ENVIRONMENTAL STANDARDS

Setting the Standards for Innovative Environmental Solutions

QUALITY ASSURANCE REVIEW

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

COLLECTED ON NOVEMBER 21 AND 22, 2019

AT THE ANACONDA COPPER MINE SITE

IN YERINGTON, NEVADA

March 25, 2020

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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 November 21 and 22, 2019, at the Anaconda Copper Mine Site in Yerington, Nevada. These samples were analyzed by Eurofins Calscience in Irvine, 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	Parameters Examined
STSB27_0-0.5	440-255674-1	440-255674-1	Soil	11/21/19	M^1, M^2, Hg
STSB27_0.5-3	440-255674-2	440-255674-1	Soil	11/21/19	M^1, M^2, Hg
STSB27_3-6	440-255674-3	440-255674-1	Soil	11/21/19	M^1, M^2, Hg
EB01 (Equipment Blank)	440-255674-4	440-255674-2	Aq	11/21/19	M^1, M^3, M^4, Hg
STSB27_6-15	440-255674-5	440-255674-1	Soil	11/21/19	M^1, M^2, Hg
STSB28_0-0.5	440-255674-6	440-255674-1	Soil	11/21/19	M^1, M^2, Hg
STSB28-FD_0-0.5 (Field Duplicate of STSB28_0-0.5)	440-255674-7	440-255674-1	Soil	11/21/19	M^1, M^2, Hg
STSB28_0.5-3	440-255674-8	440-255674-1	Soil	11/21/19	M^1, M^2, Hg
STSB28_3-6	440-255674-9	440-255674-1	Soil	11/21/19	M^1, M^2, Hg
STSB28_6-15	440-255674-10	440-255674-1	Soil	11/21/19	M^1, M^2, Hg
STSB29_0-0.5	440-255674-11	440-255674-1	Soil	11/21/19	M^1, M^2, Hg
STSB29_0.5-3	440-255674-12	440-255674-1	Soil	11/21/19	M^1, M^2, Hg
STSB29_0.5-3MS (Matrix Spike)	440-255674-12MS	440-255674-1	Soil	11/21/19	M^1, M^2, Hg
STSB29_0.5-3MSD (Matrix Spike Duplicate)	440-255674-12MSD	440-255674-1	Soil	11/21/19	M^1, M^2, Hg
STSB29_3-6	440-255674-13	440-255674-1	Soil	11/21/19	M^1, M^2, Hg
STSB29_6-15	440-255674-14	440-255674-1	Soil	11/21/19	M^1, M^2, Hg
STSB29-FD_6-15 (Field Duplicate of STSB29_6-15)	440-255674-15	440-255674-1	Soil	11/21/19	M^1, M^2, Hg
STSB30_0-0.5	440-255674-16	440-255674-1	Soil	11/22/19	M^1, M^2, Hg
STSB30_0.5-3	440-255674-17	440-255674-1	Soil	11/22/19	M^1, M^2, Hg
STSB30_3-6	440-255674-18	440-255674-1	Soil	11/22/19	M^1, M^2, Hg
FB01 (Field Blank)	440-255674-19	440-255674-2	Aq	11/22/19	M^1, M^3, M^4, Hg
STSB30_6-15	440-255674-20	440-255674-1	Soil	11/22/19	M^1, M^2, Hg
STSB31_0-0.5	440-255674-21	440-255674-1	Soil	11/22/19	M^1, M^2, Hg
STSB31_0.5-3	440-255674-22	440-255674-1	Soil	11/22/19	M^1, M^2, Hg

TABLE 1 (Cont.)

Field Sample Identification	Laboratory Sample Identification	SDG	Matrix	Date Sample Collected	Parameters Examined
STSB31_3-6	440-255674-23	440-255674-1	Soil	11/22/19	M^1, M^2, Hg
STSB31_3-6MS (Matrix Spike)	440-255674-23MS	440-255674-1	Soil	11/22/19	M^1, M^2, Hg
STSB31_3-6MSD (Matrix Spike Duplicate)	440-255674-23MSD	440-255674-1	Soil	11/22/19	M^1, M^2, Hg
STSB31_6-15	440-255674-24	440-255674-1	Soil	11/22/19	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-eight 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: Low recoveries (< 75%) were observed for potassium in the associated matrix spike/matrix spike duplicate (MS/MSD) analyses, indicating a low bias. The reported positive results for potassium in samples STSB27_0-0.5, STSB27_0.5-3, STSB27_3-6, STSB27_6-15, STSB28_0-0.5, STSB28-FD_0-0.5, STSB28_0.5-3, STSB28_3-6, STSB28_6-15, STSB29_0-0.5, STSB29_0.5-3, STSB29_3-6, STSB29 _6-15, STSB29-FD_6-15, STSB30_0-0.5, STSB30_0.5-3, STSB30_3-6, STSB30_6-15, STSB31_0-0.5, and STSB31_0.5-3 should be considered estimated and have been flagged “J” on the data tables.

High recoveries (> 125%) were observed for titanium in the associated MS/MSD analyses, indicating a high bias. The reported positive results for titanium in samples STSB31_3-6 and STSB31_6-15 should be considered estimated and have been flagged “J” on the data tables.

Field Duplicate Precision: Acceptable precision and sample representativeness were not observed (the relative percent difference [RPD] was > 40% when both results were ≥ 5× the reporting limit [RL], or the difference between the results was > 2× RL when at least one result was < 5× the RL) between the results for potassium in sample STSB28_0-0.5 and its field duplicate, sample STSB28-FD_0-0.5. The positive results for potassium in these 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 RL, were qualified as estimated and have been flagged "J" on the data tables.

B. ICP/MS Metals Analysis

Twenty-eight 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	√		

Blank Analysis Results: Antimony was observed in the continuing calibration blanks (CCBs) associated with the project samples. The reported positive results for antimony in samples STSB27_0-0.5, STSB27_0.5-3, STSB27_3-6, STSB27_6-15, STSB28_0-0.5, STSB28-FD_0-0.5, STSB28_6-15, STSB29_0.5-3, STSB30_0.5-3, STSB30_3-6, STSB30_6-15, STSB31_0-0.5, and STSB31_0.5-3 should be considered "not-detected" and have been flagged "UJ" on the data

tables. The value in the result field of the data tables should be considered the revised MDL and RL (if the reported result exceeded the RL).

MS/MSD Results: Low recoveries (< 75%) were observed for antimony in the associated MS/MSD analyses, indicating a low bias. The reported positive results for antimony in all Sample Delivery Group (SDG) 440-255674-1 samples should be considered estimated and have been flagged "J" (unless previously flagged "UJ" due to blank contamination) on the data tables.

A low recovery (< 75%) was observed for manganese in an associated MS analysis, indicating a low bias. The reported positive results for manganese in samples STSB31_3-6 and STSB31_6-15 should be considered estimated and have been flagged "J" on the data tables.

Field Duplicate Precision: Acceptable precision and sample representativeness were not observed (the RPD was > 40% when both results were ≥ 5× the RL, or the difference between the results was > 2× RL when at least one result was < 5× the RL) between the results for barium and cobalt in sample STSB28_0-0.5 and its field duplicate, sample STSB28-FD_0-0.5. The positive results for barium and cobalt in these 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-eight 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	√		

MS/MSD Results: High recoveries (> 125%) were observed for mercury in the associated MS/MSD analyses, indicating a high bias. The reported positive results for mercury in samples STSB27_0-0.5, STSB27_0.5-3, STSB27_3-6, STSB27_6-15, STSB28_0-0.5, STSB28-FD_0-0.5, STSB28_0.5-3, STSB28_3-6, STSB28_6-15, STSB29_0-0.5, STSB29_0.5-3, STSB29-FD_6-15, STSB30_0-0.5, STSB30_0.5-3, STSB30_3-6, STSB30_6-15, STSB31_0-0.5, and STSB31_0.5-3 should be considered estimated and have been flagged "J" on the data tables.

Field Duplicate Precision: Acceptable precision and sample representativeness were not observed (the RPD was > 40% when both results were ≥ 5× the RL or the difference between the results was > 2× RL when at least one result was < 5× the RL) between the results for mercury in sample STSB28_0-0.5 and its field duplicate, sample STSB28-FD_0-0.5. The positive results for mercury in these samples should be considered 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
potassium	440-255674-1	STSB27_0-0.5, STSB27_0.5-3, STSB27_3-6, STSB27_6-15, STSB28_0-0.5, STSB28-FD_0-0.5, STSB28_0.5-3, STSB28_3-6, STSB28_6-15, STSB29_0-0.5, STSB29_0.5-3, STSB29_3-6, STSB29 _6-15, STSB29-FD_6-15, STSB30_0-0.5, STSB30_0.5-3, STSB30_3-6, STSB30_6-15, STSB31_0-0.5, and STSB31_0.5-3	J	4L – Low MS/MSD recoveries
titanium	440-255674-1	STSB31_3-6 and STSB31_6-15	J	4H – High MS/MSD recoveries
potassium	440-255674-1	STSB28_0-0.5 and STSB28-FD_0-0.5	J	8 – Field duplicate imprecision

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
manganese	440-255674-1	STSB31_3-6 and STSB31_6-15	J	4L – Low MS recovery

Analyte(s)	SDG(s)	Sample(s)	Validation Qualifier(s)	Reason(s) for Qualification
antimony	440-255674-1	All samples	J/UJ	4L – Low MS/MSD recoveries
antimony	440-255674-1	STSB27_0-0.5, STSB27_0.5-3, STSB27_3-6, STSB27_6-15, STSB28_0-0.5, STSB28-FD_0-0.5, STSB28_6-15, STSB29_0.5-3, STSB30_0.5-3, STSB30_3-6, STSB30_6-15, STSB31_0-0.5, and STSB31_0.5-3	UJ	Y – CCB contamination
barium and cobalt	440-255674-1	STSB28_0-0.5 and STSB28-FD_0-0.5	J	8 – Field duplicate imprecision

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

C. Mercury Analysis

Analyte(s)	SDG(s)	Sample(s)	Validation Qualifier(s)	Reason(s) for Qualification
mercury	440-255674-1	STSB27_0-0.5, STSB27_0.5-3, STSB27_3-6, STSB27_6-15, STSB28_0-0.5, STSB28-FD_0-0.5, STSB28_0.5-3, STSB28_3-6, STSB28_6-15, STSB29_0-0.5, STSB29_0.5-3, STSB29-FD_6-15, STSB30_0-0.5, STSB30_0.5-3, STSB30_3-6, STSB30_6-15, STSB31_0-0.5, and STSB31_0.5-3	J	4H – High MS/MSD recoveries
mercury	440-255674-1	STSB28_0-0.5 and STSB28-FD_0-0.5	J	8 – Field duplicate imprecision

4.0 Overall Assessment

Based on this QA review, the results for antimony in several samples were qualified as "not-detected" due to blank contamination. The results for potassium, antimony, manganese, titanium, and mercury in several samples were qualified as estimated due to out-of-criteria MS/MSD recoveries. The results for potassium, barium, cobalt, and mercury in two samples were qualified as estimated due to field duplicate imprecision. Finally, several 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

Inorganic Data Qualifiers

U Analyte not detected at the detection limit concentration.

J Reported value is an estimated concentration.

UJ Analyte not detected at an estimated detection limit concentration.

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

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

Valid Reason Codes

1 Holding time violation
2 Method blank contamination
3 Surrogate recovery
4 Matrix spike/matrix spike duplicate recovery
5 Matrix spike/matrix spike duplicate precision outside limits
6 Laboratory control sample recovery
7 Field blank contamination
8 Field duplicate precision outside limits
9 Other deficiencies (including cooler temperature)
A Absence of supporting QC
S ICV, CCV, or column performance check problem
Y Initial and continuing calibration blank problem
M Interference check samples problem
O Post-digestion spike outside of 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

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7.0 ANALYTICAL RESULTS

A. SDG 440-255674-1

					Lab Sample	440-255674-1						440-255674-10					
					Field Sample	STSB27_0-0.5						STSB28_6-15					
					Collect Date	11/21/2019 9:15:00 AM						11/21/2019 12:25:00 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	8000		7.9	10		Y	9300		9.3	12		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	11000		7.1	10		Y	16000		8.3	12		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG	7.4		2.9	5.1		Y	4.4	J/T	3.4	6.0		Y
	7439-95-4	Magnesium	T	INITIAL	MG/KG	6600		5.1	10		Y	7300		6.0	12		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	450	J/4L	33	64		Y	2100	J/4L	39	75		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	290		33	64		Y	150		39	75		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	79		2.6	5.1		Y	50		3.0	6.0		Y
	7440-31-5	Tin	T	INITIAL	MG/KG		U	5.1	10		N		U	6.0	12		N
	7440-32-6	Titanium	T	INITIAL	MG/KG	290		1.0	2.0		Y	500		1.2	2.4		Y
	7440-42-8	Boron	T	INITIAL	MG/KG		U	2.6	5.1		N		U	3.0	6.0		N
	7440-70-2	Calcium	T	INITIAL	MG/KG	7200		14	26		Y	6000		16	30		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	340		2.6	5.1		Y	670		3.0	6.0		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	3.2		0.26	0.51		Y	2.4		0.30	0.60		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	77		0.26	0.51		Y	110		0.30	0.60		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	2.5		0.51	1.0		Y	2.4		0.60	1.2		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	11		0.51	1.0		Y	12		0.60	1.2		Y
	7440-22-4	Silver	T	INITIAL	MG/KG		U	0.10	0.51		N		U	0.12	0.60		N
	7440-28-0	Thallium	T	INITIAL	MG/KG		U	0.26	0.51		N		U	0.30	0.60		N
	7440-36-0	Antimony	T	INITIAL	MG/KG	1.3	UJ/4L,Y	1.3	1.3		N	0.35	UJ/4L,Y	0.35	1.2		N
	7440-38-2	Arsenic	T	INITIAL	MG/KG	4.7		0.26	0.51		Y	2.5		0.30	0.60		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	43		0.26	0.51		Y	65		0.30	0.60		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG		U	0.15	0.31		N	0.48		0.18	0.36		Y
	7440-43-9	Cadmium	T	INITIAL	MG/KG		U	0.26	0.51		N		U	0.30	0.60		N
	7440-47-3	Chromium	T	INITIAL	MG/KG	9.0		0.51	1.0		Y	9.5		0.60	1.2		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	3.8		0.22	0.51		Y	8.3		0.25	0.60		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	600		0.51	1.0		Y	710		0.60	1.2		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	18		0.51	1.0		Y	23		0.60	1.2		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG	8.9	J/T	5.1	10		Y	19		6.0	12		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	2.4		0.20	1.0		Y	2.6		0.24	1.2		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG	0.21	J/4H	0.012	0.021		Y	0.084	J/4H	0.014	0.024		Y

					Lab Sample	440-255674-11						440-255674-12					
					Field Sample	STSB29_0-0.5						STSB29_0.5-3					
					Collect Date	11/21/2019 3:00:00 PM						11/21/2019 3:10:00 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	7300		8.2	11		Y	5900		8.2	11		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	8800		7.3	11		Y	13000		7.3	11		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG	3.5	J/T	3.0	5.3		Y	3.6	J/T	3.0	5.3		Y
	7439-95-4	Magnesium	T	INITIAL	MG/KG	6100		5.3	11		Y	5000		5.3	11		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	400	J/4L	35	66		Y	1200	J/4L	35	66		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	77		34	66		Y	37	J/T	34	66		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	130		2.7	5.3		Y	42		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	320		1.1	2.1		Y	330		1.1	2.1		Y
	7440-42-8	Boron	T	INITIAL	MG/KG		U	2.7	5.3		N		U	2.7	5.3		N
	7440-70-2	Calcium	T	INITIAL	MG/KG	3000		14	27		Y	3600		14	27		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	320		2.7	5.3		Y	640		2.7	5.3		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	3.0		0.27	0.53		Y	1.6		0.27	0.53		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	30		0.27	0.53		Y	36		0.27	0.53		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	2.7		0.53	1.1		Y	1.8		0.53	1.1		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	6.8		0.53	1.1		Y	5.9		0.53	1.1		Y
	7440-22-4	Silver	T	INITIAL	MG/KG	0.18	J/T	0.11	0.53		Y	0.11	J/T	0.11	0.53		Y
	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	6.0	J/4L	0.29	1.1		Y	2.2	UJ/4L,Y	2.2	2.2		N
	7440-38-2	Arsenic	T	INITIAL	MG/KG	9.0		0.27	0.53		Y	3.3		0.27	0.53		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	44		0.27	0.53		Y	34		0.27	0.53		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG	0.20	J/T	0.16	0.32		Y	0.20	J/T	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	5.7		0.53	1.1		Y	5.6		0.53	1.1		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	2.8		0.22	0.53		Y	2.3		0.22	0.53		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	1300		0.53	1.1		Y	820		0.53	1.1		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	19		0.53	1.1		Y	18		0.53	1.1		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG		U	5.3	11		N	8.2	J/T	5.3	11		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	3.6		0.21	1.1		Y	2.5		0.21	1.1		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG	0.57	J/4H	0.013	0.021		Y	0.20	J/4H	0.013	0.021		Y

					Lab Sample	440-255674-13						440-255674-14					
					Field Sample	STSB29_3-6						STSB29_6-15					
					Collect Date	11/21/2019 3:30:00 PM						11/21/2019 3:45:00 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	4900		8.0	10		Y	5700		8.5	11		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	13000		7.2	10		Y	11000		7.6	11		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG	4.8	J/T	2.9	5.2		Y	3.5	J/T	3.1	5.5		Y
	7439-95-4	Magnesium	T	INITIAL	MG/KG	4900		5.2	10		Y	5200		5.5	11		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	1300	J/4L	34	65		Y	1400	J/4L	36	69		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	45	J/T	33	65		Y	83		35	69		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	30		2.6	5.2		Y	34		2.8	5.5		Y
	7440-31-5	Tin	T	INITIAL	MG/KG		U	5.2	10		N		U	5.5	11		N
	7440-32-6	Titanium	T	INITIAL	MG/KG	410		1.0	2.1		Y	380		1.1	2.2		Y
	7440-42-8	Boron	T	INITIAL	MG/KG		U	2.6	5.2		N		U	2.8	5.5		N
	7440-70-2	Calcium	T	INITIAL	MG/KG	3400		14	26		Y	5100		15	28		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	630		2.6	5.2		Y	590		2.8	5.5		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	1.4		0.26	0.52		Y	1.6		0.28	0.55		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	92		0.26	0.52		Y	65		0.28	0.55		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	1.4		0.52	1.0		Y	1.8		0.55	1.1		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	8.7		0.52	1.0		Y	8.3		0.55	1.1		Y
	7440-22-4	Silver	T	INITIAL	MG/KG	0.11	J/T	0.10	0.52		Y	0.12	J/T	0.11	0.55		Y
	7440-28-0	Thallium	T	INITIAL	MG/KG		U	0.26	0.52		N		U	0.28	0.55		N
	7440-36-0	Antimony	T	INITIAL	MG/KG		UJ/4L	0.28	1.0		N		UJ/4L	0.30	1.1		N
	7440-38-2	Arsenic	T	INITIAL	MG/KG	1.2		0.26	0.52		Y	1.4		0.28	0.55		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	28		0.26	0.52		Y	39		0.28	0.55		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG	0.25	J/T	0.16	0.31		Y		U	0.17	0.33		N
	7440-43-9	Cadmium	T	INITIAL	MG/KG		U	0.26	0.52		N		U	0.28	0.55		N
	7440-47-3	Chromium	T	INITIAL	MG/KG	5.4		0.52	1.0		Y	7.9		0.55	1.1		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	7.9		0.22	0.52		Y	4.6		0.23	0.55		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	1900		0.52	1.0		Y	840		0.55	1.1		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	19		0.52	1.0		Y	16		0.55	1.1		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG	17		5.2	10		Y	13		5.5	11		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	1.7		0.21	1.0		Y	1.9		0.22	1.1		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG		U	0.013	0.021		N		U	0.014	0.023		N

					Lab Sample	440-255674-15						440-255674-16					
					Field Sample	STSB29-FD_6-15						STSB30_0-0.5					
					Collect Date	11/21/2019 3:50:00 PM						11/22/2019 8:55:00 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	5900		8.7	11		Y	6300		8.1	11		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	11000		7.8	11		Y	8700		7.3	11		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG	3.3	J/T	3.2	5.7		Y		U	3.0	5.3		N
	7439-95-4	Magnesium	T	INITIAL	MG/KG	5400		5.7	11		Y	4700		5.3	11		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	1300	J/4L	37	71		Y	270	J/4L	34	66		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	82		36	71		Y	62	J/T	34	66		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	37		2.8	5.7		Y	65		2.6	5.3		Y
	7440-31-5	Tin	T	INITIAL	MG/KG		U	5.7	11		N		U	5.3	11		N
	7440-32-6	Titanium	T	INITIAL	MG/KG	430		1.1	2.3		Y	220		1.1	2.1		Y
	7440-42-8	Boron	T	INITIAL	MG/KG		U	2.8	5.7		N		U	2.6	5.3		N
	7440-70-2	Calcium	T	INITIAL	MG/KG	5500		15	28		Y	4500		14	26		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	580		2.8	5.7		Y	360		2.6	5.3		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	1.5		0.28	0.57		Y	4.9		0.26	0.53		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	70		0.28	0.57		Y	38		0.26	0.53		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	1.9		0.57	1.1		Y	3.5		0.53	1.1		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	8.5		0.57	1.1		Y	7.4		0.53	1.1		Y
	7440-22-4	Silver	T	INITIAL	MG/KG		U	0.11	0.57		N		U	0.11	0.53		N
	7440-28-0	Thallium	T	INITIAL	MG/KG		U	0.28	0.57		N		U	0.26	0.53		N
	7440-36-0	Antimony	T	INITIAL	MG/KG		UJ/4L	0.31	1.1		N	2.0	J/4L	0.29	1.1		Y
	7440-38-2	Arsenic	T	INITIAL	MG/KG	1.3		0.28	0.57		Y	5.9		0.26	0.53		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	36		0.28	0.57		Y	35		0.26	0.53		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG		U	0.17	0.34		N	0.34		0.16	0.32		Y
	7440-43-9	Cadmium	T	INITIAL	MG/KG		U	0.28	0.57		N		U	0.26	0.53		N
	7440-47-3	Chromium	T	INITIAL	MG/KG	8.6		0.57	1.1		Y	4.9		0.53	1.1		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	4.5		0.24	0.57		Y	4.1		0.22	0.53		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	840		0.57	1.1		Y	680		0.53	1.1		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	17		0.57	1.1		Y	15		0.53	1.1		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG	13		5.7	11		Y	7.5	J/T	5.3	11		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	1.7		0.23	1.1		Y	3.5		0.21	1.1		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG	0.027	J/4H	0.013	0.022		Y	0.28	J/4H	0.013	0.022		Y

					Lab Sample	440-255674-17						440-255674-18					
					Field Sample	STSB30_0.5-3						STSB30_3-6					
					Collect Date	11/22/2019 9:02:00 AM						11/22/2019 9:10:00 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	6500		8.2	11		Y	7600		8.0	10		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	8900		7.3	11		Y	9700		7.2	10		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG		U	3.0	5.3		N	3.1	J/T	2.9	5.2		Y
	7439-95-4	Magnesium	T	INITIAL	MG/KG	4700		5.3	11		Y	6000		5.2	10		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	280	J/4L	34	66		Y	340	J/4L	34	65		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	56	J/T	34	66		Y	51	J/T	33	65		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	54		2.7	5.3		Y	58		2.6	5.2		Y
	7440-31-5	Tin	T	INITIAL	MG/KG		U	5.3	11		N		U	5.2	10		N
	7440-32-6	Titanium	T	INITIAL	MG/KG	260		1.1	2.1		Y	360		1.0	2.1		Y
	7440-42-8	Boron	T	INITIAL	MG/KG		U	2.7	5.3		N		U	2.6	5.2		N
	7440-70-2	Calcium	T	INITIAL	MG/KG	2800		14	27		Y	4200		14	26		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	330		2.7	5.3		Y	410		2.6	5.2		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	3.8		0.27	0.53		Y	4.0		0.26	0.52		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	46		0.27	0.53		Y	42		0.26	0.52		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	2.3		0.53	1.1		Y	2.5		0.52	1.0		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	6.7		0.53	1.1		Y	8.2		0.52	1.0		Y
	7440-22-4	Silver	T	INITIAL	MG/KG		U	0.11	0.53		N		U	0.10	0.52		N
	7440-28-0	Thallium	T	INITIAL	MG/KG		U	0.27	0.53		N		U	0.26	0.52		N
	7440-36-0	Antimony	T	INITIAL	MG/KG	1.2	UJ/4L,Y	1.2	1.2		N	1.3	UJ/4L,Y	1.3	1.3		N
	7440-38-2	Arsenic	T	INITIAL	MG/KG	4.6		0.27	0.53		Y	6.6		0.26	0.52		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	33		0.27	0.53		Y	38		0.26	0.52		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG	0.31	J/T	0.16	0.32		Y	0.20	J/T	0.16	0.31		Y
	7440-43-9	Cadmium	T	INITIAL	MG/KG		U	0.27	0.53		N		U	0.26	0.52		N
	7440-47-3	Chromium	T	INITIAL	MG/KG	5.0		0.53	1.1		Y	6.1		0.52	1.0		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	3.0		0.22	0.53		Y	3.6		0.22	0.52		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	670		0.53	1.1		Y	880		0.52	1.0		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	15		0.53	1.1		Y	19		0.52	1.0		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG	6.8	J/T	5.3	11		Y	8.1	J/T	5.2	10		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	3.2		0.21	1.1		Y	5.2		0.21	1.0		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG	0.31	J/4H	0.013	0.022		Y	0.23	J/4H	0.012	0.021		Y

					Lab Sample	440-255674-2						440-255674-20					
					Field Sample	STSB27_0.5-3						STSB30_6-15					
					Collect Date	11/21/2019 9:25:00 AM						11/22/2019 9:25:00 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	8200		8.0	10		Y	6500		8.7	11		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	12000		7.2	10		Y	12000		7.8	11		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG	5.8		2.9	5.2		Y	3.3	J/T	3.2	5.6		Y
	7439-95-4	Magnesium	T	INITIAL	MG/KG	7000		5.2	10		Y	5700		5.6	11		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	390	J/4L	34	65		Y	1200	J/4L	37	71		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	270		33	65		Y	97		36	71		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	70		2.6	5.2		Y	65		2.8	5.6		Y
	7440-31-5	Tin	T	INITIAL	MG/KG		U	5.2	10		N		U	5.6	11		N
	7440-32-6	Titanium	T	INITIAL	MG/KG	300		1.0	2.1		Y	420		1.1	2.3		Y
	7440-42-8	Boron	T	INITIAL	MG/KG		U	2.6	5.2		N		U	2.8	5.6		N
	7440-70-2	Calcium	T	INITIAL	MG/KG	6200		14	26		Y	6700		15	28		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	350		2.6	5.2		Y	570		2.8	5.6		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	3.1		0.26	0.52		Y	2.2		0.28	0.56		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	84		0.26	0.52		Y	74		0.28	0.56		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	2.3		0.52	1.0		Y	2.1		0.56	1.1		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	11		0.52	1.0		Y	9.3		0.56	1.1		Y
	7440-22-4	Silver	T	INITIAL	MG/KG		U	0.10	0.52		N		U	0.11	0.56		N
	7440-28-0	Thallium	T	INITIAL	MG/KG		U	0.26	0.52		N		U	0.28	0.56		N
	7440-36-0	Antimony	T	INITIAL	MG/KG	0.83	UJ/4L,Y	0.83	1.0		N	0.59	UJ/4L,Y	0.59	1.1		N
	7440-38-2	Arsenic	T	INITIAL	MG/KG	4.5		0.26	0.52		Y	2.5		0.28	0.56		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	37		0.26	0.52		Y	51		0.28	0.56		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG	0.17	J/T	0.16	0.31		Y	0.40		0.17	0.34		Y
	7440-43-9	Cadmium	T	INITIAL	MG/KG		U	0.26	0.52		N		U	0.28	0.56		N
	7440-47-3	Chromium	T	INITIAL	MG/KG	8.7		0.52	1.0		Y	7.5		0.56	1.1		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	4.1		0.22	0.52		Y	6.7		0.24	0.56		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	660		0.52	1.0		Y	740		0.56	1.1		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	20		0.52	1.0		Y	19		0.56	1.1		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG	9.9	J/T	5.2	10		Y	13		5.6	11		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	2.2		0.21	1.0		Y	2.2		0.23	1.1		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG	0.15	J/4H	0.013	0.021		Y	0.075	J/4H	0.013	0.022		Y

					Lab Sample	440-255674-21						440-255674-22					
					Field Sample	STSB31_0-0.5						STSB31_0.5-3					
					Collect Date	11/22/2019 11:56:00 AM						11/22/2019 12:03:00 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	7500		8.4	11		Y	6400		8.3	11		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	14000		7.5	11		Y	15000		7.5	11		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG	5.3	J/T	3.1	5.5		Y	4.3	J/T	3.0	5.4		Y
	7439-95-4	Magnesium	T	INITIAL	MG/KG	5600		5.5	11		Y	4800		5.4	11		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	1200	J/4L	35	68		Y	1100	J/4L	35	67		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	220		35	68		Y	45	J/T	35	67		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	38		2.7	5.5		Y	50		2.7	5.4		Y
	7440-31-5	Tin	T	INITIAL	MG/KG		U	5.5	11		N		U	5.4	11		N
	7440-32-6	Titanium	T	INITIAL	MG/KG	230		1.1	2.2		Y	200		1.1	2.2		Y
	7440-42-8	Boron	T	INITIAL	MG/KG	2.7	J/T	2.7	5.5		Y		U	2.7	5.4		N
	7440-70-2	Calcium	T	INITIAL	MG/KG	3000		15	27		Y	2500		15	27		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	360		2.7	5.5		Y	300		2.7	5.4		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	3.3		0.27	0.55		Y	3.5		0.27	0.54		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	65		0.27	0.55		Y	49		0.27	0.54		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	4.9		0.55	1.1		Y	4.1		0.54	1.1		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	8.2		0.55	1.1		Y	6.6		0.54	1.1		Y
	7440-22-4	Silver	T	INITIAL	MG/KG		U	0.11	0.55		N		U	0.11	0.54		N
	7440-28-0	Thallium	T	INITIAL	MG/KG		U	0.27	0.55		N		U	0.27	0.54		N
	7440-36-0	Antimony	T	INITIAL	MG/KG	0.96	UJ/4L,Y	0.96	1.1		N	0.74	UJ/4L,Y	0.74	1.1		N
	7440-38-2	Arsenic	T	INITIAL	MG/KG	6.8		0.27	0.55		Y	6.9		0.27	0.54		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	46		0.27	0.55		Y	47		0.27	0.54		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG	0.26	J/T	0.16	0.33		Y	0.17	J/T	0.16	0.32		Y
	7440-43-9	Cadmium	T	INITIAL	MG/KG		U	0.27	0.55		N		U	0.27	0.54		N
	7440-47-3	Chromium	T	INITIAL	MG/KG	6.0		0.55	1.1		Y	5.1		0.54	1.1		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	4.3		0.23	0.55		Y	3.5		0.23	0.54		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	1900		0.55	1.1		Y	1300		0.54	1.1		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	21		0.55	1.1		Y	18		0.54	1.1		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG	21		5.5	11		Y	18		5.4	11		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	3.3		0.22	1.1		Y	2.8		0.22	1.1		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG	0.067	J/4H	0.013	0.021		Y	0.21	J/4H	0.013	0.022		Y

					Lab Sample	440-255674-23						440-255674-24					
					Field Sample	STSB31_3-6						STSB31_6-15					
					Collect Date	11/22/2019 12:10:00 PM						11/22/2019 12:20:00 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	7000		8.1	11		Y	7900		8.9	12		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	15000		7.3	11		Y	17000		7.9	12		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG	4.8	J/T	2.9	5.3		Y	4.9	J/T	3.2	5.8		Y
	7439-95-4	Magnesium	T	INITIAL	MG/KG	5100		5.3	11		Y	6600		5.8	12		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	1100		34	66		Y	1600		37	72		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	49	J/T	34	66		Y	110		37	72		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	40		2.6	5.3		Y	48		2.9	5.8		Y
	7440-31-5	Tin	T	INITIAL	MG/KG		U	5.3	11		N		U	5.8	12		N
	7440-32-6	Titanium	T	INITIAL	MG/KG	200	J/4H	1.1	2.1		Y	460	J/4H	1.2	2.3		Y
	7440-42-8	Boron	T	INITIAL	MG/KG		U	2.6	5.3		N		U	2.9	5.8		N
	7440-70-2	Calcium	T	INITIAL	MG/KG	2700		14	26		Y	5600		16	29		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	350		2.6	5.3		Y	690		2.9	5.8		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	3.0		0.26	0.53		Y	2.2		0.29	0.58		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	51	J/4L	0.26	0.53		Y	87	J/4L	0.29	0.58		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	4.6		0.53	1.1		Y	2.3		0.58	1.2		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	6.0		0.53	1.1		Y	9.5		0.58	1.2		Y
	7440-22-4	Silver	T	INITIAL	MG/KG		U	0.11	0.53		N		U	0.12	0.58		N
	7440-28-0	Thallium	T	INITIAL	MG/KG		U	0.26	0.53		N		U	0.29	0.58		N
	7440-36-0	Antimony	T	INITIAL	MG/KG	0.63	J/T,4L	0.28	1.1		Y	0.41	J/T,4L	0.31	1.2		Y
	7440-38-2	Arsenic	T	INITIAL	MG/KG	6.8		0.26	0.53		Y	3.8		0.29	0.58		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	47		0.26	0.53		Y	45		0.29	0.58		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG		U	0.16	0.32		N	0.23	J/T	0.17	0.35		Y
	7440-43-9	Cadmium	T	INITIAL	MG/KG		U	0.26	0.53		N		U	0.29	0.58		N
	7440-47-3	Chromium	T	INITIAL	MG/KG	5.4		0.53	1.1		Y	8.0		0.58	1.2		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	3.3		0.22	0.53		Y	6.2		0.24	0.58		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	1100		0.53	1.1		Y	740		0.58	1.2		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	17		0.53	1.1		Y	21		0.58	1.2		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG	16		5.3	11		Y	15		5.8	12		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	3.5		0.21	1.1		Y	2.7		0.23	1.2		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG	0.25		0.013	0.021		Y	0.12		0.014	0.023		Y

					Lab Sample	440-255674-3						440-255674-5					
					Field Sample	STSB27_3-6						STSB27_6-15					
					Collect Date	11/21/2019 9:31:00 AM						11/21/2019 9:55:00 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		8.1	10		Y	5900		8.5	11		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	10000		7.2	10		Y	14000		7.6	11		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG	3.6	J/T	2.9	5.2		Y	3.5	J/T	3.1	5.5		Y
	7439-95-4	Magnesium	T	INITIAL	MG/KG	6800		5.2	10		Y	5500		5.5	11		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	250	J/4L	34	66		Y	1200	J/4L	36	69		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	38	J/T	34	66		Y	59	J/T	35	69		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	69		2.6	5.2		Y	38		2.8	5.5		Y
	7440-31-5	Tin	T	INITIAL	MG/KG		U	5.2	10		N		U	5.5	11		N
	7440-32-6	Titanium	T	INITIAL	MG/KG	320		1.0	2.1		Y	380		1.1	2.2		Y
	7440-42-8	Boron	T	INITIAL	MG/KG		U	2.6	5.2		N		U	2.8	5.5		N
	7440-70-2	Calcium	T	INITIAL	MG/KG	2900		14	26		Y	4300		15	28		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	360		2.6	5.2		Y	650		2.8	5.5		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	3.0		0.26	0.52		Y	1.6		0.28	0.55		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	36		0.26	0.52		Y	80		0.28	0.55		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	2.6		0.52	1.0		Y	2.3		0.55	1.1		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	7.3		0.52	1.0		Y	8.1		0.55	1.1		Y
	7440-22-4	Silver	T	INITIAL	MG/KG		U	0.10	0.52		N		U	0.11	0.55		N
	7440-28-0	Thallium	T	INITIAL	MG/KG		U	0.26	0.52		N		U	0.28	0.55		N
	7440-36-0	Antimony	T	INITIAL	MG/KG	0.70	UJ/4L,Y	0.70	1.0		N	0.30	UJ/4L,Y	0.30	1.1		N
	7440-38-2	Arsenic	T	INITIAL	MG/KG	5.5		0.26	0.52		Y	1.9		0.28	0.55		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	25		0.26	0.52		Y	34		0.28	0.55		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG	0.20	J/T	0.16	0.31		Y	0.26	J/T	0.17	0.33		Y
	7440-43-9	Cadmium	T	INITIAL	MG/KG		U	0.26	0.52		N		U	0.28	0.55		N
	7440-47-3	Chromium	T	INITIAL	MG/KG	5.2		0.52	1.0		Y	6.7		0.55	1.1		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	4.2		0.22	0.52		Y	6.7		0.23	0.55		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	910		0.52	1.0		Y	770		0.55	1.1		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	19		0.52	1.0		Y	19		0.55	1.1		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG	5.8	J/T	5.2	10		Y	13		5.5	11		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	4.3		0.21	1.0		Y	1.7		0.22	1.1		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG	0.11	J/4H	0.013	0.021		Y	0.042	J/4H	0.013	0.022		Y

					Lab Sample	440-255674-6						440-255674-7					
					Field Sample	STSB28_0-0.5						STSB28-FD_0-0.5					
					Collect Date	11/21/2019 11:45:00 AM						11/21/2019 11:50:00 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	7200		8.2	11		Y	6800		8.3	11		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	9800		7.4	11		Y	10000		7.4	11		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG		U	3.0	5.3		N		U	3.0	5.4		N
	7439-95-4	Magnesium	T	INITIAL	MG/KG	5600		5.3	11		Y	5400		5.4	11		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	1200	J/4L,8	35	67		Y	680	J/4L,8	35	67		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	89		34	67		Y	100		34	67		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	96		2.7	5.3		Y	71		2.7	5.4		Y
	7440-31-5	Tin	T	INITIAL	MG/KG		U	5.3	11		N		U	5.4	11		N
	7440-32-6	Titanium	T	INITIAL	MG/KG	450		1.1	2.1		Y	390		1.1	2.1		Y
	7440-42-8	Boron	T	INITIAL	MG/KG		U	2.7	5.3		N		U	2.7	5.4		N
	7440-70-2	Calcium	T	INITIAL	MG/KG	3800		14	27		Y	3700		14	27		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	430		2.7	5.3		Y	360		2.7	5.4		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	2.6		0.27	0.53		Y	2.4		0.27	0.54		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	38		0.27	0.53		Y	32		0.27	0.54		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	2.7		0.53	1.1		Y	2.6		0.54	1.1		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	6.6		0.53	1.1		Y	5.5		0.54	1.1		Y
	7440-22-4	Silver	T	INITIAL	MG/KG	0.13	J/T	0.11	0.53		Y	0.12	J/T	0.11	0.54		Y
	7440-28-0	Thallium	T	INITIAL	MG/KG		U	0.27	0.53		N		U	0.27	0.54		N
	7440-36-0	Antimony	T	INITIAL	MG/KG	1.4	UJ/4L,Y	1.4	1.4		N	1.4	UJ/4L,Y	1.4	1.4		N
	7440-38-2	Arsenic	T	INITIAL	MG/KG	6.7		0.27	0.53		Y	6.1		0.27	0.54		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	57	J/8	0.27	0.53		Y	35	J/8	0.27	0.54		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG	0.23	J/T	0.16	0.32		Y		U	0.16	0.32		N
	7440-43-9	Cadmium	T	INITIAL	MG/KG		U	0.27	0.53		N		U	0.27	0.54		N
	7440-47-3	Chromium	T	INITIAL	MG/KG	5.3		0.53	1.1		Y	4.7		0.54	1.1		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	3.8	J/8	0.22	0.53		Y	2.6	J/8	0.23	0.54		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	470		0.53	1.1		Y	450		0.54	1.1		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	20		0.53	1.1		Y	17		0.54	1.1		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG	9.0	J/T	5.3	11		Y	7.3	J/T	5.4	11		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	4.7		0.21	1.1		Y	4.2		0.21	1.1		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG	0.38	J/4H,8	0.013	0.021		Y	0.71	J/4H,8	0.013	0.021		Y

					Lab Sample	440-255674-8						440-255674-9					
					Field Sample	STSB28_0.5-3						STSB28_3-6					
					Collect Date	11/21/2019 11:55:00 AM						11/21/2019 12:15:00 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	7200		8.1	10		Y	4100		8.3	11		Y
	7439-89-6	Iron	T	INITIAL	MG/KG	10000		7.2	10		Y	9200		7.4	11		Y
	7439-93-2	Lithium	T	INITIAL	MG/KG		U	2.9	5.2		N		U	3.0	5.4		N
	7439-95-4	Magnesium	T	INITIAL	MG/KG	6200		5.2	10		Y	3600		5.4	11		Y
	7440-09-7	Potassium	T	INITIAL	MG/KG	650	J/4L	34	66		Y	680	J/4L	35	67		Y
	7440-23-5	Sodium	T	INITIAL	MG/KG	41	J/T	34	66		Y	49	J/T	35	67		Y
	7440-24-6	Strontium	T	INITIAL	MG/KG	51		2.6	5.2		Y	27		2.7	5.4		Y
	7440-31-5	Tin	T	INITIAL	MG/KG		U	5.2	10		N		U	5.4	11		N
	7440-32-6	Titanium	T	INITIAL	MG/KG	360		1.0	2.1		Y	190		1.1	2.2		Y
	7440-42-8	Boron	T	INITIAL	MG/KG		U	2.6	5.2		N		U	2.7	5.4		N
	7440-70-2	Calcium	T	INITIAL	MG/KG	3500		14	26		Y	2800		15	27		Y
	7723-14-0	Phosphorus	T	INITIAL	MG/KG	380		2.6	5.2		Y	460		2.7	5.4		Y
SW-846 6020	7439-92-1	Lead	T	INITIAL	MG/KG	2.4		0.26	0.52		Y	1.4		0.27	0.54		Y
	7439-96-5	Manganese	T	INITIAL	MG/KG	44		0.26	0.52		Y	39		0.27	0.54		Y
	7439-98-7	Molybdenum	T	INITIAL	MG/KG	2.7		0.52	1.0		Y	1.6		0.54	1.1		Y
	7440-02-0	Nickel	T	INITIAL	MG/KG	6.9		0.52	1.0		Y	5.0		0.54	1.1		Y
	7440-22-4	Silver	T	INITIAL	MG/KG	0.10	J/T	0.10	0.52		Y		U	0.11	0.54		N
	7440-28-0	Thallium	T	INITIAL	MG/KG		U	0.26	0.52		N		U	0.27	0.54		N
	7440-36-0	Antimony	T	INITIAL	MG/KG	1.6	J/4L	0.28	1.0		Y	0.54	J/T,4L	0.29	1.1		Y
	7440-38-2	Arsenic	T	INITIAL	MG/KG	4.7		0.26	0.52		Y	2.1		0.27	0.54		Y
	7440-39-3	Barium	T	INITIAL	MG/KG	34		0.26	0.52		Y	26		0.27	0.54		Y
	7440-41-7	Beryllium	T	INITIAL	MG/KG		U	0.16	0.31		N		U	0.16	0.32		N
	7440-43-9	Cadmium	T	INITIAL	MG/KG		U	0.26	0.52		N		U	0.27	0.54		N
	7440-47-3	Chromium	T	INITIAL	MG/KG	6.0		0.52	1.0		Y	5.0		0.54	1.1		Y
	7440-48-4	Cobalt	T	INITIAL	MG/KG	3.5		0.22	0.52		Y	2.3		0.23	0.54		Y
	7440-50-8	Copper	T	INITIAL	MG/KG	580		0.52	1.0		Y	420		0.54	1.1		Y
	7440-62-2	Vanadium	T	INITIAL	MG/KG	15		0.52	1.0		Y	11		0.54	1.1		Y
	7440-66-6	Zinc	T	INITIAL	MG/KG	6.8	J/T	5.2	10		Y	8.3	J/T	5.4	11		Y
	7782-49-2	Selenium	T	INITIAL	MG/KG	3.1		0.21	1.0		Y	1.8		0.22	1.1		Y
SW-846 7471A	7439-97-6	Mercury	T	INITIAL	MG/KG	0.66	J/4H	0.012	0.021		Y	0.40	J/4H	0.013	0.022		Y

B. SDG 440-255674-2

Yerington
SDG: 440-255674-2

					Lab Sample	440-255674-19						440-255674-4					
					Field Sample	FB01						EB01					
					Collect Date	11/22/2019 9:15:00 AM						11/21/2019 9:36:00 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/L		U	0.050	0.10		N		U	0.050	0.10		N
	7439-89-6	Iron	T	INITIAL	MG/L		U	0.050	0.10		N		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		U	0.010	0.020		N	0.012	J/T	0.010	0.020		Y
	7440-09-7	Potassium	T	INITIAL	MG/L		U	0.25	0.50		N	0.30	J/T	0.25	0.50		Y
	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		U	0.050	0.10		N		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		U	0.50	1.0		N		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		U	0.50	2.0		N		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		U	0.50	1.0		N		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		U	0.50	2.0		N		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	1.5	J/T	0.50	2.0		Y	1.1	J/T	0.50	2.0		Y
	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	11	J/T	2.5	20		Y	16	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

Report Generated: 3/25/2020 10:18:27 AM

8.0 SUPPORTING DOCUMENTATION

A. SDG 440-255674-1

Konstadina Vlahogiani

From: Bondoc, Christian M. <Christian.Bondoc@testamericainc.com>
Sent: Friday, February 14, 2020 1:28 PM
To: Konstadina Vlahogiani
Cc: Lombardi, Lynda; Jared K. Acker
Subject: RE: ACMS Yerington OU-4b_OU-5 Soil Sampling - request for 440-255674-1

Good Morning Dina,

This has been revised and posted to TotalAccess.

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 10:41 AM
To: Bondoc, Christian M.
Cc: Lombardi, Lynda; Jared K. Acker
Subject: ACMS Yerington OU-4b_OU-5 Soil Sampling - request for 440-255674-1

-External Email-

Hi Christian,

In job 440-255674-1, the %solids used in the calculation of the 6020 results of all samples, except sample -1, are different than the %solids used in the calculation of the 6010B and 7471B results . The %solids used for the 6010B and 7471B results are those provided in the raw data. Please check and let us know.

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 2020 DV	Reviewed by:	JKA 2/18/20
Sample Collection Dates:	November 21-22, 2019	Approved by:	
Job Number:	20115675.GW20	Completion Date:	
Project Manager:	Dina		
Laboratory:	TA Irvine		

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

Deliverable:			Sample No.	Lab Control No.
	CLP (Full)	( )	440-255674-1 / -2	
	Level IV (Full)	(X)		
	Limited	( )		
	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				
	6010B	6020	7470A/7471A			6010B	6020	7470A/7471A			6010B	6020	7470A/7471A		
Holding Times	X	X	X								X	X	X		
Blank Analysis Results	X	X	X				X				X	X	X		
Matrix Spike (Predigestion) Results	X	X	X			X	X	X			X	X	X		
Duplicate Analysis: (X) Field ( ) Lab	X	X	X			X	X	X			X	X	X		
Quantitation of Results	X	X	X								X	X	X		
Detection Limit/Sensitivity															
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:															

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 (mg/kg, mg/L)	Qualification limit (5×)
S			X				MB 440-584717/1-A ^5	iron	27.9	140
S			X				MB 440-584717/1-A ^20	copper	0.663	3.32
Aq		X					CCB 440-584881/21	antimony	0.000639	0.00320
Aq		X					CCB 440-584881/29	antimony	0.000940	0.00470
Aq		X					CCB 440-584881/41	antimony	0.000614	0.00307
Aq		X					CCB 440-584960/20	antimony	0.000585	0.00293
Aq		X					CCB 440-584960/30	antimony	0.000667	0.00334
Aq		X					CCB 440-584960	antimony	0.000655	0.00328
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Aq = Aqueous; S = Solid

Notes:

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 (ug/L)	Qualification limit (5×)
Aq			X				MB 440-583233/1-A	zinc	11.2	56.0
Aq			X				MB 440-583759/1-A	mercury	0.180	0.900
Aq		X					CCB 440-583568/18	titanium	4.00	20.0
Aq		X					CCB 440-583568/30	titanium	3.80	19.0
Aq		X					CCB 440-583795/17	titanium	5.30	26.5
Aq		X					CCB 440-583795/28	titanium	5.10	25.5
								magnesium	15.0	75.0
Aq		X					CCB 440-583832/17	potassium	263	1315
Aq					X		EB01	magnesium	12	60
								potassium	300	1500
								copper	1.1	5.5
								zinc	16	80
Aq						X	FB01	copper	1.5	7.5
								zinc	11	55
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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	STSB28_0-0.5 Analyte Concentration[2]	Qual	RL	STSB28-FD_0-0.5 Analyte Concentration[2]	Qual	RL	Difference	RPD	Notes
Aluminum	7200		11	6800		11	NA	5.7%	IN
Calcium	3800		27	3700		27	NA	2.7%	IN
Iron	9800		11	10000		11	NA	2.0%	IN
Magnesium	5600		11	5400		11	NA	3.6%	IN
Phosphorus	430		5.3	360		5.4	NA	18%	IN
Potassium	1200		67	680		67	NA	55%	1
Sodium	89		67	100		67	11	NA	IN
Strontium	96		5.3	71		5.4	NA	30%	IN
Titanium	450		2.1	390		2.1	NA	14%	IN
Antimony	1.4		1.1	1.4		1.1	0.0	NA	IN
Arsenic	6.7		0.53	6.1		0.54	NA	9.4%	IN
Barium	57		0.53	35		0.54	NA	48%	1
Beryllium	0.23	J	0.32	0.16	U	0.32	0.070	NA	IN
Chromium	5.3		1.1	4.7		1.1	0.60	NA	IN
Cobalt	3.8		0.53	2.6		0.54	1.2	NA	2
Copper	470		1.1	450		1.1	NA	4.3%	IN
Lead	2.6		0.53	2.4		0.54	0.20	NA	IN
Manganese	38		0.53	32		0.54	NA	17%	IN
Molybdenum	2.7		1.1	2.6		1.1	0.10	NA	IN
Nickel	6.6		1.1	5.5		1.1	NA	18%	IN
Selenium	4.7		1.1	4.2		1.1	0.50	NA	IN
Silver	0.13	J	0.53	0.12	J	0.54	0.010	NA	IN
Vanadium	20		1.1	17		1.1	NA	16%	IN
Zinc	9.0	J	11	7.3	J	11	1.7	NA	IN
Mercury	0.38		0.021	0.71		0.021	NA	61%	1

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	STSB29_6-15 Analyte Concentration[2]	Qual	RL	STSB29-FD_6-15 Analyte Concentration[2]	Qual	RL	Difference	RPD	Notes
Aluminum	5700		11	5900		11	NA	3.4%	IN
Calcium	5100		28	5500		28	NA	7.5%	IN
Iron	11000		11	11000		11	NA	0.0%	IN
Lithium	3.5	J	5.5	3.3	J	5.7	0.20	NA	IN
Magnesium	5200		11	5400		11	NA	3.8%	IN
Phosphorus	590		5.5	580		5.7	NA	1.7%	IN
Potassium	1400		69	1300		71	NA	7.4%	IN
Sodium	83		69	82		71	1	NA	IN
Strontium	34		5.5	37		5.7	NA	8.5%	IN
Titanium	380		2.2	430		2.3	NA	12%	IN
Arsenic	1.4		0.55	1.3		0.57	0.10	NA	IN
Barium	39		0.55	36		0.57	NA	8.0%	IN
Chromium	7.9		1.1	8.6		1.1	NA	8.5%	IN
Cobalt	4.6		0.55	4.5		0.57	NA	2.2%	IN
Copper	840		1.1	840		1.1	NA	0.0%	IN
Lead	1.6		0.55	1.5		0.57	0.10	NA	IN
Manganese	65		0.55	70		0.57	NA	7.4%	IN
Molybdenum	1.8		1.1	1.9		1.1	0.10	NA	IN
Nickel	8.3		1.1	8.5		1.1	NA	2.4%	IN
Selenium	1.9		1.1	1.7		1.1	0.20	NA	IN
Silver	0.12	J	0.55	0.11	U	0.57	0.01	NA	IN
Vanadium	16		1.1	17		1.1	NA	6.1%	IN
Zinc	13		11	13		11	0.00	NA	IN
Mercury	0.014	U	0.023	0.027		0.022	0.013	NA	IN

eurofins | Calscience

ANALYTICAL REPORT

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

Laboratory Job ID: 440-255674-1
Client Project/Site: ACMS - BP Yerington OU-4b_OU-5 Soil
Revision: 1

Rpt 228

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

Attn: Lynda Lombardi

Authorized for release by:
2/14/2020 10:19:20 AM

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.

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
2/14/2020 10:19:20 AM

Definitions/Glossary

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

Job ID: 440-255674-1

Qualifiers

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
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.
B	Compound was found in the blank and sample.
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)

Job ID: 440-255674-1

Laboratory: Eurofins Calscience Irvine

Narrative

Job Narrative
440-255674-1

Comments
Revised to correct percent moisture value used for 6020 calculation.

Receipt
The samples were received on 11/26/2019 10:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.0° C.

Metals
Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries of Potassium and Titanium for preparation batch 440-583612 and analytical batch 440-584155 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 continuing calibration blank (CCB) for 440-584155 contained Titanium above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method 6010B: The method blank for preparation batch 440-583612 and analytical batch 440-584378 contained Iron above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries of Titanium for preparation batch 440-584711 and analytical batch 440-584991 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries of Potassium for preparation batch 440-584717 and analytical batch 440-584992 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 method blank for preparation batch 440-584717 and analytical batch 440-584992 contained Iron above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 440-583612 and analytical batch 440-584031 were outside control limits for Manganese and Antimony. Sample matrix interference is 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 for preparation batch 440-584711 and analytical batch 440-584875 were outside control limits for Chromium, Manganese and Antimony. Sample matrix interference and/or non-homogeneity are suspected. The associated laboratory control sample (LCS) was within acceptance limits.

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 440-584717 and analytical batch 440-584881 were outside control limits for Antimony. Sample matrix interference is suspected. The associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6020: The method blank for preparation batch 440-584717 and analytical batch 440-584881 contained Copper above the method detection limit (MDL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6020: The continuing calibration verification (CCV) associated with batch 440-584938 recovered above the upper control limit for Beryllium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: STSB28_0.5-3 (440-255674-8), STSB28_3-6 (440-255674-9) and STSB29_6-15 (440-255674-14).

Job ID: 440-255674-1 (Continued)

Laboratory: Eurofins Calscience Irvine (Continued)

Method 6020: The method blank for preparation batch 440-584717 and analytical batch 440-584938 contained Copper above the method detection limit (MDL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6020: The method blank for preparation batch 440-584717 and analytical batch 440-584960 contained Copper above the method detection limit (MDL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 7471A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 440-584679 and analytical batch 440-585046 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.

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.

Detection Summary

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

Job ID: 440-255674-1

Client Sample ID: STSB27_0-0.5 — Lab Sample ID: 440-255674-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8000		10	7.9	mg/Kg	5	☼	6010B	Total/NA
Calcium	7200		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	11000	B	10	7.1	mg/Kg	5	☼	6010B	Total/NA
Lithium	7.4		5.1	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	6600		10	5.1	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	340		5.1	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	450		64	33	mg/Kg	5	☼	6010B	Total/NA
Sodium	290		64	33	mg/Kg	5	☼	6010B	Total/NA
Strontium	79		5.1	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	290		2.0	1.0	mg/Kg	5	☼	6010B	Total/NA
Antimony	1.3		1.0	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	4.7		0.51	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	43		0.51	0.26	mg/Kg	20	☼	6020	Total/NA
Chromium	9.0		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Cobalt	3.8		0.51	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	600	B	1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Lead	3.2		0.51	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	77		0.51	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.5		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Nickel	11		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Selenium	2.4		1.0	0.20	mg/Kg	20	☼	6020	Total/NA
Vanadium	18		1.0	0.51	mg/Kg	20	☼	6020	Total/NA
Zinc	8.9	J	10	5.1	mg/Kg	20	☼	6020	Total/NA
Mercury	0.21		0.021	0.012	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB27_0.5-3 — Lab Sample ID: 440-255674-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8200		10	8.0	mg/Kg	5	☼	6010B	Total/NA
Calcium	6200		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	12000	B	10	7.2	mg/Kg	5	☼	6010B	Total/NA
Lithium	5.8		5.2	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	7000		10	5.2	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	350		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	390		65	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	270		65	33	mg/Kg	5	☼	6010B	Total/NA
Strontium	70		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	300		2.1	1.0	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.83	J	1.0	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	4.5		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	37		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.17	J	0.31	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	8.7		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.1		0.52	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	660	B	1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Lead	3.1		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	84		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.3		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Nickel	11		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Selenium	2.2		1.0	0.21	mg/Kg	20	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: STSB27_0.5-3 (Continued) — Lab Sample ID: 440-255674-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	20		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Zinc	9.9	J	10	5.2	mg/Kg	20	☼	6020	Total/NA
Mercury	0.15		0.021	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB27_3-6 — Lab Sample ID: 440-255674-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7800		10	8.1	mg/Kg	5	☼	6010B	Total/NA
Calcium	2900		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	10000	B	10	7.2	mg/Kg	5	☼	6010B	Total/NA
Lithium	3.6	J	5.2	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	6800		10	5.2	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	360		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	250		66	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	38	J	66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	69		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	320		2.1	1.0	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.70	J	1.0	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	5.5		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	25		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.20	J	0.31	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	5.2		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.2		0.52	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	910	B	1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Lead	3.0		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	36		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.6		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Nickel	7.3		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Selenium	4.3		1.0	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	19		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Zinc	5.8	J	10	5.2	mg/Kg	20	☼	6020	Total/NA
Mercury	0.11		0.021	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB27_6-15 — Lab Sample ID: 440-255674-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	5900		11	8.5	mg/Kg	5	☼	6010B	Total/NA
Calcium	4300		28	15	mg/Kg	5	☼	6010B	Total/NA
Iron	14000	B	11	7.6	mg/Kg	5	☼	6010B	Total/NA
Lithium	3.5	J	5.5	3.1	mg/Kg	5	☼	6010B	Total/NA
Magnesium	5500		11	5.5	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	650		5.5	2.8	mg/Kg	5	☼	6010B	Total/NA
Potassium	1200		69	36	mg/Kg	5	☼	6010B	Total/NA
Sodium	59	J	69	35	mg/Kg	5	☼	6010B	Total/NA
Strontium	38		5.5	2.8	mg/Kg	5	☼	6010B	Total/NA
Titanium	380		2.2	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.30	J	1.1	0.30	mg/Kg	20	☼	6020	Total/NA
Arsenic	1.9		0.55	0.28	mg/Kg	20	☼	6020	Total/NA
Barium	34		0.55	0.28	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.26	J	0.33	0.17	mg/Kg	20	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: STSB27_6-15 (Continued)

Lab Sample ID: 440-255674-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	6.7		1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Cobalt	6.7		0.55	0.23	mg/Kg	20	☼	6020	Total/NA
Copper	770	B	1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Lead	1.6		0.55	0.28	mg/Kg	20	☼	6020	Total/NA
Manganese	80		0.55	0.28	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.3		1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Nickel	8.1		1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Selenium	1.7		1.1	0.22	mg/Kg	20	☼	6020	Total/NA
Vanadium	19		1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Zinc	13		11	5.5	mg/Kg	20	☼	6020	Total/NA
Mercury	0.042		0.022	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB28_0-0.5

Lab Sample ID: 440-255674-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7200		11	8.2	mg/Kg	5	☼	6010B	Total/NA
Calcium	3800		27	14	mg/Kg	5	☼	6010B	Total/NA
Iron	9800	B	11	7.4	mg/Kg	5	☼	6010B	Total/NA
Magnesium	5600		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	430		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Potassium	1200		67	35	mg/Kg	5	☼	6010B	Total/NA
Sodium	89		67	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	96		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Titanium	450		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	1.4		1.1	0.29	mg/Kg	20	☼	6020	Total/NA
Arsenic	6.7		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Barium	57		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.23	J	0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	5.3		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	3.8		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	470	B	1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	2.6		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Manganese	38		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.7		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	6.6		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	4.7		1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Silver	0.13	J	0.53	0.11	mg/Kg	20	☼	6020	Total/NA
Vanadium	20		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	9.0	J	11	5.3	mg/Kg	20	☼	6020	Total/NA
Mercury	0.38		0.021	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB28-FD_0-0.5

Lab Sample ID: 440-255674-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	6800		11	8.3	mg/Kg	5	☼	6010B	Total/NA
Calcium	3700		27	14	mg/Kg	5	☼	6010B	Total/NA
Iron	10000	B	11	7.4	mg/Kg	5	☼	6010B	Total/NA
Magnesium	5400		11	5.4	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	360		5.4	2.7	mg/Kg	5	☼	6010B	Total/NA
Potassium	680		67	35	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: 440-255674-1

Client Sample ID: STSB28-FD_0-0.5 (Continued)

Lab Sample ID: 440-255674-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	100		67	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	71		5.4	2.7	mg/Kg	5	☼	6010B	Total/NA
Titanium	390		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	1.4		1.1	0.29	mg/Kg	20	☼	6020	Total/NA
Arsenic	6.1		0.54	0.27	mg/Kg	20	☼	6020	Total/NA
Barium	35		0.54	0.27	mg/Kg	20	☼	6020	Total/NA
Chromium	4.7		1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Cobalt	2.6		0.54	0.23	mg/Kg	20	☼	6020	Total/NA
Copper	450	B	1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Lead	2.4		0.54	0.27	mg/Kg	20	☼	6020	Total/NA
Manganese	32		0.54	0.27	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.6		1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Nickel	5.5		1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Selenium	4.2		1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Silver	0.12	J	0.54	0.11	mg/Kg	20	☼	6020	Total/NA
Vanadium	17		1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Zinc	7.3	J	11	5.4	mg/Kg	20	☼	6020	Total/NA
Mercury	0.71		0.021	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB28_0.5-3

Lab Sample ID: 440-255674-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7200		10	8.1	mg/Kg	5	☼	6010B	Total/NA
Calcium	3500		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	10000	B	10	7.2	mg/Kg	5	☼	6010B	Total/NA
Magnesium	6200		10	5.2	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	380		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	650		66	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	41	J	66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	51		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	360		2.1	1.0	mg/Kg	5	☼	6010B	Total/NA
Antimony	1.6		1.0	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	4.7		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	34		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Chromium	6.0		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Cobalt	3.5		0.52	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	580	B	1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Lead	2.4		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	44		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.7		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Nickel	6.9		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Selenium	3.1		1.0	0.21	mg/Kg	20	☼	6020	Total/NA
Silver	0.10	J	0.52	0.10	mg/Kg	20	☼	6020	Total/NA
Vanadium	15		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Zinc	6.8	J	10	5.2	mg/Kg	20	☼	6020	Total/NA
Mercury	0.66		0.021	0.012	mg/Kg	1	☼	7471A	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: 440-255674-1

Client Sample ID: STSB28_3-6

Lab Sample ID: 440-255674-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	4100		11	8.3	mg/Kg	5	☼	6010B	Total/NA
Calcium	2800		27	15	mg/Kg	5	☼	6010B	Total/NA
Iron	9200	B	11	7.4	mg/Kg	5	☼	6010B	Total/NA
Magnesium	3600		11	5.4	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	460		5.4	2.7	mg/Kg	5	☼	6010B	Total/NA
Potassium	680		67	35	mg/Kg	5	☼	6010B	Total/NA
Sodium	49	J	67	35	mg/Kg	5	☼	6010B	Total/NA
Strontium	27		5.4	2.7	mg/Kg	5	☼	6010B	Total/NA
Titanium	190		2.2	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.54	J	1.1	0.29	mg/Kg	20	☼	6020	Total/NA
Arsenic	2.1		0.54	0.27	mg/Kg	20	☼	6020	Total/NA
Barium	26		0.54	0.27	mg/Kg	20	☼	6020	Total/NA
Chromium	5.0		1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Cobalt	2.3		0.54	0.23	mg/Kg	20	☼	6020	Total/NA
Copper	420	B	1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Lead	1.4		0.54	0.27	mg/Kg	20	☼	6020	Total/NA
Manganese	39		0.54	0.27	mg/Kg	20	☼	6020	Total/NA
Molybdenum	1.6		1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Nickel	5.0		1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Selenium	1.8		1.1	0.22	mg/Kg	20	☼	6020	Total/NA
Vanadium	11		1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Zinc	8.3	J	11	5.4	mg/Kg	20	☼	6020	Total/NA
Mercury	0.40		0.022	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB28_6-15

Lab Sample ID: 440-255674-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	9300		12	9.3	mg/Kg	5	☼	6010B	Total/NA
Calcium	6000		30	16	mg/Kg	5	☼	6010B	Total/NA
Iron	16000	B	12	8.3	mg/Kg	5	☼	6010B	Total/NA
Lithium	4.4	J	6.0	3.4	mg/Kg	5	☼	6010B	Total/NA
Magnesium	7300		12	6.0	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	670		6.0	3.0	mg/Kg	5	☼	6010B	Total/NA
Potassium	2100		75	39	mg/Kg	5	☼	6010B	Total/NA
Sodium	150		75	39	mg/Kg	5	☼	6010B	Total/NA
Strontium	50		6.0	3.0	mg/Kg	5	☼	6010B	Total/NA
Titanium	500		2.4	1.2	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.35	J	1.2	0.33	mg/Kg	20	☼	6020	Total/NA
Arsenic	2.5		0.60	0.30	mg/Kg	20	☼	6020	Total/NA
Barium	65		0.60	0.30	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.48		0.36	0.18	mg/Kg	20	☼	6020	Total/NA
Chromium	9.5		1.2	0.60	mg/Kg	20	☼	6020	Total/NA
Cobalt	8.3		0.60	0.25	mg/Kg	20	☼	6020	Total/NA
Copper	710	B	1.2	0.60	mg/Kg	20	☼	6020	Total/NA
Lead	2.4		0.60	0.30	mg/Kg	20	☼	6020	Total/NA
Manganese	110		0.60	0.30	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.4		1.2	0.60	mg/Kg	20	☼	6020	Total/NA
Nickel	12		1.2	0.60	mg/Kg	20	☼	6020	Total/NA
Selenium	2.6		1.2	0.24	mg/Kg	20	☼	6020	Total/NA
Vanadium	23		1.2	0.60	mg/Kg	20	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: STSB28_6-15 (Continued)

Lab Sample ID: 440-255674-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	19		12	6.0	mg/Kg	20	☼	6020	Total/NA
Mercury	0.084		0.024	0.014	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB29_0-0.5

Lab Sample ID: 440-255674-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7300		11	8.2	mg/Kg	5	☼	6010B	Total/NA
Calcium	3000		27	14	mg/Kg	5	☼	6010B	Total/NA
Iron	8800	B	11	7.3	mg/Kg	5	☼	6010B	Total/NA
Lithium	3.5	J	5.3	3.0	mg/Kg	5	☼	6010B	Total/NA
Magnesium	6100		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	320		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Potassium	400		66	35	mg/Kg	5	☼	6010B	Total/NA
Sodium	77		66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	130		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Titanium	320		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	6.0		1.1	0.29	mg/Kg	20	☼	6020	Total/NA
Arsenic	9.0		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Barium	44		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.20	J	0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	5.7		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	2.8		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	1300	B	1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	3.0		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Manganese	30		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.7		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	6.8		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	3.6		1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Silver	0.18	J	0.53	0.11	mg/Kg	20	☼	6020	Total/NA
Vanadium	19		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Mercury	0.57		0.021	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB29_0.5-3

Lab Sample ID: 440-255674-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	5900		11	8.2	mg/Kg	5	☼	6010B	Total/NA
Calcium	3600		27	14	mg/Kg	5	☼	6010B	Total/NA
Iron	13000	B	11	7.3	mg/Kg	5	☼	6010B	Total/NA
Lithium	3.6	J	5.3	3.0	mg/Kg	5	☼	6010B	Total/NA
Magnesium	5000		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	640		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Potassium	1200	F1	66	35	mg/Kg	5	☼	6010B	Total/NA
Sodium	37	J	66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	42		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Titanium	330		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	2.2	F1	1.1	0.29	mg/Kg	20	☼	6020	Total/NA
Arsenic	3.3		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Barium	34		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.20	J	0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	5.6		1.1	0.53	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: 440-255674-1

Client Sample ID: STSB29_0.5-3 (Continued) — Lab Sample ID: 440-255674-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	2.3		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	820	B	1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	1.6		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Manganese	36		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Molybdenum	1.8		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	5.9		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	2.5		1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Silver	0.11	J	0.53	0.11	mg/Kg	20	☼	6020	Total/NA
Vanadium	18		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	8.2	J	11	5.3	mg/Kg	20	☼	6020	Total/NA
Mercury	0.20	F1	0.021	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB29_3-6 — Lab Sample ID: 440-255674-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	4900		10	8.0	mg/Kg	5	☼	6010B	Total/NA
Calcium	3400		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	13000	B	10	7.2	mg/Kg	5	☼	6010B	Total/NA
Lithium	4.8	J	5.2	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	4900		10	5.2	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	630		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1300		65	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	45	J	65	33	mg/Kg	5	☼	6010B	Total/NA
Strontium	30		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	410		2.1	1.0	mg/Kg	5	☼	6010B	Total/NA
Arsenic	1.2		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	28		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.25	J	0.31	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	5.4		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Cobalt	7.9		0.52	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	1900	B	1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Lead	1.4		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	92		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	1.4		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Nickel	8.7		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Selenium	1.7		1.0	0.21	mg/Kg	20	☼	6020	Total/NA
Silver	0.11	J	0.52	0.10	mg/Kg	20	☼	6020	Total/NA
Vanadium	19		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Zinc	17		10	5.2	mg/Kg	20	☼	6020	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB29_6-15 — Lab Sample ID: 440-255674-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	5700		11	8.5	mg/Kg	5	☼	6010B	Total/NA
Calcium	5100		28	15	mg/Kg	5	☼	6010B	Total/NA
Iron	11000	B	11	7.6	mg/Kg	5	☼	6010B	Total/NA
Lithium	3.5	J	5.5	3.1	mg/Kg	5	☼	6010B	Total/NA
Magnesium	5200		11	5.5	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	590		5.5	2.8	mg/Kg	5	☼	6010B	Total/NA
Potassium	1400		69	36	mg/Kg	5	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: STSB29_6-15 (Continued)

Lab Sample ID: 440-255674-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	83		69	35	mg/Kg	5	☼	6010B	Total/NA
Strontium	34		5.5	2.8	mg/Kg	5	☼	6010B	Total/NA
Titanium	380		2.2	1.1	mg/Kg	5	☼	6010B	Total/NA
Arsenic	1.4		0.55	0.28	mg/Kg	20	☼	6020	Total/NA
Barium	39		0.55	0.28	mg/Kg	20	☼	6020	Total/NA
Chromium	7.9		1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.6		0.55	0.23	mg/Kg	20	☼	6020	Total/NA
Copper	840	B	1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Lead	1.6		0.55	0.28	mg/Kg	20	☼	6020	Total/NA
Manganese	65		0.55	0.28	mg/Kg	20	☼	6020	Total/NA
Molybdenum	1.8		1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Nickel	8.3		1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Selenium	1.9		1.1	0.22	mg/Kg	20	☼	6020	Total/NA
Silver	0.12	J	0.55	0.11	mg/Kg	20	☼	6020	Total/NA
Vanadium	16		1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Zinc	13		11	5.5	mg/Kg	20	☼	6020	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB29-FD_6-15

Lab Sample ID: 440-255674-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	5900		11	8.7	mg/Kg	5	☼	6010B	Total/NA
Calcium	5500		28	15	mg/Kg	5	☼	6010B	Total/NA
Iron	11000	B	11	7.8	mg/Kg	5	☼	6010B	Total/NA
Lithium	3.3	J	5.7	3.2	mg/Kg	5	☼	6010B	Total/NA
Magnesium	5400		11	5.7	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	580		5.7	2.8	mg/Kg	5	☼	6010B	Total/NA
Potassium	1300		71	37	mg/Kg	5	☼	6010B	Total/NA
Sodium	82		71	36	mg/Kg	5	☼	6010B	Total/NA
Strontium	37		5.7	2.8	mg/Kg	5	☼	6010B	Total/NA
Titanium	430		2.3	1.1	mg/Kg	5	☼	6010B	Total/NA
Arsenic	1.3		0.57	0.28	mg/Kg	20	☼	6020	Total/NA
Barium	36		0.57	0.28	mg/Kg	20	☼	6020	Total/NA
Chromium	8.6		1.1	0.57	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.5		0.57	0.24	mg/Kg	20	☼	6020	Total/NA
Copper	840	B	1.1	0.57	mg/Kg	20	☼	6020	Total/NA
Lead	1.5		0.57	0.28	mg/Kg	20	☼	6020	Total/NA
Manganese	70		0.57	0.28	mg/Kg	20	☼	6020	Total/NA
Molybdenum	1.9		1.1	0.57	mg/Kg	20	☼	6020	Total/NA
Nickel	8.5		1.1	0.57	mg/Kg	20	☼	6020	Total/NA
Selenium	1.7		1.1	0.23	mg/Kg	20	☼	6020	Total/NA
Vanadium	17		1.1	0.57	mg/Kg	20	☼	6020	Total/NA
Zinc	13		11	5.7	mg/Kg	20	☼	6020	Total/NA
Mercury	0.027		0.022	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB30_0-0.5

Lab Sample ID: 440-255674-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	6300		11	8.1	mg/Kg	5	☼	6010B	Total/NA
Calcium	4500		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	8700	B	11	7.3	mg/Kg	5	☼	6010B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: STSB30_0-0.5 (Continued)

Lab Sample ID: 440-255674-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	4700		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	360		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	270		66	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	62	J	66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	65		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	220		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	2.0		1.1	0.29	mg/Kg	20	☼	6020	Total/NA
Arsenic	5.9		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	35		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.34		0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	4.9		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.1		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	680	B	1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	4.9		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	38		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	3.5		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	7.4		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	3.5		1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	15		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	7.5	J	11	5.3	mg/Kg	20	☼	6020	Total/NA
Mercury	0.28		0.022	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB30_0.5-3

Lab Sample ID: 440-255674-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	6500		11	8.2	mg/Kg	5	☼	6010B	Total/NA
Calcium	2800		27	14	mg/Kg	5	☼	6010B	Total/NA
Iron	8900	B	11	7.3	mg/Kg	5	☼	6010B	Total/NA
Magnesium	4700		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	330		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Potassium	280		66	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	56	J	66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	54		5.3	2.7	mg/Kg	5	☼	6010B	Total/NA
Titanium	260		2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	1.2		1.1	0.29	mg/Kg	20	☼	6020	Total/NA
Arsenic	4.6		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Barium	33		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.31	J	0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	5.0		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	3.0		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	670	B	1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	3.8		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Manganese	46		0.53	0.27	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.3		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	6.7		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	3.2		1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	15		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	6.8	J	11	5.3	mg/Kg	20	☼	6020	Total/NA
Mercury	0.31		0.022	0.013	mg/Kg	1	☼	7471A	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: 440-255674-1

Client Sample ID: STSB30_3-6 — Lab Sample ID: 440-255674-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7600		10	8.0	mg/Kg	5	☼	6010B	Total/NA
Calcium	4200		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	9700	B	10	7.2	mg/Kg	5	☼	6010B	Total/NA
Lithium	3.1	J	5.2	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	6000		10	5.2	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	410		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	340		65	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	51	J	65	33	mg/Kg	5	☼	6010B	Total/NA
Strontium	58		5.2	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	360		2.1	1.0	mg/Kg	5	☼	6010B	Total/NA
Antimony	1.3		1.0	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	6.6		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	38		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.20	J	0.31	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	6.1		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Cobalt	3.6		0.52	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	880	B	1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Lead	4.0		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	42		0.52	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.5		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Nickel	8.2		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Selenium	5.2		1.0	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	19		1.0	0.52	mg/Kg	20	☼	6020	Total/NA
Zinc	8.1	J	10	5.2	mg/Kg	20	☼	6020	Total/NA
Mercury	0.23		0.021	0.012	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB30_6-15 — Lab Sample ID: 440-255674-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	6500		11	8.7	mg/Kg	5	☼	6010B	Total/NA
Calcium	6700		28	15	mg/Kg	5	☼	6010B	Total/NA
Iron	12000	B	11	7.8	mg/Kg	5	☼	6010B	Total/NA
Lithium	3.3	J	5.6	3.2	mg/Kg	5	☼	6010B	Total/NA
Magnesium	5700		11	5.6	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	570		5.6	2.8	mg/Kg	5	☼	6010B	Total/NA
Potassium	1200		71	37	mg/Kg	5	☼	6010B	Total/NA
Sodium	97		71	36	mg/Kg	5	☼	6010B	Total/NA
Strontium	65		5.6	2.8	mg/Kg	5	☼	6010B	Total/NA
Titanium	420		2.3	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.59	J	1.1	0.30	mg/Kg	20	☼	6020	Total/NA
Arsenic	2.5		0.56	0.28	mg/Kg	20	☼	6020	Total/NA
Barium	51		0.56	0.28	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.40		0.34	0.17	mg/Kg	20	☼	6020	Total/NA
Chromium	7.5		1.1	0.56	mg/Kg	20	☼	6020	Total/NA
Cobalt	6.7		0.56	0.24	mg/Kg	20	☼	6020	Total/NA
Copper	740	B	1.1	0.56	mg/Kg	20	☼	6020	Total/NA
Lead	2.2		0.56	0.28	mg/Kg	20	☼	6020	Total/NA
Manganese	74		0.56	0.28	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.1		1.1	0.56	mg/Kg	20	☼	6020	Total/NA
Nickel	9.3		1.1	0.56	mg/Kg	20	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: STSB30_6-15 (Continued)

Lab Sample ID: 440-255674-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Selenium	2.2		1.1	0.23	mg/Kg	20	☼	6020	Total/NA
Vanadium	19		1.1	0.56	mg/Kg	20	☼	6020	Total/NA
Zinc	13		11	5.6	mg/Kg	20	☼	6020	Total/NA
Mercury	0.075		0.022	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB31_0-0.5

Lab Sample ID: 440-255674-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7500		11	8.4	mg/Kg	5	☼	6010B	Total/NA
Boron	2.7	J	5.5	2.7	mg/Kg	5	☼	6010B	Total/NA
Calcium	3000		27	15	mg/Kg	5	☼	6010B	Total/NA
Iron	14000	B	11	7.5	mg/Kg	5	☼	6010B	Total/NA
Lithium	5.3	J	5.5	3.1	mg/Kg	5	☼	6010B	Total/NA
Magnesium	5600		11	5.5	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	360		5.5	2.7	mg/Kg	5	☼	6010B	Total/NA
Potassium	1200		68	35	mg/Kg	5	☼	6010B	Total/NA
Sodium	220		68	35	mg/Kg	5	☼	6010B	Total/NA
Strontium	38		5.5	2.7	mg/Kg	5	☼	6010B	Total/NA
Titanium	230		2.2	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.96	J	1.1	0.29	mg/Kg	20	☼	6020	Total/NA
Arsenic	6.8		0.55	0.27	mg/Kg	20	☼	6020	Total/NA
Barium	46		0.55	0.27	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.26	J	0.33	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	6.0		1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Cobalt	4.3		0.55	0.23	mg/Kg	20	☼	6020	Total/NA
Copper	1900	B	1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Lead	3.3		0.55	0.27	mg/Kg	20	☼	6020	Total/NA
Manganese	65		0.55	0.27	mg/Kg	20	☼	6020	Total/NA
Molybdenum	4.9		1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Nickel	8.2		1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Selenium	3.3		1.1	0.22	mg/Kg	20	☼	6020	Total/NA
Vanadium	21		1.1	0.55	mg/Kg	20	☼	6020	Total/NA
Zinc	21		11	5.5	mg/Kg	20	☼	6020	Total/NA
Mercury	0.067		0.021	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB31_0.5-3

Lab Sample ID: 440-255674-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	6400		11	8.3	mg/Kg	5	☼	6010B	Total/NA
Calcium	2500		27	15	mg/Kg	5	☼	6010B	Total/NA
Iron	15000	B	11	7.5	mg/Kg	5	☼	6010B	Total/NA
Lithium	4.3	J	5.4	3.0	mg/Kg	5	☼	6010B	Total/NA
Magnesium	4800		11	5.4	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	300		5.4	2.7	mg/Kg	5	☼	6010B	Total/NA
Potassium	1100		67	35	mg/Kg	5	☼	6010B	Total/NA
Sodium	45	J	67	35	mg/Kg	5	☼	6010B	Total/NA
Strontium	50		5.4	2.7	mg/Kg	5	☼	6010B	Total/NA
Titanium	200		2.2	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.74	J	1.1	0.29	mg/Kg	20	☼	6020	Total/NA
Arsenic	6.9		0.54	0.27	mg/Kg	20	☼	6020	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: STSB31_0.5-3 (Continued)

Lab Sample ID: 440-255674-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	47		0.54	0.27	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.17	J	0.32	0.16	mg/Kg	20	☼	6020	Total/NA
Chromium	5.1		1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Cobalt	3.5		0.54	0.23	mg/Kg	20	☼	6020	Total/NA
Copper	1300	B	1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Lead	3.5		0.54	0.27	mg/Kg	20	☼	6020	Total/NA
Manganese	49		0.54	0.27	mg/Kg	20	☼	6020	Total/NA
Molybdenum	4.1		1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Nickel	6.6		1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Selenium	2.8		1.1	0.22	mg/Kg	20	☼	6020	Total/NA
Vanadium	18		1.1	0.54	mg/Kg	20	☼	6020	Total/NA
Zinc	18		11	5.4	mg/Kg	20	☼	6020	Total/NA
Mercury	0.21		0.022	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB31_3-6

Lab Sample ID: 440-255674-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7000		11	8.1	mg/Kg	5	☼	6010B	Total/NA
Calcium	2700		26	14	mg/Kg	5	☼	6010B	Total/NA
Iron	15000		11	7.3	mg/Kg	5	☼	6010B	Total/NA
Lithium	4.8	J	5.3	2.9	mg/Kg	5	☼	6010B	Total/NA
Magnesium	5100		11	5.3	mg/Kg	5	☼	6010B	Total/NA
Phosphorus	350		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Potassium	1100		66	34	mg/Kg	5	☼	6010B	Total/NA
Sodium	49	J	66	34	mg/Kg	5	☼	6010B	Total/NA
Strontium	40		5.3	2.6	mg/Kg	5	☼	6010B	Total/NA
Titanium	200	F1	2.1	1.1	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.63	J F1	1.1	0.28	mg/Kg	20	☼	6020	Total/NA
Arsenic	6.8		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Barium	47		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Chromium	5.4	F2	1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Cobalt	3.3		0.53	0.22	mg/Kg	20	☼	6020	Total/NA
Copper	1100		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Lead	3.0		0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Manganese	51	F1	0.53	0.26	mg/Kg	20	☼	6020	Total/NA
Molybdenum	4.6		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Nickel	6.0		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Selenium	3.5		1.1	0.21	mg/Kg	20	☼	6020	Total/NA
Vanadium	17		1.1	0.53	mg/Kg	20	☼	6020	Total/NA
Zinc	16		11	5.3	mg/Kg	20	☼	6020	Total/NA
Mercury	0.25		0.021	0.013	mg/Kg	1	☼	7471A	Total/NA
Sample Homogenized	yes				NONE	1		Homogenization	Total/NA

Client Sample ID: STSB31_6-15

Lab Sample ID: 440-255674-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7900		12	8.9	mg/Kg	5	☼	6010B	Total/NA
Calcium	5600		29	16	mg/Kg	5	☼	6010B	Total/NA
Iron	17000		12	7.9	mg/Kg	5	☼	6010B	Total/NA
Lithium	4.9	J	5.8	3.2	mg/Kg	5	☼	6010B	Total/NA
Magnesium	6600		12	5.8	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: 440-255674-1

Client Sample ID: STSB31_6-15 (Continued)

Lab Sample ID: 440-255674-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phosphorus	690		5.8	2.9	mg/Kg	5	☼	6010B	Total/NA
Potassium	1600		72	37	mg/Kg	5	☼	6010B	Total/NA
Sodium	110		72	37	mg/Kg	5	☼	6010B	Total/NA
Strontium	48		5.8	2.9	mg/Kg	5	☼	6010B	Total/NA
Titanium	460		2.3	1.2	mg/Kg	5	☼	6010B	Total/NA
Antimony	0.41	J	1.2	0.31	mg/Kg	20	☼	6020	Total/NA
Arsenic	3.8		0.58	0.29	mg/Kg	20	☼	6020	Total/NA
Barium	45		0.58	0.29	mg/Kg	20	☼	6020	Total/NA
Beryllium	0.23	J	0.35	0.17	mg/Kg	20	☼	6020	Total/NA
Chromium	8.0		1.2	0.58	mg/Kg	20	☼	6020	Total/NA
Cobalt	6.2		0.58	0.24	mg/Kg	20	☼	6020	Total/NA
Copper	740		1.2	0.58	mg/Kg	20	☼	6020	Total/NA
Lead	2.2		0.58	0.29	mg/Kg	20	☼	6020	Total/NA
Manganese	87		0.58	0.29	mg/Kg	20	☼	6020	Total/NA
Molybdenum	2.3		1.2	0.58	mg/Kg	20	☼	6020	Total/NA
Nickel	9.5		1.2	0.58	mg/Kg	20	☼	6020	Total/NA
Selenium	2.7		1.2	0.23	mg/Kg	20	☼	6020	Total/NA
Vanadium	21		1.2	0.58	mg/Kg	20	☼	6020	Total/NA
Zinc	15		12	5.8	mg/Kg	20	☼	6020	Total/NA
Mercury	0.12		0.023	0.014	mg/Kg	1	☼	7471A	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: 440-255674-1

Client Sample ID: STSB27_0-0.5

Lab Sample ID: 440-255674-1
Date Collected: 11/21/19 09:15
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 97.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8000		10	7.9	mg/Kg	☼	12/09/19 13:03	12/10/19 12:45	5
Boron	ND		5.1	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 12:45	5
Calcium	7200		26	14	mg/Kg	☼	12/09/19 13:03	12/10/19 12:45	5
Iron	11000	B	10	7.1	mg/Kg	☼	12/09/19 13:03	12/10/19 12:45	5
Lithium	7.4		5.1	2.9	mg/Kg	☼	12/09/19 13:03	12/10/19 12:45	5
Magnesium	6600		10	5.1	mg/Kg	☼	12/09/19 13:03	12/10/19 12:45	5
Phosphorus	340		5.1	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 12:45	5
Potassium	450		64	33	mg/Kg	☼	12/09/19 13:03	12/10/19 12:45	5
Sodium	290		64	33	mg/Kg	☼	12/09/19 13:03	12/10/19 12:45	5
Strontium	79		5.1	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 12:45	5
Tin	ND		10	5.1	mg/Kg	☼	12/09/19 13:03	12/10/19 12:45	5
Titanium	290		2.0	1.0	mg/Kg	☼	12/09/19 13:03	12/10/19 12:45	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.3		1.0	0.28	mg/Kg	☼	12/09/19 13:03	12/09/19 23:07	20
Arsenic	4.7		0.51	0.26	mg/Kg	☼	12/09/19 13:03	12/09/19 23:07	20
Barium	43		0.51	0.26	mg/Kg	☼	12/09/19 13:03	12/09/19 23:07	20
Beryllium	ND		0.31	0.15	mg/Kg	☼	12/09/19 13:03	12/09/19 23:07	20
Cadmium	ND		0.51	0.26	mg/Kg	☼	12/09/19 13:03	12/09/19 23:07	20
Chromium	9.0		1.0	0.51	mg/Kg	☼	12/09/19 13:03	12/09/19 23:07	20
Cobalt	3.8		0.51	0.22	mg/Kg	☼	12/09/19 13:03	12/09/19 23:07	20
Copper	600	B	1.0	0.51	mg/Kg	☼	12/09/19 13:03	12/09/19 23:07	20
Lead	3.2		0.51	0.26	mg/Kg	☼	12/09/19 13:03	12/09/19 23:07	20
Manganese	77		0.51	0.26	mg/Kg	☼	12/09/19 13:03	12/09/19 23:07	20
Molybdenum	2.5		1.0	0.51	mg/Kg	☼	12/09/19 13:03	12/09/19 23:07	20
Nickel	11		1.0	0.51	mg/Kg	☼	12/09/19 13:03	12/09/19 23:07	20
Selenium	2.4		1.0	0.20	mg/Kg	☼	12/09/19 13:03	12/09/19 23:07	20
Silver	ND		0.51	0.10	mg/Kg	☼	12/09/19 13:03	12/09/19 23:07	20
Thallium	ND		0.51	0.26	mg/Kg	☼	12/09/19 13:03	12/09/19 23:07	20
Vanadium	18		1.0	0.51	mg/Kg	☼	12/09/19 13:03	12/09/19 23:07	20
Zinc	8.9	J	10	5.1	mg/Kg	☼	12/09/19 13:03	12/09/19 23:07	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.21		0.021	0.012	mg/Kg	☼	12/09/19 11:21	12/10/19 11:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB27_0.5-3

Lab Sample ID: 440-255674-2
Date Collected: 11/21/19 09:25
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 96.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8200		10	8.0	mg/Kg	☼	12/09/19 13:03	12/10/19 12:47	5
Boron	ND		5.2	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 12:47	5
Calcium	6200		26	14	mg/Kg	☼	12/09/19 13:03	12/10/19 12:47	5
Iron	12000	B	10	7.2	mg/Kg	☼	12/09/19 13:03	12/10/19 12:47	5

Client Sample ID: STSB27_0.5-3

Lab Sample ID: 440-255674-2

Date Collected: 11/21/19 09:25
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 96.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	5.8		5.2	2.9	mg/Kg	☼	12/09/19 13:03	12/10/19 12:47	5
Magnesium	7000		10	5.2	mg/Kg	☼	12/09/19 13:03	12/10/19 12:47	5
Phosphorus	350		5.2	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 12:47	5
Potassium	390		65	34	mg/Kg	☼	12/09/19 13:03	12/10/19 12:47	5
Sodium	270		65	33	mg/Kg	☼	12/09/19 13:03	12/10/19 12:47	5
Strontium	70		5.2	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 12:47	5
Tin	ND		10	5.2	mg/Kg	☼	12/09/19 13:03	12/10/19 12:47	5
Titanium	300		2.1	1.0	mg/Kg	☼	12/09/19 13:03	12/10/19 12:47	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.83	J	1.0	0.28	mg/Kg	☼	12/09/19 13:03	12/09/19 23:09	20
Arsenic	4.5		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/09/19 23:09	20
Barium	37		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/09/19 23:09	20
Beryllium	0.17	J	0.31	0.16	mg/Kg	☼	12/09/19 13:03	12/09/19 23:09	20
Cadmium	ND		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/09/19 23:09	20
Chromium	8.7		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/09/19 23:09	20
Cobalt	4.1		0.52	0.22	mg/Kg	☼	12/09/19 13:03	12/09/19 23:09	20
Copper	660	B	1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/09/19 23:09	20
Lead	3.1		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/09/19 23:09	20
Manganese	84		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/09/19 23:09	20
Molybdenum	2.3		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/09/19 23:09	20
Nickel	11		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/09/19 23:09	20
Selenium	2.2		1.0	0.21	mg/Kg	☼	12/09/19 13:03	12/09/19 23:09	20
Silver	ND		0.52	0.10	mg/Kg	☼	12/09/19 13:03	12/09/19 23:09	20
Thallium	ND		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/09/19 23:09	20
Vanadium	20		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/09/19 23:09	20
Zinc	9.9	J	10	5.2	mg/Kg	☼	12/09/19 13:03	12/09/19 23:09	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15		0.021	0.013	mg/Kg	☼	12/09/19 11:21	12/10/19 11:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB27_3-6

Lab Sample ID: 440-255674-3

Date Collected: 11/21/19 09:31
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 94.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7800		10	8.1	mg/Kg	☼	12/09/19 13:03	12/10/19 12:48	5
Boron	ND		5.2	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 12:48	5
Calcium	2900		26	14	mg/Kg	☼	12/09/19 13:03	12/10/19 12:48	5
Iron	10000	B	10	7.2	mg/Kg	☼	12/09/19 13:03	12/10/19 12:48	5
Lithium	3.6	J	5.2	2.9	mg/Kg	☼	12/09/19 13:03	12/10/19 12:48	5
Magnesium	6800		10	5.2	mg/Kg	☼	12/09/19 13:03	12/10/19 12:48	5
Phosphorus	360		5.2	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 12:48	5
Potassium	250		66	34	mg/Kg	☼	12/09/19 13:03	12/10/19 12:48	5

Client Sample ID: STSB27_3-6

Lab Sample ID: 440-255674-3
Date Collected: 11/21/19 09:31
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 94.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	38	J	66	34	mg/Kg	☼	12/09/19 13:03	12/10/19 12:48	5
Strontium	69		5.2	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 12:48	5
Tin	ND		10	5.2	mg/Kg	☼	12/09/19 13:03	12/10/19 12:48	5
Titanium	320		2.1	1.0	mg/Kg	☼	12/09/19 13:03	12/10/19 12:48	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.70	J	1.0	0.28	mg/Kg	☼	12/09/19 13:03	12/09/19 23:12	20
Arsenic	5.5		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/09/19 23:12	20
Barium	25		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/09/19 23:12	20
Beryllium	0.20	J	0.31	0.16	mg/Kg	☼	12/09/19 13:03	12/09/19 23:12	20
Cadmium	ND		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/09/19 23:12	20
Chromium	5.2		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/09/19 23:12	20
Cobalt	4.2		0.52	0.22	mg/Kg	☼	12/09/19 13:03	12/09/19 23:12	20
Copper	910	B	1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/09/19 23:12	20
Lead	3.0		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/09/19 23:12	20
Manganese	36		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/09/19 23:12	20
Molybdenum	2.6		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/09/19 23:12	20
Nickel	7.3		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/09/19 23:12	20
Selenium	4.3		1.0	0.21	mg/Kg	☼	12/09/19 13:03	12/09/19 23:12	20
Silver	ND		0.52	0.10	mg/Kg	☼	12/09/19 13:03	12/09/19 23:12	20
Thallium	ND		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/09/19 23:12	20
Vanadium	19		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/09/19 23:12	20
Zinc	5.8	J	10	5.2	mg/Kg	☼	12/09/19 13:03	12/09/19 23:12	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11		0.021	0.013	mg/Kg	☼	12/09/19 11:21	12/10/19 11:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB27_6-15

Lab Sample ID: 440-255674-5
Date Collected: 11/21/19 09:55
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 89.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5900		11	8.5	mg/Kg	☼	12/09/19 13:03	12/10/19 13:00	5
Boron	ND		5.5	2.8	mg/Kg	☼	12/09/19 13:03	12/10/19 13:00	5
Calcium	4300		28	15	mg/Kg	☼	12/09/19 13:03	12/10/19 13:00	5
Iron	14000	B	11	7.6	mg/Kg	☼	12/09/19 13:03	12/10/19 13:00	5
Lithium	3.5	J	5.5	3.1	mg/Kg	☼	12/09/19 13:03	12/10/19 13:00	5
Magnesium	5500		11	5.5	mg/Kg	☼	12/09/19 13:03	12/10/19 13:00	5
Phosphorus	650		5.5	2.8	mg/Kg	☼	12/09/19 13:03	12/10/19 13:00	5
Potassium	1200		69	36	mg/Kg	☼	12/09/19 13:03	12/10/19 13:00	5
Sodium	59	J	69	35	mg/Kg	☼	12/09/19 13:03	12/10/19 13:00	5
Strontium	38		5.5	2.8	mg/Kg	☼	12/09/19 13:03	12/10/19 13:00	5
Tin	ND		11	5.5	mg/Kg	☼	12/09/19 13:03	12/10/19 13:00	5
Titanium	380		2.2	1.1	mg/Kg	☼	12/09/19 13:03	12/10/19 13:00	5

Client Sample Results

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

Job ID: 440-255674-1

Client Sample ID: STSB27_6-15

Lab Sample ID: 440-255674-5

Date Collected: 11/21/19 09:55
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 89.8

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.30	J	1.1	0.30	mg/Kg	☼	12/09/19 13:03	12/09/19 23:14	20
Arsenic	1.9		0.55	0.28	mg/Kg	☼	12/09/19 13:03	12/09/19 23:14	20
Barium	34		0.55	0.28	mg/Kg	☼	12/09/19 13:03	12/09/19 23:14	20
Beryllium	0.26	J	0.33	0.17	mg/Kg	☼	12/09/19 13:03	12/09/19 23:14	20
Cadmium	ND		0.55	0.28	mg/Kg	☼	12/09/19 13:03	12/09/19 23:14	20
Chromium	6.7		1.1	0.55	mg/Kg	☼	12/09/19 13:03	12/09/19 23:14	20
Cobalt	6.7		0.55	0.23	mg/Kg	☼	12/09/19 13:03	12/09/19 23:14	20
Copper	770	B	1.1	0.55	mg/Kg	☼	12/09/19 13:03	12/09/19 23:14	20
Lead	1.6		0.55	0.28	mg/Kg	☼	12/09/19 13:03	12/09/19 23:14	20
Manganese	80		0.55	0.28	mg/Kg	☼	12/09/19 13:03	12/09/19 23:14	20
Molybdenum	2.3		1.1	0.55	mg/Kg	☼	12/09/19 13:03	12/09/19 23:14	20
Nickel	8.1		1.1	0.55	mg/Kg	☼	12/09/19 13:03	12/09/19 23:14	20
Selenium	1.7		1.1	0.22	mg/Kg	☼	12/09/19 13:03	12/09/19 23:14	20
Silver	ND		0.55	0.11	mg/Kg	☼	12/09/19 13:03	12/09/19 23:14	20
Thallium	ND		0.55	0.28	mg/Kg	☼	12/09/19 13:03	12/09/19 23:14	20
Vanadium	19		1.1	0.55	mg/Kg	☼	12/09/19 13:03	12/09/19 23:14	20
Zinc	13		11	5.5	mg/Kg	☼	12/09/19 13:03	12/09/19 23:14	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.042		0.022	0.013	mg/Kg	☼	12/09/19 11:21	12/10/19 11:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB28_0-0.5

Lab Sample ID: 440-255674-6

Date Collected: 11/21/19 11:45
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 93.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7200		11	8.2	mg/Kg	☼	12/09/19 13:03	12/10/19 13:01	5
Boron	ND		5.3	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:01	5
Calcium	3800		27	14	mg/Kg	☼	12/09/19 13:03	12/10/19 13:01	5
Iron	9800	B	11	7.4	mg/Kg	☼	12/09/19 13:03	12/10/19 13:01	5
Lithium	ND		5.3	3.0	mg/Kg	☼	12/09/19 13:03	12/10/19 13:01	5
Magnesium	5600		11	5.3	mg/Kg	☼	12/09/19 13:03	12/10/19 13:01	5
Phosphorus	430		5.3	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:01	5
Potassium	1200		67	35	mg/Kg	☼	12/09/19 13:03	12/10/19 13:01	5
Sodium	89		67	34	mg/Kg	☼	12/09/19 13:03	12/10/19 13:01	5
Strontium	96		5.3	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:01	5
Tin	ND		11	5.3	mg/Kg	☼	12/09/19 13:03	12/10/19 13:01	5
Titanium	450		2.1	1.1	mg/Kg	☼	12/09/19 13:03	12/10/19 13:01	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.4		1.1	0.29	mg/Kg	☼	12/09/19 13:03	12/10/19 10:57	20
Arsenic	6.7		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 10:57	20
Barium	57		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 10:57	20
Beryllium	0.23	J	0.32	0.16	mg/Kg	☼	12/09/19 13:03	12/10/19 10:57	20

Client Sample ID: STSB28_0-0.5

Lab Sample ID: 440-255674-6

Date Collected: 11/21/19 11:45
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 93.9

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	☼	12/09/19 13:03	12/10/19 10:57	20
Chromium	5.3		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 10:57	20
Cobalt	3.8		0.53	0.22	mg/Kg	☼	12/09/19 13:03	12/10/19 10:57	20
Copper	470	B	1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 10:57	20
Lead	2.6		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 10:57	20
Manganese	38		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 10:57	20
Molybdenum	2.7		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 10:57	20
Nickel	6.6		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 10:57	20
Selenium	4.7		1.1	0.21	mg/Kg	☼	12/09/19 13:03	12/10/19 10:57	20
Silver	0.13	J	0.53	0.11	mg/Kg	☼	12/09/19 13:03	12/10/19 10:57	20
Thallium	ND		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 10:57	20
Vanadium	20		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 10:57	20
Zinc	9.0	J	11	5.3	mg/Kg	☼	12/09/19 13:03	12/10/19 10:57	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.38		0.021	0.013	mg/Kg	☼	12/09/19 11:21	12/10/19 11:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB28-FD_0-0.5

Lab Sample ID: 440-255674-7

Date Collected: 11/21/19 11:50
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 94.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6800		11	8.3	mg/Kg	☼	12/09/19 13:03	12/10/19 13:03	5
Boron	ND		5.4	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:03	5
Calcium	3700		27	14	mg/Kg	☼	12/09/19 13:03	12/10/19 13:03	5
Iron	10000	B	11	7.4	mg/Kg	☼	12/09/19 13:03	12/10/19 13:03	5
Lithium	ND		5.4	3.0	mg/Kg	☼	12/09/19 13:03	12/10/19 13:03	5
Magnesium	5400		11	5.4	mg/Kg	☼	12/09/19 13:03	12/10/19 13:03	5
Phosphorus	360		5.4	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:03	5
Potassium	680		67	35	mg/Kg	☼	12/09/19 13:03	12/10/19 13:03	5
Sodium	100		67	34	mg/Kg	☼	12/09/19 13:03	12/10/19 13:03	5
Strontium	71		5.4	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:03	5
Tin	ND		11	5.4	mg/Kg	☼	12/09/19 13:03	12/10/19 13:03	5
Titanium	390		2.1	1.1	mg/Kg	☼	12/09/19 13:03	12/10/19 13:03	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.4		1.1	0.29	mg/Kg	☼	12/09/19 13:03	12/10/19 11:09	20
Arsenic	6.1		0.54	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:09	20
Barium	35		0.54	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:09	20
Beryllium	ND		0.32	0.16	mg/Kg	☼	12/09/19 13:03	12/10/19 11:09	20
Cadmium	ND		0.54	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:09	20
Chromium	4.7		1.1	0.54	mg/Kg	☼	12/09/19 13:03	12/10/19 11:09	20
Cobalt	2.6		0.54	0.23	mg/Kg	☼	12/09/19 13:03	12/10/19 11:09	20
Copper	450	B	1.1	0.54	mg/Kg	☼	12/09/19 13:03	12/10/19 11:09	20

Client Sample ID: STSB28-FD_0-0.5

Lab Sample ID: 440-255674-7

Date Collected: 11/21/19 11:50
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 94.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2.4		0.54	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:09	20
Manganese	32		0.54	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:09	20
Molybdenum	2.6		1.1	0.54	mg/Kg	☼	12/09/19 13:03	12/10/19 11:09	20
Nickel	5.5		1.1	0.54	mg/Kg	☼	12/09/19 13:03	12/10/19 11:09	20
Selenium	4.2		1.1	0.21	mg/Kg	☼	12/09/19 13:03	12/10/19 11:09	20
Silver	0.12	J	0.54	0.11	mg/Kg	☼	12/09/19 13:03	12/10/19 11:09	20
Thallium	ND		0.54	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:09	20
Vanadium	17		1.1	0.54	mg/Kg	☼	12/09/19 13:03	12/10/19 11:09	20
Zinc	7.3	J	11	5.4	mg/Kg	☼	12/09/19 13:03	12/10/19 11:09	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.71		0.021	0.013	mg/Kg	☼	12/09/19 11:21	12/10/19 11:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB28_0.5-3

Lab Sample ID: 440-255674-8

Date Collected: 11/21/19 11:55
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 94.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7200		10	8.1	mg/Kg	☼	12/09/19 13:03	12/10/19 13:05	5
Boron	ND		5.2	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 13:05	5
Calcium	3500		26	14	mg/Kg	☼	12/09/19 13:03	12/10/19 13:05	5
Iron	10000	B	10	7.2	mg/Kg	☼	12/09/19 13:03	12/10/19 13:05	5
Lithium	ND		5.2	2.9	mg/Kg	☼	12/09/19 13:03	12/10/19 13:05	5
Magnesium	6200		10	5.2	mg/Kg	☼	12/09/19 13:03	12/10/19 13:05	5
Phosphorus	380		5.2	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 13:05	5
Potassium	650		66	34	mg/Kg	☼	12/09/19 13:03	12/10/19 13:05	5
Sodium	41	J	66	34	mg/Kg	☼	12/09/19 13:03	12/10/19 13:05	5
Strontium	51		5.2	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 13:05	5
Tin	ND		10	5.2	mg/Kg	☼	12/09/19 13:03	12/10/19 13:05	5
Titanium	360		2.1	1.0	mg/Kg	☼	12/09/19 13:03	12/10/19 13:05	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.6		1.0	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 09:48	20
Arsenic	4.7		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 09:48	20
Barium	34		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 09:48	20
Beryllium	ND	^	0.31	0.16	mg/Kg	☼	12/09/19 13:03	12/10/19 09:48	20
Cadmium	ND		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 09:48	20
Chromium	6.0		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/10/19 09:48	20
Cobalt	3.5		0.52	0.22	mg/Kg	☼	12/09/19 13:03	12/10/19 09:48	20
Copper	580	B	1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/10/19 09:48	20
Lead	2.4		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 09:48	20
Manganese	44		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 09:48	20
Molybdenum	2.7		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/10/19 09:48	20
Nickel	6.9		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/10/19 09:48	20

Client Sample ID: STSB28_0.5-3

Lab Sample ID: 440-255674-8
Date Collected: 11/21/19 11:55
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 94.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	3.1		1.0	0.21	mg/Kg	☼	12/09/19 13:03	12/10/19 09:48	20
Silver	0.10	J	0.52	0.10	mg/Kg	☼	12/09/19 13:03	12/10/19 09:48	20
Thallium	ND		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 09:48	20
Vanadium	15		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/10/19 09:48	20
Zinc	6.8	J	10	5.2	mg/Kg	☼	12/09/19 13:03	12/10/19 09:48	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.66		0.021	0.012	mg/Kg	☼	12/09/19 11:21	12/10/19 11:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB28_3-6

Lab Sample ID: 440-255674-9
Date Collected: 11/21/19 12:15
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 90.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4100		11	8.3	mg/Kg	☼	12/09/19 13:03	12/10/19 13:07	5
Boron	ND		5.4	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:07	5
Calcium	2800		27	15	mg/Kg	☼	12/09/19 13:03	12/10/19 13:07	5
Iron	9200	B	11	7.4	mg/Kg	☼	12/09/19 13:03	12/10/19 13:07	5
Lithium	ND		5.4	3.0	mg/Kg	☼	12/09/19 13:03	12/10/19 13:07	5
Magnesium	3600		11	5.4	mg/Kg	☼	12/09/19 13:03	12/10/19 13:07	5
Phosphorus	460		5.4	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:07	5
Potassium	680		67	35	mg/Kg	☼	12/09/19 13:03	12/10/19 13:07	5
Sodium	49	J	67	35	mg/Kg	☼	12/09/19 13:03	12/10/19 13:07	5
Strontium	27		5.4	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:07	5
Tin	ND		11	5.4	mg/Kg	☼	12/09/19 13:03	12/10/19 13:07	5
Titanium	190		2.2	1.1	mg/Kg	☼	12/09/19 13:03	12/10/19 13:07	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.54	J	1.1	0.29	mg/Kg	☼	12/09/19 13:03	12/10/19 09:50	20
Arsenic	2.1		0.54	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 09:50	20
Barium	26		0.54	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 09:50	20
Beryllium	ND	^	0.32	0.16	mg/Kg	☼	12/09/19 13:03	12/10/19 09:50	20
Cadmium	ND		0.54	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 09:50	20
Chromium	5.0		1.1	0.54	mg/Kg	☼	12/09/19 13:03	12/10/19 09:50	20
Cobalt	2.3		0.54	0.23	mg/Kg	☼	12/09/19 13:03	12/10/19 09:50	20
Copper	420	B	1.1	0.54	mg/Kg	☼	12/09/19 13:03	12/10/19 09:50	20
Lead	1.4		0.54	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 09:50	20
Manganese	39		0.54	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 09:50	20
Molybdenum	1.6		1.1	0.54	mg/Kg	☼	12/09/19 13:03	12/10/19 09:50	20
Nickel	5.0		1.1	0.54	mg/Kg	☼	12/09/19 13:03	12/10/19 09:50	20
Selenium	1.8		1.1	0.22	mg/Kg	☼	12/09/19 13:03	12/10/19 09:50	20
Silver	ND		0.54	0.11	mg/Kg	☼	12/09/19 13:03	12/10/19 09:50	20
Thallium	ND		0.54	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 09:50	20
Vanadium	11		1.1	0.54	mg/Kg	☼	12/09/19 13:03	12/10/19 09:50	20

Client Sample Results

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

Job ID: 440-255674-1

Client Sample ID: STSB28_3-6

Lab Sample ID: 440-255674-9
Date Collected: 11/21/19 12:15
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 90.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	8.3	J	11	5.4	mg/Kg	☼	12/09/19 13:03	12/10/19 09:50	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.40		0.022	0.013	mg/Kg	☼	12/09/19 11:21	12/10/19 11:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB28_6-15

Lab Sample ID: 440-255674-10
Date Collected: 11/21/19 12:25
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 83.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9300		12	9.3	mg/Kg	☼	12/09/19 13:03	12/10/19 13:09	5
Boron	ND		6.0	3.0	mg/Kg	☼	12/09/19 13:03	12/10/19 13:09	5
Calcium	6000		30	16	mg/Kg	☼	12/09/19 13:03	12/10/19 13:09	5
Iron	16000	B	12	8.3	mg/Kg	☼	12/09/19 13:03	12/10/19 13:09	5
Lithium	4.4	J	6.0	3.4	mg/Kg	☼	12/09/19 13:03	12/10/19 13:09	5
Magnesium	7300		12	6.0	mg/Kg	☼	12/09/19 13:03	12/10/19 13:09	5
Phosphorus	670		6.0	3.0	mg/Kg	☼	12/09/19 13:03	12/10/19 13:09	5
Potassium	2100		75	39	mg/Kg	☼	12/09/19 13:03	12/10/19 13:09	5
Sodium	150		75	39	mg/Kg	☼	12/09/19 13:03	12/10/19 13:09	5
Strontium	50		6.0	3.0	mg/Kg	☼	12/09/19 13:03	12/10/19 13:09	5
Tin	ND		12	6.0	mg/Kg	☼	12/09/19 13:03	12/10/19 13:09	5
Titanium	500		2.4	1.2	mg/Kg	☼	12/09/19 13:03	12/10/19 13:09	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.35	J	1.2	0.33	mg/Kg	☼	12/09/19 13:03	12/10/19 11:11	20
Arsenic	2.5		0.60	0.30	mg/Kg	☼	12/09/19 13:03	12/10/19 11:11	20
Barium	65		0.60	0.30	mg/Kg	☼	12/09/19 13:03	12/10/19 11:11	20
Beryllium	0.48		0.36	0.18	mg/Kg	☼	12/09/19 13:03	12/10/19 11:11	20
Cadmium	ND		0.60	0.30	mg/Kg	☼	12/09/19 13:03	12/10/19 11:11	20
Chromium	9.5		1.2	0.60	mg/Kg	☼	12/09/19 13:03	12/10/19 11:11	20
Cobalt	8.3		0.60	0.25	mg/Kg	☼	12/09/19 13:03	12/10/19 11:11	20
Copper	710	B	1.2	0.60	mg/Kg	☼	12/09/19 13:03	12/10/19 11:11	20
Lead	2.4		0.60	0.30	mg/Kg	☼	12/09/19 13:03	12/10/19 11:11	20
Manganese	110		0.60	0.30	mg/Kg	☼	12/09/19 13:03	12/10/19 11:11	20
Molybdenum	2.4		1.2	0.60	mg/Kg	☼	12/09/19 13:03	12/10/19 11:11	20
Nickel	12		1.2	0.60	mg/Kg	☼	12/09/19 13:03	12/10/19 11:11	20
Selenium	2.6		1.2	0.24	mg/Kg	☼	12/09/19 13:03	12/10/19 11:11	20
Silver	ND		0.60	0.12	mg/Kg	☼	12/09/19 13:03	12/10/19 11:11	20
Thallium	ND		0.60	0.30	mg/Kg	☼	12/09/19 13:03	12/10/19 11:11	20
Vanadium	23		1.2	0.60	mg/Kg	☼	12/09/19 13:03	12/10/19 11:11	20
Zinc	19		12	6.0	mg/Kg	☼	12/09/19 13:03	12/10/19 11:11	20

Client Sample Results

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

Job ID: 440-255674-1

Client Sample ID: STSB28_6-15

Lab Sample ID: 440-255674-10

Date Collected: 11/21/19 12:25
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 83.8

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.084		0.024	0.014	mg/Kg	☼	12/09/19 11:21	12/10/19 11:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB29_0-0.5

Lab Sample ID: 440-255674-11

Date Collected: 11/21/19 15:00
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 94.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7300		11	8.2	mg/Kg	☼	12/09/19 13:03	12/10/19 13:11	5
Boron	ND		5.3	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:11	5
Calcium	3000		27	14	mg/Kg	☼	12/09/19 13:03	12/10/19 13:11	5
Iron	8800	B	11	7.3	mg/Kg	☼	12/09/19 13:03	12/10/19 13:11	5
Lithium	3.5	J	5.3	3.0	mg/Kg	☼	12/09/19 13:03	12/10/19 13:11	5
Magnesium	6100		11	5.3	mg/Kg	☼	12/09/19 13:03	12/10/19 13:11	5
Phosphorus	320		5.3	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:11	5
Potassium	400		66	35	mg/Kg	☼	12/09/19 13:03	12/10/19 13:11	5
Sodium	77		66	34	mg/Kg	☼	12/09/19 13:03	12/10/19 13:11	5
Strontium	130		5.3	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:11	5
Tin	ND		11	5.3	mg/Kg	☼	12/09/19 13:03	12/10/19 13:11	5
Titanium	320		2.1	1.1	mg/Kg	☼	12/09/19 13:03	12/10/19 13:11	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	6.0		1.1	0.29	mg/Kg	☼	12/09/19 13:03	12/10/19 11:13	20
Arsenic	9.0		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:13	20
Barium	44		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:13	20
Beryllium	0.20	J	0.32	0.16	mg/Kg	☼	12/09/19 13:03	12/10/19 11:13	20
Cadmium	ND		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:13	20
Chromium	5.7		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 11:13	20
Cobalt	2.8		0.53	0.22	mg/Kg	☼	12/09/19 13:03	12/10/19 11:13	20
Copper	1300	B	1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 11:13	20
Lead	3.0		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:13	20
Manganese	30		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:13	20
Molybdenum	2.7		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 11:13	20
Nickel	6.8		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 11:13	20
Selenium	3.6		1.1	0.21	mg/Kg	☼	12/09/19 13:03	12/10/19 11:13	20
Silver	0.18	J	0.53	0.11	mg/Kg	☼	12/09/19 13:03	12/10/19 11:13	20
Thallium	ND		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:13	20
Vanadium	19		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 11:13	20
Zinc	ND		11	5.3	mg/Kg	☼	12/09/19 13:03	12/10/19 11:13	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.57		0.021	0.013	mg/Kg	☼	12/09/19 11:21	12/10/19 11:55	1

Client Sample Results

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

Job ID: 440-255674-1

Client Sample ID: STSB29_0-0.5

Lab Sample ID: 440-255674-11

Date Collected: 11/21/19 15:00
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 94.5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB29_0.5-3

Lab Sample ID: 440-255674-12

Date Collected: 11/21/19 15:10
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 94.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5900		11	8.2	mg/Kg	☼	12/09/19 13:03	12/10/19 12:37	5
Boron	ND		5.3	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 12:37	5
Calcium	3600		27	14	mg/Kg	☼	12/09/19 13:03	12/10/19 12:37	5
Iron	13000	B	11	7.3	mg/Kg	☼	12/09/19 13:03	12/10/19 12:37	5
Lithium	3.6	J	5.3	3.0	mg/Kg	☼	12/09/19 13:03	12/10/19 12:37	5
Magnesium	5000		11	5.3	mg/Kg	☼	12/09/19 13:03	12/10/19 12:37	5
Phosphorus	640		5.3	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 12:37	5
Potassium	1200	F1	66	35	mg/Kg	☼	12/09/19 13:03	12/10/19 12:37	5
Sodium	37	J	66	34	mg/Kg	☼	12/09/19 13:03	12/10/19 12:37	5
Strontium	42		5.3	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 12:37	5
Tin	ND		11	5.3	mg/Kg	☼	12/09/19 13:03	12/10/19 12:37	5
Titanium	330		2.1	1.1	mg/Kg	☼	12/09/19 13:03	12/10/19 12:37	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.2	F1	1.1	0.29	mg/Kg	☼	12/09/19 13:03	12/09/19 22:50	20
Arsenic	3.3		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/09/19 22:50	20
Barium	34		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/09/19 22:50	20
Beryllium	0.20	J	0.32	0.16	mg/Kg	☼	12/09/19 13:03	12/09/19 22:50	20
Cadmium	ND		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/09/19 22:50	20
Chromium	5.6		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/09/19 22:50	20
Cobalt	2.3		0.53	0.22	mg/Kg	☼	12/09/19 13:03	12/09/19 22:50	20
Copper	820	B	1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/09/19 22:50	20
Lead	1.6		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/09/19 22:50	20
Manganese	36		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/09/19 22:50	20
Molybdenum	1.8		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/09/19 22:50	20
Nickel	5.9		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/09/19 22:50	20
Selenium	2.5		1.1	0.21	mg/Kg	☼	12/09/19 13:03	12/09/19 22:50	20
Silver	0.11	J	0.53	0.11	mg/Kg	☼	12/09/19 13:03	12/09/19 22:50	20
Thallium	ND		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/09/19 22:50	20
Vanadium	18		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/09/19 22:50	20
Zinc	8.2	J	11	5.3	mg/Kg	☼	12/09/19 13:03	12/09/19 22:50	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	F1	0.021	0.013	mg/Kg	☼	12/09/19 11:21	12/10/19 11:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample Results

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

Job ID: 440-255674-1

Client Sample ID: STSB29_3-6

Lab Sample ID: 440-255674-13

Date Collected: 11/21/19 15:30
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 95.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4900		10	8.0	mg/Kg	☼	12/09/19 13:03	12/10/19 13:12	5
Boron	ND		5.2	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 13:12	5
Calcium	3400		26	14	mg/Kg	☼	12/09/19 13:03	12/10/19 13:12	5
Iron	13000	B	10	7.2	mg/Kg	☼	12/09/19 13:03	12/10/19 13:12	5
Lithium	4.8	J	5.2	2.9	mg/Kg	☼	12/09/19 13:03	12/10/19 13:12	5
Magnesium	4900		10	5.2	mg/Kg	☼	12/09/19 13:03	12/10/19 13:12	5
Phosphorus	630		5.2	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 13:12	5
Potassium	1300		65	34	mg/Kg	☼	12/09/19 13:03	12/10/19 13:12	5
Sodium	45	J	65	33	mg/Kg	☼	12/09/19 13:03	12/10/19 13:12	5
Strontium	30		5.2	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 13:12	5
Tin	ND		10	5.2	mg/Kg	☼	12/09/19 13:03	12/10/19 13:12	5
Titanium	410		2.1	1.0	mg/Kg	☼	12/09/19 13:03	12/10/19 13:12	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	☼	12/09/19 13:03	12/10/19 11:16	20
Arsenic	1.2		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 11:16	20
Barium	28		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 11:16	20
Beryllium	0.25	J	0.31	0.16	mg/Kg	☼	12/09/19 13:03	12/10/19 11:16	20
Cadmium	ND		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 11:16	20
Chromium	5.4		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/10/19 11:16	20
Cobalt	7.9		0.52	0.22	mg/Kg	☼	12/09/19 13:03	12/10/19 11:16	20
Copper	1900	B	1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/10/19 11:16	20
Lead	1.4		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 11:16	20
Manganese	92		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 11:16	20
Molybdenum	1.4		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/10/19 11:16	20
Nickel	8.7		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/10/19 11:16	20
Selenium	1.7		1.0	0.21	mg/Kg	☼	12/09/19 13:03	12/10/19 11:16	20
Silver	0.11	J	0.52	0.10	mg/Kg	☼	12/09/19 13:03	12/10/19 11:16	20
Thallium	ND		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 11:16	20
Vanadium	19		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/10/19 11:16	20
Zinc	17		10	5.2	mg/Kg	☼	12/09/19 13:03	12/10/19 11:16	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.013	mg/Kg	☼	12/09/19 11:21	12/10/19 11:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB29_6-15

Lab Sample ID: 440-255674-14

Date Collected: 11/21/19 15:45
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 88.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5700		11	8.5	mg/Kg	☼	12/09/19 13:03	12/10/19 13:14	5
Boron	ND		5.5	2.8	mg/Kg	☼	12/09/19 13:03	12/10/19 13:14	5
Calcium	5100		28	15	mg/Kg	☼	12/09/19 13:03	12/10/19 13:14	5
Iron	11000	B	11	7.6	mg/Kg	☼	12/09/19 13:03	12/10/19 13:14	5

Client Sample ID: STSB29_6-15

Lab Sample ID: 440-255674-14

Date Collected: 11/21/19 15:45
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 88.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	3.5	J	5.5	3.1	mg/Kg	☼	12/09/19 13:03	12/10/19 13:14	5
Magnesium	5200		11	5.5	mg/Kg	☼	12/09/19 13:03	12/10/19 13:14	5
Phosphorus	590		5.5	2.8	mg/Kg	☼	12/09/19 13:03	12/10/19 13:14	5
Potassium	1400		69	36	mg/Kg	☼	12/09/19 13:03	12/10/19 13:14	5
Sodium	83		69	35	mg/Kg	☼	12/09/19 13:03	12/10/19 13:14	5
Strontium	34		5.5	2.8	mg/Kg	☼	12/09/19 13:03	12/10/19 13:14	5
Tin	ND		11	5.5	mg/Kg	☼	12/09/19 13:03	12/10/19 13:14	5
Titanium	380		2.2	1.1	mg/Kg	☼	12/09/19 13:03	12/10/19 13:14	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.1	0.30	mg/Kg	☼	12/09/19 13:03	12/10/19 09:58	20
Arsenic	1.4		0.55	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 09:58	20
Barium	39		0.55	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 09:58	20
Beryllium	ND	^	0.33	0.17	mg/Kg	☼	12/09/19 13:03	12/10/19 09:58	20
Cadmium	ND		0.55	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 09:58	20
Chromium	7.9		1.1	0.55	mg/Kg	☼	12/09/19 13:03	12/10/19 09:58	20
Cobalt	4.6		0.55	0.23	mg/Kg	☼	12/09/19 13:03	12/10/19 09:58	20
Copper	840	B	1.1	0.55	mg/Kg	☼	12/09/19 13:03	12/10/19 09:58	20
Lead	1.6		0.55	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 09:58	20
Manganese	65		0.55	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 09:58	20
Molybdenum	1.8		1.1	0.55	mg/Kg	☼	12/09/19 13:03	12/10/19 09:58	20
Nickel	8.3		1.1	0.55	mg/Kg	☼	12/09/19 13:03	12/10/19 09:58	20
Selenium	1.9		1.1	0.22	mg/Kg	☼	12/09/19 13:03	12/10/19 09:58	20
Silver	0.12	J	0.55	0.11	mg/Kg	☼	12/09/19 13:03	12/10/19 09:58	20
Thallium	ND		0.55	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 09:58	20
Vanadium	16		1.1	0.55	mg/Kg	☼	12/09/19 13:03	12/10/19 09:58	20
Zinc	13		11	5.5	mg/Kg	☼	12/09/19 13:03	12/10/19 09:58	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.023	0.014	mg/Kg	☼	12/09/19 11:21	12/10/19 12:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB29-FD_6-15

Lab Sample ID: 440-255674-15

Date Collected: 11/21/19 15:50
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 89.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5900		11	8.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:16	5
Boron	ND		5.7	2.8	mg/Kg	☼	12/09/19 13:03	12/10/19 13:16	5
Calcium	5500		28	15	mg/Kg	☼	12/09/19 13:03	12/10/19 13:16	5
Iron	11000	B	11	7.8	mg/Kg	☼	12/09/19 13:03	12/10/19 13:16	5
Lithium	3.3	J	5.7	3.2	mg/Kg	☼	12/09/19 13:03	12/10/19 13:16	5
Magnesium	5400		11	5.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:16	5
Phosphorus	580		5.7	2.8	mg/Kg	☼	12/09/19 13:03	12/10/19 13:16	5
Potassium	1300		71	37	mg/Kg	☼	12/09/19 13:03	12/10/19 13:16	5

Client Sample ID: STSB29-FD_6-15

Lab Sample ID: 440-255674-15

Date Collected: 11/21/19 15:50
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 89.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	82		71	36	mg/Kg	☼	12/09/19 13:03	12/10/19 13:16	5
Strontium	37		5.7	2.8	mg/Kg	☼	12/09/19 13:03	12/10/19 13:16	5
Tin	ND		11	5.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:16	5
Titanium	430		2.3	1.1	mg/Kg	☼	12/09/19 13:03	12/10/19 13:16	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.1	0.31	mg/Kg	☼	12/09/19 13:03	12/10/19 11:18	20
Arsenic	1.3		0.57	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 11:18	20
Barium	36		0.57	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 11:18	20
Beryllium	ND		0.34	0.17	mg/Kg	☼	12/09/19 13:03	12/10/19 11:18	20
Cadmium	ND		0.57	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 11:18	20
Chromium	8.6		1.1	0.57	mg/Kg	☼	12/09/19 13:03	12/10/19 11:18	20
Cobalt	4.5		0.57	0.24	mg/Kg	☼	12/09/19 13:03	12/10/19 11:18	20
Copper	840	B	1.1	0.57	mg/Kg	☼	12/09/19 13:03	12/10/19 11:18	20
Lead	1.5		0.57	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 11:18	20
Manganese	70		0.57	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 11:18	20
Molybdenum	1.9		1.1	0.57	mg/Kg	☼	12/09/19 13:03	12/10/19 11:18	20
Nickel	8.5		1.1	0.57	mg/Kg	☼	12/09/19 13:03	12/10/19 11:18	20
Selenium	1.7		1.1	0.23	mg/Kg	☼	12/09/19 13:03	12/10/19 11:18	20
Silver	ND		0.57	0.11	mg/Kg	☼	12/09/19 13:03	12/10/19 11:18	20
Thallium	ND		0.57	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 11:18	20
Vanadium	17		1.1	0.57	mg/Kg	☼	12/09/19 13:03	12/10/19 11:18	20
Zinc	13		11	5.7	mg/Kg	☼	12/09/19 13:03	12/10/19 11:18	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.027		0.022	0.013	mg/Kg	☼	12/09/19 11:21	12/10/19 12:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB30_0-0.5

Lab Sample ID: 440-255674-16

Date Collected: 11/22/19 08:55
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 94.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6300		11	8.1	mg/Kg	☼	12/09/19 13:03	12/10/19 13:27	5
Boron	ND		5.3	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 13:27	5
Calcium	4500		26	14	mg/Kg	☼	12/09/19 13:03	12/10/19 13:27	5
Iron	8700	B	11	7.3	mg/Kg	☼	12/09/19 13:03	12/10/19 13:27	5
Lithium	ND		5.3	3.0	mg/Kg	☼	12/09/19 13:03	12/10/19 13:27	5
Magnesium	4700		11	5.3	mg/Kg	☼	12/09/19 13:03	12/10/19 13:27	5
Phosphorus	360		5.3	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 13:27	5
Potassium	270		66	34	mg/Kg	☼	12/09/19 13:03	12/10/19 13:27	5
Sodium	62	J	66	34	mg/Kg	☼	12/09/19 13:03	12/10/19 13:27	5
Strontium	65		5.3	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 13:27	5
Tin	ND		11	5.3	mg/Kg	☼	12/09/19 13:03	12/10/19 13:27	5
Titanium	220		2.1	1.1	mg/Kg	☼	12/09/19 13:03	12/10/19 13:27	5

Client Sample ID: STSB30_0-0.5

Lab Sample ID: 440-255674-16

Date Collected: 11/22/19 08:55
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 94.2

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.0		1.1	0.29	mg/Kg	☼	12/09/19 13:03	12/10/19 11:21	20
Arsenic	5.9		0.53	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 11:21	20
Barium	35		0.53	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 11:21	20
Beryllium	0.34		0.32	0.16	mg/Kg	☼	12/09/19 13:03	12/10/19 11:21	20
Cadmium	ND		0.53	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 11:21	20
Chromium	4.9		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 11:21	20
Cobalt	4.1		0.53	0.22	mg/Kg	☼	12/09/19 13:03	12/10/19 11:21	20
Copper	680	B	1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 11:21	20
Lead	4.9		0.53	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 11:21	20
Manganese	38		0.53	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 11:21	20
Molybdenum	3.5		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 11:21	20
Nickel	7.4		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 11:21	20
Selenium	3.5		1.1	0.21	mg/Kg	☼	12/09/19 13:03	12/10/19 11:21	20
Silver	ND		0.53	0.11	mg/Kg	☼	12/09/19 13:03	12/10/19 11:21	20
Thallium	ND		0.53	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 11:21	20
Vanadium	15		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 11:21	20
Zinc	7.5	J	11	5.3	mg/Kg	☼	12/09/19 13:03	12/10/19 11:21	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.28		0.022	0.013	mg/Kg	☼	12/09/19 11:21	12/10/19 12:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB30_0.5-3

Lab Sample ID: 440-255674-17

Date Collected: 11/22/19 09:02
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 94.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6500		11	8.2	mg/Kg	☼	12/09/19 13:03	12/10/19 13:28	5
Boron	ND		5.3	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:28	5
Calcium	2800		27	14	mg/Kg	☼	12/09/19 13:03	12/10/19 13:28	5
Iron	8900	B	11	7.3	mg/Kg	☼	12/09/19 13:03	12/10/19 13:28	5
Lithium	ND		5.3	3.0	mg/Kg	☼	12/09/19 13:03	12/10/19 13:28	5
Magnesium	4700		11	5.3	mg/Kg	☼	12/09/19 13:03	12/10/19 13:28	5
Phosphorus	330		5.3	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:28	5
Potassium	280		66	34	mg/Kg	☼	12/09/19 13:03	12/10/19 13:28	5
Sodium	56	J	66	34	mg/Kg	☼	12/09/19 13:03	12/10/19 13:28	5
Strontium	54		5.3	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:28	5
Tin	ND		11	5.3	mg/Kg	☼	12/09/19 13:03	12/10/19 13:28	5
Titanium	260		2.1	1.1	mg/Kg	☼	12/09/19 13:03	12/10/19 13:28	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.2		1.1	0.29	mg/Kg	☼	12/09/19 13:03	12/10/19 11:23	20
Arsenic	4.6		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:23	20
Barium	33		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:23	20
Beryllium	0.31	J	0.32	0.16	mg/Kg	☼	12/09/19 13:03	12/10/19 11:23	20

Client Sample ID: STSB30_0.5-3

Lab Sample ID: 440-255674-17

Date Collected: 11/22/19 09:02
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 94.3

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	☼	12/09/19 13:03	12/10/19 11:23	20
Chromium	5.0		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 11:23	20
Cobalt	3.0		0.53	0.22	mg/Kg	☼	12/09/19 13:03	12/10/19 11:23	20
Copper	670	B	1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 11:23	20
Lead	3.8		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:23	20
Manganese	46		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:23	20
Molybdenum	2.3		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 11:23	20
Nickel	6.7		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 11:23	20
Selenium	3.2		1.1	0.21	mg/Kg	☼	12/09/19 13:03	12/10/19 11:23	20
Silver	ND		0.53	0.11	mg/Kg	☼	12/09/19 13:03	12/10/19 11:23	20
Thallium	ND		0.53	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:23	20
Vanadium	15		1.1	0.53	mg/Kg	☼	12/09/19 13:03	12/10/19 11:23	20
Zinc	6.8	J	11	5.3	mg/Kg	☼	12/09/19 13:03	12/10/19 11:23	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.31		0.022	0.013	mg/Kg	☼	12/09/19 11:21	12/10/19 12:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB30_3-6

Lab Sample ID: 440-255674-18

Date Collected: 11/22/19 09:10
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 94.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7600		10	8.0	mg/Kg	☼	12/09/19 13:03	12/10/19 13:30	5
Boron	ND		5.2	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 13:30	5
Calcium	4200		26	14	mg/Kg	☼	12/09/19 13:03	12/10/19 13:30	5
Iron	9700	B	10	7.2	mg/Kg	☼	12/09/19 13:03	12/10/19 13:30	5
Lithium	3.1	J	5.2	2.9	mg/Kg	☼	12/09/19 13:03	12/10/19 13:30	5
Magnesium	6000		10	5.2	mg/Kg	☼	12/09/19 13:03	12/10/19 13:30	5
Phosphorus	410		5.2	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 13:30	5
Potassium	340		65	34	mg/Kg	☼	12/09/19 13:03	12/10/19 13:30	5
Sodium	51	J	65	33	mg/Kg	☼	12/09/19 13:03	12/10/19 13:30	5
Strontium	58		5.2	2.6	mg/Kg	☼	12/09/19 13:03	12/10/19 13:30	5
Tin	ND		10	5.2	mg/Kg	☼	12/09/19 13:03	12/10/19 13:30	5
Titanium	360		2.1	1.0	mg/Kg	☼	12/09/19 13:03	12/10/19 13:30	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.3		1.0	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 11:33	20
Arsenic	6.6		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 11:33	20
Barium	38		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 11:33	20
Beryllium	0.20	J	0.31	0.16	mg/Kg	☼	12/09/19 13:03	12/10/19 11:33	20
Cadmium	ND		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 11:33	20
Chromium	6.1		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/10/19 11:33	20
Cobalt	3.6		0.52	0.22	mg/Kg	☼	12/09/19 13:03	12/10/19 11:33	20
Copper	880	B	1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/10/19 11:33	20

Client Sample ID: STSB30_3-6

Lab Sample ID: 440-255674-18

Date Collected: 11/22/19 09:10
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 94.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4.0		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 11:33	20
Manganese	42		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 11:33	20
Molybdenum	2.5		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/10/19 11:33	20
Nickel	8.2		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/10/19 11:33	20
Selenium	5.2		1.0	0.21	mg/Kg	☼	12/09/19 13:03	12/10/19 11:33	20
Silver	ND		0.52	0.10	mg/Kg	☼	12/09/19 13:03	12/10/19 11:33	20
Thallium	ND		0.52	0.26	mg/Kg	☼	12/09/19 13:03	12/10/19 11:33	20
Vanadium	19		1.0	0.52	mg/Kg	☼	12/09/19 13:03	12/10/19 11:33	20
Zinc	8.1	J	10	5.2	mg/Kg	☼	12/09/19 13:03	12/10/19 11:33	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.23		0.021	0.012	mg/Kg	☼	12/09/19 11:21	12/10/19 12:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB30_6-15

Lab Sample ID: 440-255674-20

Date Collected: 11/22/19 09:25
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 89.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6500		11	8.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:32	5
Boron	ND		5.6	2.8	mg/Kg	☼	12/09/19 13:03	12/10/19 13:32	5
Calcium	6700		28	15	mg/Kg	☼	12/09/19 13:03	12/10/19 13:32	5
Iron	12000	B	11	7.8	mg/Kg	☼	12/09/19 13:03	12/10/19 13:32	5
Lithium	3.3	J	5.6	3.2	mg/Kg	☼	12/09/19 13:03	12/10/19 13:32	5
Magnesium	5700		11	5.6	mg/Kg	☼	12/09/19 13:03	12/10/19 13:32	5
Phosphorus	570		5.6	2.8	mg/Kg	☼	12/09/19 13:03	12/10/19 13:32	5
Potassium	1200		71	37	mg/Kg	☼	12/09/19 13:03	12/10/19 13:32	5
Sodium	97		71	36	mg/Kg	☼	12/09/19 13:03	12/10/19 13:32	5
Strontium	65		5.6	2.8	mg/Kg	☼	12/09/19 13:03	12/10/19 13:32	5
Tin	ND		11	5.6	mg/Kg	☼	12/09/19 13:03	12/10/19 13:32	5
Titanium	420		2.3	1.1	mg/Kg	☼	12/09/19 13:03	12/10/19 13:32	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.59	J	1.1	0.30	mg/Kg	☼	12/09/19 13:03	12/10/19 11:35	20
Arsenic	2.5		0.56	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 11:35	20
Barium	51		0.56	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 11:35	20
Beryllium	0.40		0.34	0.17	mg/Kg	☼	12/09/19 13:03	12/10/19 11:35	20
Cadmium	ND		0.56	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 11:35	20
Chromium	7.5		1.1	0.56	mg/Kg	☼	12/09/19 13:03	12/10/19 11:35	20
Cobalt	6.7		0.56	0.24	mg/Kg	☼	12/09/19 13:03	12/10/19 11:35	20
Copper	740	B	1.1	0.56	mg/Kg	☼	12/09/19 13:03	12/10/19 11:35	20
Lead	2.2		0.56	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 11:35	20
Manganese	74		0.56	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 11:35	20
Molybdenum	2.1		1.1	0.56	mg/Kg	☼	12/09/19 13:03	12/10/19 11:35	20
Nickel	9.3		1.1	0.56	mg/Kg	☼	12/09/19 13:03	12/10/19 11:35	20

Client Sample ID: STSB30_6-15

Lab Sample ID: 440-255674-20

Date Collected: 11/22/19 09:25
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 89.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	2.2		1.1	0.23	mg/Kg	☼	12/09/19 13:03	12/10/19 11:35	20
Silver	ND		0.56	0.11	mg/Kg	☼	12/09/19 13:03	12/10/19 11:35	20
Thallium	ND		0.56	0.28	mg/Kg	☼	12/09/19 13:03	12/10/19 11:35	20
Vanadium	19		1.1	0.56	mg/Kg	☼	12/09/19 13:03	12/10/19 11:35	20
Zinc	13		11	5.6	mg/Kg	☼	12/09/19 13:03	12/10/19 11:35	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.075		0.022	0.013	mg/Kg	☼	12/09/19 11:21	12/10/19 12:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB31_0-0.5

Lab Sample ID: 440-255674-21

Date Collected: 11/22/19 11:56
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 92.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7500		11	8.4	mg/Kg	☼	12/09/19 13:03	12/10/19 13:34	5
Boron	2.7	J	5.5	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:34	5
Calcium	3000		27	15	mg/Kg	☼	12/09/19 13:03	12/10/19 13:34	5
Iron	14000	B	11	7.5	mg/Kg	☼	12/09/19 13:03	12/10/19 13:34	5
Lithium	5.3	J	5.5	3.1	mg/Kg	☼	12/09/19 13:03	12/10/19 13:34	5
Magnesium	5600		11	5.5	mg/Kg	☼	12/09/19 13:03	12/10/19 13:34	5
Phosphorus	360		5.5	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:34	5
Potassium	1200		68	35	mg/Kg	☼	12/09/19 13:03	12/10/19 13:34	5
Sodium	220		68	35	mg/Kg	☼	12/09/19 13:03	12/10/19 13:34	5
Strontium	38		5.5	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:34	5
Tin	ND		11	5.5	mg/Kg	☼	12/09/19 13:03	12/10/19 13:34	5
Titanium	230		2.2	1.1	mg/Kg	☼	12/09/19 13:03	12/10/19 13:34	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.96	J	1.1	0.29	mg/Kg	☼	12/09/19 13:03	12/10/19 11:38	20
Arsenic	6.8		0.55	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:38	20
Barium	46		0.55	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:38	20
Beryllium	0.26	J	0.33	0.16	mg/Kg	☼	12/09/19 13:03	12/10/19 11:38	20
Cadmium	ND		0.55	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:38	20
Chromium	6.0		1.1	0.55	mg/Kg	☼	12/09/19 13:03	12/10/19 11:38	20
Cobalt	4.3		0.55	0.23	mg/Kg	☼	12/09/19 13:03	12/10/19 11:38	20
Copper	1900	B	1.1	0.55	mg/Kg	☼	12/09/19 13:03	12/10/19 11:38	20
Lead	3.3		0.55	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:38	20
Manganese	65		0.55	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:38	20
Molybdenum	4.9		1.1	0.55	mg/Kg	☼	12/09/19 13:03	12/10/19 11:38	20
Nickel	8.2		1.1	0.55	mg/Kg	☼	12/09/19 13:03	12/10/19 11:38	20
Selenium	3.3		1.1	0.22	mg/Kg	☼	12/09/19 13:03	12/10/19 11:38	20
Silver	ND		0.55	0.11	mg/Kg	☼	12/09/19 13:03	12/10/19 11:38	20
Thallium	ND		0.55	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:38	20
Vanadium	21		1.1	0.55	mg/Kg	☼	12/09/19 13:03	12/10/19 11:38	20

Client Sample ID: STSB31_0-0.5

Lab Sample ID: 440-255674-21

Date Collected: 11/22/19 11:56
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 92.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	21		11	5.5	mg/Kg	☼	12/09/19 13:03	12/10/19 11:38	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.067		0.021	0.013	mg/Kg	☼	12/09/19 11:21	12/10/19 12:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB31_0.5-3

Lab Sample ID: 440-255674-22

Date Collected: 11/22/19 12:03
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 94.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	6400		11	8.3	mg/Kg	☼	12/09/19 13:03	12/10/19 13:36	5
Boron	ND		5.4	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:36	5
Calcium	2500		27	15	mg/Kg	☼	12/09/19 13:03	12/10/19 13:36	5
Iron	15000	B	11	7.5	mg/Kg	☼	12/09/19 13:03	12/10/19 13:36	5
Lithium	4.3	J	5.4	3.0	mg/Kg	☼	12/09/19 13:03	12/10/19 13:36	5
Magnesium	4800		11	5.4	mg/Kg	☼	12/09/19 13:03	12/10/19 13:36	5
Phosphorus	300		5.4	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:36	5
Potassium	1100		67	35	mg/Kg	☼	12/09/19 13:03	12/10/19 13:36	5
Sodium	45	J	67	35	mg/Kg	☼	12/09/19 13:03	12/10/19 13:36	5
Strontium	50		5.4	2.7	mg/Kg	☼	12/09/19 13:03	12/10/19 13:36	5
Tin	ND		11	5.4	mg/Kg	☼	12/09/19 13:03	12/10/19 13:36	5
Titanium	200		2.2	1.1	mg/Kg	☼	12/09/19 13:03	12/10/19 13:36	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.74	J	1.1	0.29	mg/Kg	☼	12/09/19 13:03	12/10/19 11:40	20
Arsenic	6.9		0.54	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:40	20
Barium	47		0.54	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:40	20
Beryllium	0.17	J	0.32	0.16	mg/Kg	☼	12/09/19 13:03	12/10/19 11:40	20
Cadmium	ND		0.54	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:40	20
Chromium	5.1		1.1	0.54	mg/Kg	☼	12/09/19 13:03	12/10/19 11:40	20
Cobalt	3.5		0.54	0.23	mg/Kg	☼	12/09/19 13:03	12/10/19 11:40	20
Copper	1300	B	1.1	0.54	mg/Kg	☼	12/09/19 13:03	12/10/19 11:40	20
Lead	3.5		0.54	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:40	20
Manganese	49		0.54	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:40	20
Molybdenum	4.1		1.1	0.54	mg/Kg	☼	12/09/19 13:03	12/10/19 11:40	20
Nickel	6.6		1.1	0.54	mg/Kg	☼	12/09/19 13:03	12/10/19 11:40	20
Selenium	2.8		1.1	0.22	mg/Kg	☼	12/09/19 13:03	12/10/19 11:40	20
Silver	ND		0.54	0.11	mg/Kg	☼	12/09/19 13:03	12/10/19 11:40	20
Thallium	ND		0.54	0.27	mg/Kg	☼	12/09/19 13:03	12/10/19 11:40	20
Vanadium	18		1.1	0.54	mg/Kg	☼	12/09/19 13:03	12/10/19 11:40	20
Zinc	18		11	5.4	mg/Kg	☼	12/09/19 13:03	12/10/19 11:40	20

Client Sample Results

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

Job ID: 440-255674-1

Client Sample ID: STSB31_0.5-3

Lab Sample ID: 440-255674-22

Date Collected: 11/22/19 12:03
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 94.0

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.21		0.022	0.013	mg/Kg	☼	12/09/19 11:21	12/10/19 12:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB31_3-6

Lab Sample ID: 440-255674-23

Date Collected: 11/22/19 12:10
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 94.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7000		11	8.1	mg/Kg	☼	12/09/19 12:48	12/10/19 10:16	5
Boron	ND		5.3	2.6	mg/Kg	☼	12/09/19 12:48	12/10/19 10:16	5
Calcium	2700		26	14	mg/Kg	☼	12/09/19 12:48	12/10/19 10:16	5
Iron	15000		11	7.3	mg/Kg	☼	12/09/19 12:48	12/10/19 10:16	5
Lithium	4.8	J	5.3	2.9	mg/Kg	☼	12/09/19 12:48	12/10/19 10:16	5
Magnesium	5100		11	5.3	mg/Kg	☼	12/09/19 12:48	12/10/19 10:16	5
Phosphorus	350		5.3	2.6	mg/Kg	☼	12/09/19 12:48	12/10/19 10:16	5
Potassium	1100		66	34	mg/Kg	☼	12/09/19 12:48	12/10/19 10:16	5
Sodium	49	J	66	34	mg/Kg	☼	12/09/19 12:48	12/10/19 10:16	5
Strontium	40		5.3	2.6	mg/Kg	☼	12/09/19 12:48	12/10/19 10:16	5
Tin	ND		11	5.3	mg/Kg	☼	12/09/19 12:48	12/10/19 10:16	5
Titanium	200	F1	2.1	1.1	mg/Kg	☼	12/09/19 12:48	12/10/19 10:16	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.63	J F1	1.1	0.28	mg/Kg	☼	12/09/19 12:48	12/09/19 20:58	20
Arsenic	6.8		0.53	0.26	mg/Kg	☼	12/09/19 12:48	12/09/19 20:58	20
Barium	47		0.53	0.26	mg/Kg	☼	12/09/19 12:48	12/09/19 20:58	20
Beryllium	ND		0.32	0.16	mg/Kg	☼	12/09/19 12:48	12/09/19 20:58	20
Cadmium	ND		0.53	0.26	mg/Kg	☼	12/09/19 12:48	12/09/19 20:58	20
Chromium	5.4	F2	1.1	0.53	mg/Kg	☼	12/09/19 12:48	12/09/19 20:58	20
Cobalt	3.3		0.53	0.22	mg/Kg	☼	12/09/19 12:48	12/09/19 20:58	20
Copper	1100		1.1	0.53	mg/Kg	☼	12/09/19 12:48	12/09/19 20:58	20
Lead	3.0		0.53	0.26	mg/Kg	☼	12/09/19 12:48	12/09/19 20:58	20
Manganese	51	F1	0.53	0.26	mg/Kg	☼	12/09/19 12:48	12/09/19 20:58	20
Molybdenum	4.6		1.1	0.53	mg/Kg	☼	12/09/19 12:48	12/09/19 20:58	20
Nickel	6.0		1.1	0.53	mg/Kg	☼	12/09/19 12:48	12/09/19 20:58	20
Selenium	3.5		1.1	0.21	mg/Kg	☼	12/09/19 12:48	12/09/19 20:58	20
Silver	ND		0.53	0.11	mg/Kg	☼	12/09/19 12:48	12/09/19 20:58	20
Thallium	ND		0.53	0.26	mg/Kg	☼	12/09/19 12:48	12/09/19 20:58	20
Vanadium	17		1.1	0.53	mg/Kg	☼	12/09/19 12:48	12/09/19 20:58	20
Zinc	16		11	5.3	mg/Kg	☼	12/09/19 12:48	12/09/19 20:58	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.25		0.021	0.013	mg/Kg	☼	12/09/19 11:23	12/10/19 12:45	1

Client Sample Results

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

Job ID: 440-255674-1

Client Sample ID: STSB31_3-6

Date Collected: 11/22/19 12:10
Date Received: 11/26/19 10:50

Lab Sample ID: 440-255674-23
Matrix: Solid
Percent Solids: 94.0

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Client Sample ID: STSB31_6-15

Date Collected: 11/22/19 12:20
Date Received: 11/26/19 10:50

Lab Sample ID: 440-255674-24
Matrix: Solid
Percent Solids: 86.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7900		12	8.9	mg/Kg	☼	12/09/19 12:48	12/10/19 10:26	5
Boron	ND		5.8	2.9	mg/Kg	☼	12/09/19 12:48	12/10/19 10:26	5
Calcium	5600		29	16	mg/Kg	☼	12/09/19 12:48	12/10/19 10:26	5
Iron	17000		12	7.9	mg/Kg	☼	12/09/19 12:48	12/10/19 10:26	5
Lithium	4.9	J	5.8	3.2	mg/Kg	☼	12/09/19 12:48	12/10/19 10:26	5
Magnesium	6600		12	5.8	mg/Kg	☼	12/09/19 12:48	12/10/19 10:26	5
Phosphorus	690		5.8	2.9	mg/Kg	☼	12/09/19 12:48	12/10/19 10:26	5
Potassium	1600		72	37	mg/Kg	☼	12/09/19 12:48	12/10/19 10:26	5
Sodium	110		72	37	mg/Kg	☼	12/09/19 12:48	12/10/19 10:26	5
Strontium	48		5.8	2.9	mg/Kg	☼	12/09/19 12:48	12/10/19 10:26	5
Tin	ND		12	5.8	mg/Kg	☼	12/09/19 12:48	12/10/19 10:26	5
Titanium	460		2.3	1.2	mg/Kg	☼	12/09/19 12:48	12/10/19 10:26	5

Method: 6020 - Metals (ICP/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.41	J	1.2	0.31	mg/Kg	☼	12/09/19 12:48	12/09/19 21:12	20
Arsenic	3.8		0.58	0.29	mg/Kg	☼	12/09/19 12:48	12/09/19 21:12	20
Barium	45		0.58	0.29	mg/Kg	☼	12/09/19 12:48	12/09/19 21:12	20
Beryllium	0.23	J	0.35	0.17	mg/Kg	☼	12/09/19 12:48	12/09/19 21:12	20
Cadmium	ND		0.58	0.29	mg/Kg	☼	12/09/19 12:48	12/09/19 21:12	20
Chromium	8.0		1.2	0.58	mg/Kg	☼	12/09/19 12:48	12/09/19 21:12	20
Cobalt	6.2		0.58	0.24	mg/Kg	☼	12/09/19 12:48	12/09/19 21:12	20
Copper	740		1.2	0.58	mg/Kg	☼	12/09/19 12:48	12/09/19 21:12	20
Lead	2.2		0.58	0.29	mg/Kg	☼	12/09/19 12:48	12/09/19 21:12	20
Manganese	87		0.58	0.29	mg/Kg	☼	12/09/19 12:48	12/09/19 21:12	20
Molybdenum	2.3		1.2	0.58	mg/Kg	☼	12/09/19 12:48	12/09/19 21:12	20
Nickel	9.5		1.2	0.58	mg/Kg	☼	12/09/19 12:48	12/09/19 21:12	20
Selenium	2.7		1.2	0.23	mg/Kg	☼	12/09/19 12:48	12/09/19 21:12	20
Silver	ND		0.58	0.12	mg/Kg	☼	12/09/19 12:48	12/09/19 21:12	20
Thallium	ND		0.58	0.29	mg/Kg	☼	12/09/19 12:48	12/09/19 21:12	20
Vanadium	21		1.2	0.58	mg/Kg	☼	12/09/19 12:48	12/09/19 21:12	20
Zinc	15		12	5.8	mg/Kg	☼	12/09/19 12:48	12/09/19 21:12	20

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.023	0.014	mg/Kg	☼	12/09/19 11:23	12/10/19 12:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sample Homogenized	yes				NONE			12/05/19 15:31	1

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-584711/1-A ^5
Matrix: Solid
Analysis Batch: 584991

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 584711

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10	7.8	mg/Kg		12/09/19 12:48	12/10/19 10:10	5
Boron	ND		5.1	2.5	mg/Kg		12/09/19 12:48	12/10/19 10:10	5
Calcium	ND		25	14	mg/Kg		12/09/19 12:48	12/10/19 10:10	5
Iron	ND		10	7.0	mg/Kg		12/09/19 12:48	12/10/19 10:10	5
Lithium	ND		5.1	2.8	mg/Kg		12/09/19 12:48	12/10/19 10:10	5
Magnesium	ND		10	5.1	mg/Kg		12/09/19 12:48	12/10/19 10:10	5
Phosphorus	ND		5.1	2.5	mg/Kg		12/09/19 12:48	12/10/19 10:10	5
Potassium	ND		63	33	mg/Kg		12/09/19 12:48	12/10/19 10:10	5
Sodium	ND		63	32	mg/Kg		12/09/19 12:48	12/10/19 10:10	5
Strontium	ND		5.1	2.5	mg/Kg		12/09/19 12:48	12/10/19 10:10	5
Tin	ND		10	5.1	mg/Kg		12/09/19 12:48	12/10/19 10:10	5
Titanium	ND		2.0	1.0	mg/Kg		12/09/19 12:48	12/10/19 10:10	5

Lab Sample ID: LCS 440-584711/2-A ^5
Matrix: Solid
Analysis Batch: 584991

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 584711

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	50.0	44.7		mg/Kg		89	80 - 120
Boron	50.0	44.0		mg/Kg		88	80 - 120
Calcium	250	227		mg/Kg		91	80 - 120
Iron	50.0	48.3		mg/Kg		97	80 - 120
Lithium	50.0	45.5		mg/Kg		91	80 - 120
Magnesium	250	227		mg/Kg		91	80 - 120
Phosphorus	50.0	45.4		mg/Kg		91	80 - 120
Potassium	500	445		mg/Kg		89	80 - 120
Sodium	500	454		mg/Kg		91	80 - 120
Strontium	50.0	45.7		mg/Kg		91	80 - 120
Tin	50.0	46.2		mg/Kg		92	80 - 120
Titanium	50.0	45.3		mg/Kg		91	80 - 120

Lab Sample ID: 440-255674-23 MS
Matrix: Solid
Analysis Batch: 584991

Client Sample ID: STSB31_3-6
Prep Type: Total/NA
Prep Batch: 584711

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	7000		54.0	9160	4	mg/Kg	☼	4084	75 - 125
Boron	ND		54.0	42.9		mg/Kg	☼	79	75 - 125
Calcium	2700		270	2990	4	mg/Kg	☼	109	75 - 125
Iron	15000		54.0	14800	4	mg/Kg	☼	141	75 - 125
Lithium	4.8	J	54.0	51.4		mg/Kg	☼	86	75 - 125
Magnesium	5100		270	5150	4	mg/Kg	☼	14	75 - 125
Phosphorus	350		54.0	363	4	mg/Kg	☼	27	75 - 125
Potassium	1100		540	1690		mg/Kg	☼	105	75 - 125
Sodium	49	J	540	523		mg/Kg	☼	88	75 - 125
Strontium	40		54.0	93.8		mg/Kg	☼	101	75 - 125
Tin	ND		54.0	46.5		mg/Kg	☼	86	75 - 125
Titanium	200	F1	54.0	326	F1	mg/Kg	☼	241	75 - 125

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

Lab Sample ID: 440-255674-23 MSD
Matrix: Solid
Analysis Batch: 584991

Client Sample ID: STSB31_3-6
Prep Type: Total/NA
Prep Batch: 584711

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	7000		53.2	8360	4	mg/Kg	☼	2653	75 - 125	9	20
Boron	ND		53.2	43.7		mg/Kg	☼	82	75 - 125	2	20
Calcium	2700		266	2700	4	mg/Kg	☼	0.6	75 - 125	10	20
Iron	15000		53.2	15600	4	mg/Kg	☼	1651	75 - 125	5	20
Lithium	4.8	J	53.2	51.5		mg/Kg	☼	88	75 - 125	0	20
Magnesium	5100		266	4820	4	mg/Kg	☼	-110	75 - 125	7	20
Phosphorus	350		53.2	419	4	mg/Kg	☼	133	75 - 125	14	20
Potassium	1100		532	1730		mg/Kg	☼	115	75 - 125	3	20
Sodium	49	J	532	520		mg/Kg	☼	89	75 - 125	1	20
Strontium	40		53.2	88.2		mg/Kg	☼	92	75 - 125	6	20
Tin	ND		53.2	46.8		mg/Kg	☼	88	75 - 125	1	20
Titanium	200	F1	53.2	348	F1	mg/Kg	☼	285	75 - 125	6	20

Lab Sample ID: MB 440-584717/1-A ^5
Matrix: Solid
Analysis Batch: 584992

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 584717

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10	7.7	mg/Kg		12/09/19 13:03	12/10/19 12:32	5
Boron	ND		5.0	2.5	mg/Kg		12/09/19 13:03	12/10/19 12:32	5
Calcium	ND		25	13	mg/Kg		12/09/19 13:03	12/10/19 12:32	5
Iron	27.9		10	6.9	mg/Kg		12/09/19 13:03	12/10/19 12:32	5
Lithium	ND		5.0	2.8	mg/Kg		12/09/19 13:03	12/10/19 12:32	5
Magnesium	ND		10	5.0	mg/Kg		12/09/19 13:03	12/10/19 12:32	5
Phosphorus	ND		5.0	2.5	mg/Kg		12/09/19 13:03	12/10/19 12:32	5
Potassium	ND		62	32	mg/Kg		12/09/19 13:03	12/10/19 12:32	5
Sodium	ND		62	32	mg/Kg		12/09/19 13:03	12/10/19 12:32	5
Strontium	ND		5.0	2.5	mg/Kg		12/09/19 13:03	12/10/19 12:32	5
Tin	ND		10	5.0	mg/Kg		12/09/19 13:03	12/10/19 12:32	5
Titanium	ND		2.0	1.0	mg/Kg		12/09/19 13:03	12/10/19 12:32	5

Lab Sample ID: LCS 440-584717/2-A ^5
Matrix: Solid
Analysis Batch: 584992

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 584717

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	50.0	45.6		mg/Kg		91	80 - 120
Boron	50.0	44.7		mg/Kg		89	80 - 120
Calcium	250	231		mg/Kg		93	80 - 120
Iron	50.0	52.8		mg/Kg		106	80 - 120
Lithium	50.0	45.8		mg/Kg		92	80 - 120
Magnesium	250	231		mg/Kg		92	80 - 120
Phosphorus	50.0	46.4		mg/Kg		93	80 - 120
Potassium	500	483		mg/Kg		97	80 - 120
Sodium	500	455		mg/Kg		91	80 - 120
Strontium	50.0	45.6		mg/Kg		91	80 - 120
Tin	50.0	47.0		mg/Kg		94	80 - 120
Titanium	50.0	46.4		mg/Kg		93	80 - 120

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

Lab Sample ID: 440-255674-12 MS
Matrix: Solid
Analysis Batch: 584992

Client Sample ID: STSB29_0.5-3
Prep Type: Total/NA
Prep Batch: 584717

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	5900		53.8	7250	4	mg/Kg	☼	2500	75 - 125
Boron	ND		53.8	44.6		mg/Kg	☼	83	75 - 125
Calcium	3600		269	3700	4	mg/Kg	☼	47	75 - 125
Iron	13000	B	53.8	11600	4	mg/Kg	☼	-3210	75 - 125
Lithium	3.6	J	53.8	49.1		mg/Kg	☼	85	75 - 125
Magnesium	5000		269	5810	4	mg/Kg	☼	290	75 - 125
Phosphorus	640		53.8	610	4	mg/Kg	☼	-64	75 - 125
Potassium	1200	F1	538	1350	F1	mg/Kg	☼	36	75 - 125
Sodium	37	J	538	501		mg/Kg	☼	86	75 - 125
Strontium	42		53.8	101		mg/Kg	☼	110	75 - 125
Tin	ND		53.8	47.9		mg/Kg	☼	89	75 - 125
Titanium	330		53.8	440	4	mg/Kg	☼	214	75 - 125

Lab Sample ID: 440-255674-12 MSD
Matrix: Solid
Analysis Batch: 584992

Client Sample ID: STSB29_0.5-3
Prep Type: Total/NA
Prep Batch: 584717

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	5900		52.5	7540	4	mg/Kg	☼	3124	75 - 125	4	20
Boron	ND		52.5	45.2		mg/Kg	☼	86	75 - 125	1	20
Calcium	3600		262	3880	4	mg/Kg	☼	116	75 - 125	5	20
Iron	13000	B	52.5	11600	4	mg/Kg	☼	-3271	75 - 125	0	20
Lithium	3.6	J	52.5	49.8		mg/Kg	☼	88	75 - 125	1	20
Magnesium	5000		262	5930	4	mg/Kg	☼	343	75 - 125	2	20
Phosphorus	640		52.5	632	4	mg/Kg	☼	-25	75 - 125	3	20
Potassium	1200	F1	525	1390	F1	mg/Kg	☼	44	75 - 125	3	20
Sodium	37	J	525	511		mg/Kg	☼	90	75 - 125	2	20
Strontium	42		52.5	104		mg/Kg	☼	119	75 - 125	3	20
Tin	ND		52.5	47.5		mg/Kg	☼	91	75 - 125	1	20
Titanium	330		52.5	460	4	mg/Kg	☼	255	75 - 125	4	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 440-584711/1-A ^20
Matrix: Solid
Analysis Batch: 584875

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 584711

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.27	mg/Kg		12/09/19 12:48	12/09/19 20:15	20
Arsenic	ND		0.51	0.25	mg/Kg		12/09/19 12:48	12/09/19 20:15	20
Barium	ND		0.51	0.25	mg/Kg		12/09/19 12:48	12/09/19 20:15	20
Beryllium	ND		0.30	0.15	mg/Kg		12/09/19 12:48	12/09/19 20:15	20
Cadmium	ND		0.51	0.25	mg/Kg		12/09/19 12:48	12/09/19 20:15	20
Chromium	ND		1.0	0.51	mg/Kg		12/09/19 12:48	12/09/19 20:15	20
Cobalt	ND		0.51	0.21	mg/Kg		12/09/19 12:48	12/09/19 20:15	20
Copper	ND		1.0	0.51	mg/Kg		12/09/19 12:48	12/09/19 20:15	20
Lead	ND		0.51	0.25	mg/Kg		12/09/19 12:48	12/09/19 20:15	20
Manganese	ND		0.51	0.25	mg/Kg		12/09/19 12:48	12/09/19 20:15	20
Molybdenum	ND		1.0	0.51	mg/Kg		12/09/19 12:48	12/09/19 20:15	20

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

Lab Sample ID: MB 440-584711/1-A ^20
Matrix: Solid
Analysis Batch: 584875

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 584711

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	ND		1.0	0.51	mg/Kg		12/09/19 12:48	12/09/19 20:15	20
Selenium	ND		1.0	0.20	mg/Kg		12/09/19 12:48	12/09/19 20:15	20
Silver	ND		0.51	0.10	mg/Kg		12/09/19 12:48	12/09/19 20:15	20
Thallium	ND		0.51	0.25	mg/Kg		12/09/19 12:48	12/09/19 20:15	20
Vanadium	ND		1.0	0.51	mg/Kg		12/09/19 12:48	12/09/19 20:15	20
Zinc	ND		10	5.1	mg/Kg		12/09/19 12:48	12/09/19 20:15	20

Lab Sample ID: LCS 440-584711/2-A ^20
Matrix: Solid
Analysis Batch: 584875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 584711

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	46.1		mg/Kg		92	80 - 120
Arsenic	50.0	45.2		mg/Kg		90	80 - 120
Barium	50.0	45.4		mg/Kg		91	80 - 120
Beryllium	50.0	42.5		mg/Kg		85	80 - 120
Cadmium	50.0	44.6		mg/Kg		89	80 - 120
Chromium	50.0	44.3		mg/Kg		89	80 - 120
Cobalt	50.0	44.0		mg/Kg		88	80 - 120
Copper	50.0	44.6		mg/Kg		89	80 - 120
Lead	50.0	44.6		mg/Kg		89	80 - 120
Manganese	50.0	44.4		mg/Kg		89	80 - 120
Molybdenum	50.0	44.6		mg/Kg		89	80 - 120
Nickel	50.0	44.5		mg/Kg		89	80 - 120
Selenium	50.0	44.5		mg/Kg		89	80 - 120
Silver	25.0	23.4		mg/Kg		94	80 - 120
Thallium	50.0	44.8		mg/Kg		90	80 - 120
Vanadium	50.0	42.9		mg/Kg		86	80 - 120
Zinc	50.0	44.5		mg/Kg		89	80 - 120

Lab Sample ID: 440-255674-23 MS
Matrix: Solid
Analysis Batch: 584875

Client Sample ID: STSB31_3-6
Prep Type: Total/NA
Prep Batch: 584711

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.63	J F1	54.0	31.5	F1	mg/Kg	☼	57	75 - 125
Arsenic	6.8		54.0	54.4		mg/Kg	☼	88	75 - 125
Barium	47		54.0	100		mg/Kg	☼	99	75 - 125
Beryllium	ND		54.0	43.0		mg/Kg	☼	80	75 - 125
Cadmium	ND		54.0	46.5		mg/Kg	☼	86	75 - 125
Chromium	5.4	F2	54.0	62.0		mg/Kg	☼	105	75 - 125
Cobalt	3.3		54.0	48.4		mg/Kg	☼	83	75 - 125
Copper	1100		54.0	1150	4	mg/Kg	☼	110	75 - 125
Lead	3.0		54.0	49.2		mg/Kg	☼	86	75 - 125
Manganese	51	F1	54.0	97.3		mg/Kg	☼	86	75 - 125
Molybdenum	4.6		54.0	55.4		mg/Kg	☼	94	75 - 125
Nickel	6.0		54.0	51.8		mg/Kg	☼	85	75 - 125
Selenium	3.5		54.0	51.6		mg/Kg	☼	89	75 - 125
Silver	ND		27.0	24.2		mg/Kg	☼	90	75 - 125

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

Lab Sample ID: 440-255674-23 MS
Matrix: Solid
Analysis Batch: 584875

Client Sample ID: STSB31_3-6
Prep Type: Total/NA
Prep Batch: 584711

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	ND		54.0	45.7		mg/Kg	☼	85	75 - 125
Vanadium	17		54.0	63.7		mg/Kg	☼	86	75 - 125
Zinc	16		54.0	60.2		mg/Kg	☼	82	75 - 125

Lab Sample ID: 440-255674-23 MSD
Matrix: Solid
Analysis Batch: 584875

Client Sample ID: STSB31_3-6
Prep Type: Total/NA
Prep Batch: 584711

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.63	J F1	53.2	33.3	F1	mg/Kg	☼	62	75 - 125	5	20
Arsenic	6.8		53.2	55.5		mg/Kg	☼	92	75 - 125	2	20
Barium	47		53.2	96.4		mg/Kg	☼	93	75 - 125	4	20
Beryllium	ND		53.2	42.6		mg/Kg	☼	80	75 - 125	1	20
Cadmium	ND		53.2	46.3		mg/Kg	☼	87	75 - 125	0	20
Chromium	5.4	F2	53.2	49.9	F2	mg/Kg	☼	84	75 - 125	22	20
Cobalt	3.3		53.2	48.0		mg/Kg	☼	84	75 - 125	1	20
Copper	1100		53.2	1110	4	mg/Kg	☼	39	75 - 125	3	20
Lead	3.0		53.2	48.9		mg/Kg	☼	86	75 - 125	1	20
Manganese	51	F1	53.2	89.1	F1	mg/Kg	☼	72	75 - 125	9	20
Molybdenum	4.6		53.2	51.4		mg/Kg	☼	88	75 - 125	8	20
Nickel	6.0		53.2	50.8		mg/Kg	☼	84	75 - 125	2	20
Selenium	3.5		53.2	49.2		mg/Kg	☼	86	75 - 125	5	20
Silver	ND		26.6	24.1		mg/Kg	☼	91	75 - 125	0	20
Thallium	ND		53.2	45.8		mg/Kg	☼	86	75 - 125	0	20
Vanadium	17		53.2	63.8		mg/Kg	☼	88	75 - 125	0	20
Zinc	16		53.2	60.8		mg/Kg	☼	85	75 - 125	1	20

Lab Sample ID: MB 440-584717/1-A ^20
Matrix: Solid
Analysis Batch: 584881

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 584717

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.0	0.27	mg/Kg		12/09/19 13:03	12/09/19 22:45	20
Arsenic	ND		0.50	0.25	mg/Kg		12/09/19 13:03	12/09/19 22:45	20
Barium	ND		0.50	0.25	mg/Kg		12/09/19 13:03	12/09/19 22:45	20
Beryllium	ND		0.30	0.15	mg/Kg		12/09/19 13:03	12/09/19 22:45	20
Cadmium	ND		0.50	0.25	mg/Kg		12/09/19 13:03	12/09/19 22:45	20
Chromium	ND		1.0	0.50	mg/Kg		12/09/19 13:03	12/09/19 22:45	20
Cobalt	ND		0.50	0.21	mg/Kg		12/09/19 13:03	12/09/19 22:45	20
Copper	0.663	J	1.0	0.50	mg/Kg		12/09/19 13:03	12/09/19 22:45	20
Lead	ND		0.50	0.25	mg/Kg		12/09/19 13:03	12/09/19 22:45	20
Manganese	ND		0.50	0.25	mg/Kg		12/09/19 13:03	12/09/19 22:45	20
Molybdenum	ND		1.0	0.50	mg/Kg		12/09/19 13:03	12/09/19 22:45	20
Nickel	ND		1.0	0.50	mg/Kg		12/09/19 13:03	12/09/19 22:45	20
Selenium	ND		1.0	0.20	mg/Kg		12/09/19 13:03	12/09/19 22:45	20
Silver	ND		0.50	0.10	mg/Kg		12/09/19 13:03	12/09/19 22:45	20
Thallium	ND		0.50	0.25	mg/Kg		12/09/19 13:03	12/09/19 22:45	20
Vanadium	ND		1.0	0.50	mg/Kg		12/09/19 13:03	12/09/19 22:45	20
Zinc	ND		10	5.0	mg/Kg		12/09/19 13:03	12/09/19 22:45	20

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

Lab Sample ID: LCS 440-584717/2-A ^20
Matrix: Solid
Analysis Batch: 584881

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 584717

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	46.5		mg/Kg		93	80 - 120
Arsenic	50.0	46.5		mg/Kg		93	80 - 120
Barium	50.0	47.4		mg/Kg		95	80 - 120
Beryllium	50.0	43.8		mg/Kg		88	80 - 120
Cadmium	50.0	45.9		mg/Kg		92	80 - 120
Chromium	50.0	46.4		mg/Kg		93	80 - 120
Cobalt	50.0	46.9		mg/Kg		94	80 - 120
Copper	50.0	46.7		mg/Kg		93	80 - 120
Lead	50.0	46.3		mg/Kg		93	80 - 120
Manganese	50.0	45.5		mg/Kg		91	80 - 120
Molybdenum	50.0	45.8		mg/Kg		92	80 - 120
Nickel	50.0	46.8		mg/Kg		94	80 - 120
Selenium	50.0	45.0		mg/Kg		90	80 - 120
Silver	25.0	23.9		mg/Kg		95	80 - 120
Thallium	50.0	45.3		mg/Kg		91	80 - 120
Vanadium	50.0	45.8		mg/Kg		92	80 - 120
Zinc	50.0	46.3		mg/Kg		93	80 - 120

Lab Sample ID: 440-255674-12 MS
Matrix: Solid
Analysis Batch: 584881

Client Sample ID: STSB29_0.5-3
Prep Type: Total/NA
Prep Batch: 584717

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	2.2	F1	53.8	36.8	F1	mg/Kg	☼	64	75 - 125
Arsenic	3.3		53.8	52.2		mg/Kg	☼	91	75 - 125
Barium	34		53.8	81.4		mg/Kg	☼	88	75 - 125
Beryllium	0.20	J	53.8	43.5		mg/Kg	☼	81	75 - 125
Cadmium	ND		53.8	46.7		mg/Kg	☼	87	75 - 125
Chromium	5.6		53.8	51.6		mg/Kg	☼	85	75 - 125
Cobalt	2.3		53.8	48.0		mg/Kg	☼	85	75 - 125
Copper	820	B	53.8	908	4	mg/Kg	☼	160	75 - 125
Lead	1.6		53.8	47.8		mg/Kg	☼	86	75 - 125
Manganese	36		53.8	76.6		mg/Kg	☼	75	75 - 125
Molybdenum	1.8		53.8	49.2		mg/Kg	☼	88	75 - 125
Nickel	5.9		53.8	51.5		mg/Kg	☼	85	75 - 125
Selenium	2.5		53.8	48.4		mg/Kg	☼	85	75 - 125
Silver	0.11	J	26.9	24.2		mg/Kg	☼	90	75 - 125
Thallium	ND		53.8	45.8		mg/Kg	☼	85	75 - 125
Vanadium	18		53.8	65.5		mg/Kg	☼	89	75 - 125
Zinc	8.2	J	53.8	50.9		mg/Kg	☼	79	75 - 125

Lab Sample ID: 440-255674-12 MSD
Matrix: Solid
Analysis Batch: 584881

Client Sample ID: STSB29_0.5-3
Prep Type: Total/NA
Prep Batch: 584717

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	2.2	F1	52.5	38.0	F1	mg/Kg	☼	68	75 - 125	3	20
Arsenic	3.3		52.5	52.7		mg/Kg	☼	94	75 - 125	1	20
Barium	34		52.5	83.0		mg/Kg	☼	94	75 - 125	2	20

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

Lab Sample ID: 440-255674-12 MSD — **Client Sample ID: STSB29_0.5-3**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 584881 — **Prep Batch: 584717**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Beryllium	0.20	J	52.5	43.2		mg/Kg	☼	82	75 - 125	1	20
Cadmium	ND		52.5	46.6		mg/Kg	☼	89	75 - 125	0	20
Chromium	5.6		52.5	52.5		mg/Kg	☼	89	75 - 125	2	20
Cobalt	2.3		52.5	48.6		mg/Kg	☼	88	75 - 125	1	20
Copper	820	B	52.5	887	4	mg/Kg	☼	125	75 - 125	2	20
Lead	1.6		52.5	48.2		mg/Kg	☼	89	75 - 125	1	20
Manganese	36		52.5	79.8		mg/Kg	☼	83	75 - 125	4	20
Molybdenum	1.8		52.5	50.2		mg/Kg	☼	92	75 - 125	2	20
Nickel	5.9		52.5	52.3		mg/Kg	☼	88	75 - 125	1	20
Selenium	2.5		52.5	47.9		mg/Kg	☼	87	75 - 125	1	20
Silver	0.11	J	26.2	24.3		mg/Kg	☼	93	75 - 125	1	20
Thallium	ND		52.5	46.1		mg/Kg	☼	88	75 - 125	1	20
Vanadium	18		52.5	66.3		mg/Kg	☼	92	75 - 125	1	20
Zinc	8.2	J	52.5	52.2		mg/Kg	☼	84	75 - 125	3	20

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 440-584679/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 585046 — **Prep Batch: 584679**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.012	mg/Kg		12/09/19 11:21	12/10/19 11:15	1

Lab Sample ID: LCS 440-584679/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 585046 — **Prep Batch: 584679**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.400	0.382		mg/Kg		95	80 - 120

Lab Sample ID: 440-255674-12 MS — **Client Sample ID: STSB29_0.5-3**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 585046 — **Prep Batch: 584679**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.20	F1	0.416	0.796	F1	mg/Kg	☼	143	75 - 125

Lab Sample ID: 440-255674-12 MSD — **Client Sample ID: STSB29_0.5-3**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 585046 — **Prep Batch: 584679**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.20	F1	0.416	0.752	F1	mg/Kg	☼	132	75 - 125	6	20

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: MB 440-584680/1-A
Matrix: Solid
Analysis Batch: 585046

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 584680

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.012	mg/Kg		12/09/19 11:23	12/10/19 12:41	1

Lab Sample ID: LCS 440-584680/2-A
Matrix: Solid
Analysis Batch: 585046

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 584680

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.400	0.393		mg/Kg		98	80 - 120

Lab Sample ID: 440-255674-23 MS
Matrix: Solid
Analysis Batch: 585046

Client Sample ID: STSB31_3-6
Prep Type: Total/NA
Prep Batch: 584680

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.25		0.434	0.632		mg/Kg	☼	89	75 - 125

Lab Sample ID: 440-255674-23 MSD
Matrix: Solid
Analysis Batch: 585046

Client Sample ID: STSB31_3-6
Prep Type: Total/NA
Prep Batch: 584680

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.25		0.425	0.691		mg/Kg	☼	104	75 - 125	9	20

QC Association Summary

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

Job ID: 440-255674-1

Metals

Prep Batch: 584679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-1	STSB27_0-0.5	Total/NA	Solid	7471A	
440-255674-2	STSB27_0.5-3	Total/NA	Solid	7471A	
440-255674-3	STSB27_3-6	Total/NA	Solid	7471A	
440-255674-5	STSB27_6-15	Total/NA	Solid	7471A	
440-255674-6	STSB28_0-0.5	Total/NA	Solid	7471A	
440-255674-7	STSB28-FD_0-0.5	Total/NA	Solid	7471A	
440-255674-8	STSB28_0.5-3	Total/NA	Solid	7471A	
440-255674-9	STSB28_3-6	Total/NA	Solid	7471A	
440-255674-10	STSB28_6-15	Total/NA	Solid	7471A	
440-255674-11	STSB29_0-0.5	Total/NA	Solid	7471A	
440-255674-12	STSB29_0.5-3	Total/NA	Solid	7471A	
440-255674-13	STSB29_3-6	Total/NA	Solid	7471A	
440-255674-14	STSB29_6-15	Total/NA	Solid	7471A	
440-255674-15	STSB29-FD_6-15	Total/NA	Solid	7471A	
440-255674-16	STSB30_0-0.5	Total/NA	Solid	7471A	
440-255674-17	STSB30_0.5-3	Total/NA	Solid	7471A	
440-255674-18	STSB30_3-6	Total/NA	Solid	7471A	
440-255674-20	STSB30_6-15	Total/NA	Solid	7471A	
440-255674-21	STSB31_0-0.5	Total/NA	Solid	7471A	
440-255674-22	STSB31_0.5-3	Total/NA	Solid	7471A	
MB 440-584679/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 440-584679/2-A	Lab Control Sample	Total/NA	Solid	7471A	
440-255674-12 MS	STSB29_0.5-3	Total/NA	Solid	7471A	
440-255674-12 MSD	STSB29_0.5-3	Total/NA	Solid	7471A	

Prep Batch: 584680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-23	STSB31_3-6	Total/NA	Solid	7471A	
440-255674-24	STSB31_6-15	Total/NA	Solid	7471A	
MB 440-584680/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 440-584680/2-A	Lab Control Sample	Total/NA	Solid	7471A	
440-255674-23 MS	STSB31_3-6	Total/NA	Solid	7471A	
440-255674-23 MSD	STSB31_3-6	Total/NA	Solid	7471A	

Prep Batch: 584711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-23	STSB31_3-6	Total/NA	Solid	3050B	
440-255674-24	STSB31_6-15	Total/NA	Solid	3050B	
MB 440-584711/1-A ^20	Method Blank	Total/NA	Solid	3050B	
MB 440-584711/1-A ^5	Method Blank	Total/NA	Solid	3050B	
LCS 440-584711/2-A ^20	Lab Control Sample	Total/NA	Solid	3050B	
LCS 440-584711/2-A ^5	Lab Control Sample	Total/NA	Solid	3050B	
440-255674-23 MS	STSB31_3-6	Total/NA	Solid	3050B	
440-255674-23 MSD	STSB31_3-6	Total/NA	Solid	3050B	

Prep Batch: 584717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-1	STSB27_0-0.5	Total/NA	Solid	3050B	
440-255674-2	STSB27_0.5-3	Total/NA	Solid	3050B	
440-255674-3	STSB27_3-6	Total/NA	Solid	3050B	
440-255674-5	STSB27_6-15	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 584717 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-6	STSB28_0-0.5	Total/NA	Solid	3050B	
440-255674-7	STSB28-FD_0-0.5	Total/NA	Solid	3050B	
440-255674-8	STSB28_0.5-3	Total/NA	Solid	3050B	
440-255674-9	STSB28_3-6	Total/NA	Solid	3050B	
440-255674-10	STSB28_6-15	Total/NA	Solid	3050B	
440-255674-11	STSB29_0-0.5	Total/NA	Solid	3050B	
440-255674-12	STSB29_0.5-3	Total/NA	Solid	3050B	
440-255674-13	STSB29_3-6	Total/NA	Solid	3050B	
440-255674-14	STSB29_6-15	Total/NA	Solid	3050B	
440-255674-15	STSB29-FD_6-15	Total/NA	Solid	3050B	
440-255674-16	STSB30_0-0.5	Total/NA	Solid	3050B	
440-255674-17	STSB30_0.5-3	Total/NA	Solid	3050B	
440-255674-18	STSB30_3-6	Total/NA	Solid	3050B	
440-255674-20	STSB30_6-15	Total/NA	Solid	3050B	
440-255674-21	STSB31_0-0.5	Total/NA	Solid	3050B	
440-255674-22	STSB31_0.5-3	Total/NA	Solid	3050B	
MB 440-584717/1-A ^20	Method Blank	Total/NA	Solid	3050B	
MB 440-584717/1-A ^5	Method Blank	Total/NA	Solid	3050B	
LCS 440-584717/2-A ^20	Lab Control Sample	Total/NA	Solid	3050B	
LCS 440-584717/2-A ^5	Lab Control Sample	Total/NA	Solid	3050B	
440-255674-12 MS	STSB29_0.5-3	Total/NA	Solid	3050B	
440-255674-12 MSD	STSB29_0.5-3	Total/NA	Solid	3050B	

Analysis Batch: 584875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-23	STSB31_3-6	Total/NA	Solid	6020	584711
440-255674-24	STSB31_6-15	Total/NA	Solid	6020	584711
MB 440-584711/1-A ^20	Method Blank	Total/NA	Solid	6020	584711
LCS 440-584711/2-A ^20	Lab Control Sample	Total/NA	Solid	6020	584711
440-255674-23 MS	STSB31_3-6	Total/NA	Solid	6020	584711
440-255674-23 MSD	STSB31_3-6	Total/NA	Solid	6020	584711

Analysis Batch: 584881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-1	STSB27_0-0.5	Total/NA	Solid	6020	584717
440-255674-2	STSB27_0.5-3	Total/NA	Solid	6020	584717
440-255674-3	STSB27_3-6	Total/NA	Solid	6020	584717
440-255674-5	STSB27_6-15	Total/NA	Solid	6020	584717
440-255674-12	STSB29_0.5-3	Total/NA	Solid	6020	584717
MB 440-584717/1-A ^20	Method Blank	Total/NA	Solid	6020	584717
LCS 440-584717/2-A ^20	Lab Control Sample	Total/NA	Solid	6020	584717
440-255674-12 MS	STSB29_0.5-3	Total/NA	Solid	6020	584717
440-255674-12 MSD	STSB29_0.5-3	Total/NA	Solid	6020	584717

Analysis Batch: 584938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-8	STSB28_0.5-3	Total/NA	Solid	6020	584717
440-255674-9	STSB28_3-6	Total/NA	Solid	6020	584717
440-255674-14	STSB29_6-15	Total/NA	Solid	6020	584717

QC Association Summary

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

Job ID: 440-255674-1

Metals

Analysis Batch: 584960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-6	STSB28_0-0.5	Total/NA	Solid	6020	584717
440-255674-7	STSB28-FD_0-0.5	Total/NA	Solid	6020	584717
440-255674-10	STSB28_6-15	Total/NA	Solid	6020	584717
440-255674-11	STSB29_0-0.5	Total/NA	Solid	6020	584717
440-255674-13	STSB29_3-6	Total/NA	Solid	6020	584717
440-255674-15	STSB29-FD_6-15	Total/NA	Solid	6020	584717
440-255674-16	STSB30_0-0.5	Total/NA	Solid	6020	584717
440-255674-17	STSB30_0.5-3	Total/NA	Solid	6020	584717
440-255674-18	STSB30_3-6	Total/NA	Solid	6020	584717
440-255674-20	STSB30_6-15	Total/NA	Solid	6020	584717
440-255674-21	STSB31_0-0.5	Total/NA	Solid	6020	584717
440-255674-22	STSB31_0.5-3	Total/NA	Solid	6020	584717

Analysis Batch: 584991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-23	STSB31_3-6	Total/NA	Solid	6010B	584711
440-255674-24	STSB31_6-15	Total/NA	Solid	6010B	584711
MB 440-584711/1-A ^5	Method Blank	Total/NA	Solid	6010B	584711
LCS 440-584711/2-A ^5	Lab Control Sample	Total/NA	Solid	6010B	584711
440-255674-23 MS	STSB31_3-6	Total/NA	Solid	6010B	584711
440-255674-23 MSD	STSB31_3-6	Total/NA	Solid	6010B	584711

Analysis Batch: 584992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-1	STSB27_0-0.5	Total/NA	Solid	6010B	584717
440-255674-2	STSB27_0.5-3	Total/NA	Solid	6010B	584717
440-255674-3	STSB27_3-6	Total/NA	Solid	6010B	584717
440-255674-5	STSB27_6-15	Total/NA	Solid	6010B	584717
440-255674-6	STSB28_0-0.5	Total/NA	Solid	6010B	584717
440-255674-7	STSB28-FD_0-0.5	Total/NA	Solid	6010B	584717
440-255674-8	STSB28_0.5-3	Total/NA	Solid	6010B	584717
440-255674-9	STSB28_3-6	Total/NA	Solid	6010B	584717
440-255674-10	STSB28_6-15	Total/NA	Solid	6010B	584717
440-255674-11	STSB29_0-0.5	Total/NA	Solid	6010B	584717
440-255674-12	STSB29_0.5-3	Total/NA	Solid	6010B	584717
440-255674-13	STSB29_3-6	Total/NA	Solid	6010B	584717
440-255674-14	STSB29_6-15	Total/NA	Solid	6010B	584717
440-255674-15	STSB29-FD_6-15	Total/NA	Solid	6010B	584717
440-255674-16	STSB30_0-0.5	Total/NA	Solid	6010B	584717
440-255674-17	STSB30_0.5-3	Total/NA	Solid	6010B	584717
440-255674-18	STSB30_3-6	Total/NA	Solid	6010B	584717
440-255674-20	STSB30_6-15	Total/NA	Solid	6010B	584717
440-255674-21	STSB31_0-0.5	Total/NA	Solid	6010B	584717
440-255674-22	STSB31_0.5-3	Total/NA	Solid	6010B	584717
MB 440-584717/1-A ^5	Method Blank	Total/NA	Solid	6010B	584717
LCS 440-584717/2-A ^5	Lab Control Sample	Total/NA	Solid	6010B	584717
440-255674-12 MS	STSB29_0.5-3	Total/NA	Solid	6010B	584717
440-255674-12 MSD	STSB29_0.5-3	Total/NA	Solid	6010B	584717

QC Association Summary

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

Job ID: 440-255674-1

Metals

Analysis Batch: 585046

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-1	STSB27_0-0.5	Total/NA	Solid	7471A	584679
440-255674-2	STSB27_0.5-3	Total/NA	Solid	7471A	584679
440-255674-3	STSB27_3-6	Total/NA	Solid	7471A	584679
440-255674-5	STSB27_6-15	Total/NA	Solid	7471A	584679
440-255674-6	STSB28_0-0.5	Total/NA	Solid	7471A	584679
440-255674-7	STSB28-FD_0-0.5	Total/NA	Solid	7471A	584679
440-255674-8	STSB28_0.5-3	Total/NA	Solid	7471A	584679
440-255674-9	STSB28_3-6	Total/NA	Solid	7471A	584679
440-255674-10	STSB28_6-15	Total/NA	Solid	7471A	584679
440-255674-11	STSB29_0-0.5	Total/NA	Solid	7471A	584679
440-255674-12	STSB29_0.5-3	Total/NA	Solid	7471A	584679
440-255674-13	STSB29_3-6	Total/NA	Solid	7471A	584679
440-255674-14	STSB29_6-15	Total/NA	Solid	7471A	584679
440-255674-15	STSB29-FD_6-15	Total/NA	Solid	7471A	584679
440-255674-16	STSB30_0-0.5	Total/NA	Solid	7471A	584679
440-255674-17	STSB30_0.5-3	Total/NA	Solid	7471A	584679
440-255674-18	STSB30_3-6	Total/NA	Solid	7471A	584679
440-255674-20	STSB30_6-15	Total/NA	Solid	7471A	584679
440-255674-21	STSB31_0-0.5	Total/NA	Solid	7471A	584679
440-255674-22	STSB31_0.5-3	Total/NA	Solid	7471A	584679
440-255674-23	STSB31_3-6	Total/NA	Solid	7471A	584680
440-255674-24	STSB31_6-15	Total/NA	Solid	7471A	584680
MB 440-584679/1-A	Method Blank	Total/NA	Solid	7471A	584679
MB 440-584680/1-A	Method Blank	Total/NA	Solid	7471A	584680
LCS 440-584679/2-A	Lab Control Sample	Total/NA	Solid	7471A	584679
LCS 440-584680/2-A	Lab Control Sample	Total/NA	Solid	7471A	584680
440-255674-12 MS	STSB29_0.5-3	Total/NA	Solid	7471A	584679
440-255674-12 MSD	STSB29_0.5-3	Total/NA	Solid	7471A	584679
440-255674-23 MS	STSB31_3-6	Total/NA	Solid	7471A	584680
440-255674-23 MSD	STSB31_3-6	Total/NA	Solid	7471A	584680

General Chemistry

Analysis Batch: 584099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-1	STSB27_0-0.5	Total/NA	Solid	Moisture	
440-255674-2	STSB27_0.5-3	Total/NA	Solid	Moisture	
440-255674-3	STSB27_3-6	Total/NA	Solid	Moisture	
440-255674-5	STSB27_6-15	Total/NA	Solid	Moisture	
440-255674-6	STSB28_0-0.5	Total/NA	Solid	Moisture	
440-255674-7	STSB28-FD_0-0.5	Total/NA	Solid	Moisture	
440-255674-8	STSB28_0.5-3	Total/NA	Solid	Moisture	
440-255674-9	STSB28_3-6	Total/NA	Solid	Moisture	
440-255674-10	STSB28_6-15	Total/NA	Solid	Moisture	
440-255674-11	STSB29_0-0.5	Total/NA	Solid	Moisture	
440-255674-12	STSB29_0.5-3	Total/NA	Solid	Moisture	
440-255674-13	STSB29_3-6	Total/NA	Solid	Moisture	
440-255674-14	STSB29_6-15	Total/NA	Solid	Moisture	
440-255674-15	STSB29-FD_6-15	Total/NA	Solid	Moisture	
440-255674-16	STSB30_0-0.5	Total/NA	Solid	Moisture	
440-255674-17	STSB30_0.5-3	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 584099 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-18	STSB30_3-6	Total/NA	Solid	Moisture	
440-255674-20	STSB30_6-15	Total/NA	Solid	Moisture	
440-255674-21	STSB31_0-0.5	Total/NA	Solid	Moisture	
440-255674-22	STSB31_0.5-3	Total/NA	Solid	Moisture	
440-255674-12 MS	STSB29_0.5-3	Total/NA	Solid	Moisture	
440-255674-12 MSD	STSB29_0.5-3	Total/NA	Solid	Moisture	
440-255674-12 DU	STSB29_0.5-3	Total/NA	Solid	Moisture	

Analysis Batch: 584101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-23	STSB31_3-6	Total/NA	Solid	Moisture	
440-255674-24	STSB31_6-15	Total/NA	Solid	Moisture	
440-255674-24 DU	STSB31_6-15	Total/NA	Solid	Moisture	

Analysis Batch: 585763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-1	STSB27_0-0.5	Total/NA	Solid	Homogenization	
440-255674-2	STSB27_0.5-3	Total/NA	Solid	Homogenization	
440-255674-3	STSB27_3-6	Total/NA	Solid	Homogenization	
440-255674-5	STSB27_6-15	Total/NA	Solid	Homogenization	
440-255674-6	STSB28_0-0.5	Total/NA	Solid	Homogenization	
440-255674-7	STSB28-FD_0-0.5	Total/NA	Solid	Homogenization	
440-255674-8	STSB28_0.5-3	Total/NA	Solid	Homogenization	
440-255674-9	STSB28_3-6	Total/NA	Solid	Homogenization	
440-255674-10	STSB28_6-15	Total/NA	Solid	Homogenization	
440-255674-11	STSB29_0-0.5	Total/NA	Solid	Homogenization	
440-255674-12	STSB29_0.5-3	Total/NA	Solid	Homogenization	
440-255674-13	STSB29_3-6	Total/NA	Solid	Homogenization	
440-255674-14	STSB29_6-15	Total/NA	Solid	Homogenization	
440-255674-15	STSB29-FD_6-15	Total/NA	Solid	Homogenization	
440-255674-16	STSB30_0-0.5	Total/NA	Solid	Homogenization	
440-255674-17	STSB30_0.5-3	Total/NA	Solid	Homogenization	
440-255674-18	STSB30_3-6	Total/NA	Solid	Homogenization	
440-255674-20	STSB30_6-15	Total/NA	Solid	Homogenization	
440-255674-21	STSB31_0-0.5	Total/NA	Solid	Homogenization	
440-255674-22	STSB31_0.5-3	Total/NA	Solid	Homogenization	
440-255674-23	STSB31_3-6	Total/NA	Solid	Homogenization	
440-255674-24	STSB31_6-15	Total/NA	Solid	Homogenization	
440-255674-12 MS	STSB29_0.5-3	Total/NA	Solid	Homogenization	
440-255674-12 MSD	STSB29_0.5-3	Total/NA	Solid	Homogenization	

Lab Chronicle

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

Job ID: 440-255674-1

Client Sample ID: STSB27_0-0.5

Lab Sample ID: 440-255674-1
Matrix: Solid

Date Collected: 11/21/19 09:15
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Client Sample ID: STSB27_0-0.5

Lab Sample ID: 440-255674-1
Matrix: Solid
Percent Solids: 97.1

Date Collected: 11/21/19 09:15
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 12:45	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584881	12/09/19 23:07	B1H	TAL IRV
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 11:27	DB	TAL IRV

Client Sample ID: STSB27_0.5-3

Lab Sample ID: 440-255674-2
Matrix: Solid

Date Collected: 11/21/19 09:25
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Client Sample ID: STSB27_0.5-3

Lab Sample ID: 440-255674-2
Matrix: Solid
Percent Solids: 96.2

Date Collected: 11/21/19 09:25
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 12:47	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584881	12/09/19 23:09	B1H	TAL IRV
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 11:30	DB	TAL IRV

Client Sample ID: STSB27_3-6

Lab Sample ID: 440-255674-3
Matrix: Solid

Date Collected: 11/21/19 09:31
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Lab Chronicle

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

Job ID: 440-255674-1

Client Sample ID: STSB27_3-6

Lab Sample ID: 440-255674-3
Matrix: Solid
Percent Solids: 94.8

Date Collected: 11/21/19 09:31
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 12:48	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584881	12/09/19 23:12	B1H	TAL IRV
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 11:33	DB	TAL IRV

Client Sample ID: STSB27_6-15

Lab Sample ID: 440-255674-5
Matrix: Solid

Date Collected: 11/21/19 09:55
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Client Sample ID: STSB27_6-15

Lab Sample ID: 440-255674-5
Matrix: Solid
Percent Solids: 89.8

Date Collected: 11/21/19 09:55
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 13:00	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584881	12/09/19 23:14	B1H	TAL IRV
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 11:35	DB	TAL IRV

Client Sample ID: STSB28_0-0.5

Lab Sample ID: 440-255674-6
Matrix: Solid

Date Collected: 11/21/19 11:45
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Client Sample ID: STSB28_0-0.5

Lab Sample ID: 440-255674-6
Matrix: Solid
Percent Solids: 93.9

Date Collected: 11/21/19 11:45
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 13:01	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584960	12/10/19 10:57	B1H	TAL IRV

Lab Chronicle

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

Job ID: 440-255674-1

Client Sample ID: STSB28_0-0.5

Lab Sample ID: 440-255674-6
Date Collected: 11/21/19 11:45
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 93.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 11:38	DB	TAL IRV

Client Sample ID: STSB28-FD_0-0.5

Lab Sample ID: 440-255674-7
Date Collected: 11/21/19 11:50
Matrix: Solid
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Client Sample ID: STSB28-FD_0-0.5

Lab Sample ID: 440-255674-7
Date Collected: 11/21/19 11:50
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 94.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 13:03	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584960	12/10/19 11:09	B1H	TAL IRV
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 11:45	DB	TAL IRV

Client Sample ID: STSB28_0.5-3

Lab Sample ID: 440-255674-8
Date Collected: 11/21/19 11:55
Matrix: Solid
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Client Sample ID: STSB28_0.5-3

Lab Sample ID: 440-255674-8
Date Collected: 11/21/19 11:55
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 94.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 13:05	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584938	12/10/19 09:48	B1H	TAL IRV
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 11:47	DB	TAL IRV

Client Sample ID: STSB28_3-6
Lab Sample ID: 440-255674-9
Date Collected: 11/21/19 12:15
Matrix: Solid
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Client Sample ID: STSB28_3-6
Lab Sample ID: 440-255674-9
Date Collected: 11/21/19 12:15
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 90.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 13:07	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584938	12/10/19 09:50	B1H	TAL IRV
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 11:50	DB	TAL IRV

Client Sample ID: STSB28_6-15
Lab Sample ID: 440-255674-10
Date Collected: 11/21/19 12:25
Matrix: Solid
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Client Sample ID: STSB28_6-15
Lab Sample ID: 440-255674-10
Date Collected: 11/21/19 12:25
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 83.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 13:09	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584960	12/10/19 11:11	B1H	TAL IRV
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 11:53	DB	TAL IRV

Client Sample ID: STSB29_0-0.5
Lab Sample ID: 440-255674-11
Date Collected: 11/21/19 15:00
Matrix: Solid
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Lab Chronicle

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

Job ID: 440-255674-1

Client Sample ID: STSB29_0-0.5

Lab Sample ID: 440-255674-11
Date Collected: 11/21/19 15:00
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 94.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 13:11	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584960	12/10/19 11:13	B1H	TAL IRV
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 11:55	DB	TAL IRV

Client Sample ID: STSB29_0.5-3

Lab Sample ID: 440-255674-12
Date Collected: 11/21/19 15:10
Matrix: Solid
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Client Sample ID: STSB29_0.5-3

Lab Sample ID: 440-255674-12
Date Collected: 11/21/19 15:10
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 12:37	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584881	12/09/19 22:50	B1H	TAL IRV
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 11:19	DB	TAL IRV

Client Sample ID: STSB29_3-6

Lab Sample ID: 440-255674-13
Date Collected: 11/21/19 15:30
Matrix: Solid
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Client Sample ID: STSB29_3-6

Lab Sample ID: 440-255674-13
Date Collected: 11/21/19 15:30
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 95.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 13:12	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584960	12/10/19 11:16	B1H	TAL IRV

Lab Chronicle

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

Job ID: 440-255674-1

Client Sample ID: STSB29_3-6
Date Collected: 11/21/19 15:30
Date Received: 11/26/19 10:50

Lab Sample ID: 440-255674-13
Matrix: Solid
Percent Solids: 95.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 11:58	DB	TAL IRV

Client Sample ID: STSB29_6-15
Date Collected: 11/21/19 15:45
Date Received: 11/26/19 10:50

Lab Sample ID: 440-255674-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Client Sample ID: STSB29_6-15
Date Collected: 11/21/19 15:45
Date Received: 11/26/19 10:50

Lab Sample ID: 440-255674-14
Matrix: Solid
Percent Solids: 88.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 13:14	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584938	12/10/19 09:58	B1H	TAL IRV
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 12:01	DB	TAL IRV

Client Sample ID: STSB29-FD_6-15
Date Collected: 11/21/19 15:50
Date Received: 11/26/19 10:50

Lab Sample ID: 440-255674-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Client Sample ID: STSB29-FD_6-15
Date Collected: 11/21/19 15:50
Date Received: 11/26/19 10:50

Lab Sample ID: 440-255674-15
Matrix: Solid
Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 13:16	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584960	12/10/19 11:18	B1H	TAL IRV
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 12:03	DB	TAL IRV

Lab Chronicle

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

Job ID: 440-255674-1

Client Sample ID: STSB30_0-0.5

Lab Sample ID: 440-255674-16
Date Collected: 11/22/19 08:55
Matrix: Solid
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Client Sample ID: STSB30_0-0.5

Lab Sample ID: 440-255674-16
Date Collected: 11/22/19 08:55
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 94.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 13:27	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584960	12/10/19 11:21	B1H	TAL IRV
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 12:05	DB	TAL IRV

Client Sample ID: STSB30_0.5-3

Lab Sample ID: 440-255674-17
Date Collected: 11/22/19 09:02
Matrix: Solid
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Client Sample ID: STSB30_0.5-3

Lab Sample ID: 440-255674-17
Date Collected: 11/22/19 09:02
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 94.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 13:28	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584960	12/10/19 11:23	B1H	TAL IRV
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 12:08	DB	TAL IRV

Client Sample ID: STSB30_3-6

Lab Sample ID: 440-255674-18
Date Collected: 11/22/19 09:10
Matrix: Solid
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Lab Chronicle

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

Job ID: 440-255674-1

Client Sample ID: STSB30_3-6
Date Collected: 11/22/19 09:10
Date Received: 11/26/19 10:50

Lab Sample ID: 440-255674-18
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			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 13:30	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584960	12/10/19 11:33	B1H	TAL IRV
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 12:15	DB	TAL IRV

Client Sample ID: STSB30_6-15
Date Collected: 11/22/19 09:25
Date Received: 11/26/19 10:50

Lab Sample ID: 440-255674-20
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Client Sample ID: STSB30_6-15
Date Collected: 11/22/19 09:25
Date Received: 11/26/19 10:50

Lab Sample ID: 440-255674-20
Matrix: Solid
Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 13:32	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584960	12/10/19 11:35	B1H	TAL IRV
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 12:17	DB	TAL IRV

Client Sample ID: STSB31_0-0.5
Date Collected: 11/22/19 11:56
Date Received: 11/26/19 10:50

Lab Sample ID: 440-255674-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Client Sample ID: STSB31_0-0.5
Date Collected: 11/22/19 11:56
Date Received: 11/26/19 10:50

Lab Sample ID: 440-255674-21
Matrix: Solid
Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 13:34	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584960	12/10/19 11:38	B1H	TAL IRV

Lab Chronicle

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

Job ID: 440-255674-1

Client Sample ID: STSB31_0-0.5

Lab Sample ID: 440-255674-21
Date Collected: 11/22/19 11:56
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 12:19	DB	TAL IRV

Client Sample ID: STSB31_0.5-3

Lab Sample ID: 440-255674-22
Date Collected: 11/22/19 12:03
Matrix: Solid
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584099	12/05/19 16:05	XL	TAL IRV

Client Sample ID: STSB31_0.5-3

Lab Sample ID: 440-255674-22
Date Collected: 11/22/19 12:03
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584992	12/10/19 13:36	TQN	TAL IRV
Total/NA	Prep	3050B			584717	12/09/19 13:03	NE1	TAL IRV
Total/NA	Analysis	6020		20	584960	12/10/19 11:40	B1H	TAL IRV
Total/NA	Prep	7471A			584679	12/09/19 11:21	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 12:21	DB	TAL IRV

Client Sample ID: STSB31_3-6

Lab Sample ID: 440-255674-23
Date Collected: 11/22/19 12:10
Matrix: Solid
Date Received: 11/26/19 10:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584101	12/05/19 16:09	XL	TAL IRV

Client Sample ID: STSB31_3-6

Lab Sample ID: 440-255674-23
Date Collected: 11/22/19 12:10
Matrix: Solid
Date Received: 11/26/19 10:50
Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584711	12/09/19 12:48	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584991	12/10/19 10:16	KE	TAL IRV
Total/NA	Prep	3050B			584711	12/09/19 12:48	NE1	TAL IRV
Total/NA	Analysis	6020		20	584875	12/09/19 20:58	B1H	TAL IRV
Total/NA	Prep	7471A			584680	12/09/19 11:23	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 12:45	DB	TAL IRV

Lab Chronicle

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

Job ID: 440-255674-1

Client Sample ID: STSB31_6-15

Lab Sample ID: 440-255674-24

Date Collected: 11/22/19 12:20
Date Received: 11/26/19 10:50

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Homogenization		1	585763	12/05/19 15:31	TLN	TAL IRV
Total/NA	Analysis	Moisture		1	584101	12/05/19 16:09	XL	TAL IRV

Client Sample ID: STSB31_6-15

Lab Sample ID: 440-255674-24

Date Collected: 11/22/19 12:20
Date Received: 11/26/19 10:50

Matrix: Solid
Percent Solids: 86.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			584711	12/09/19 12:48	NE1	TAL IRV
Total/NA	Analysis	6010B		5	584991	12/10/19 10:26	KE	TAL IRV
Total/NA	Prep	3050B			584711	12/09/19 12:48	NE1	TAL IRV
Total/NA	Analysis	6020		20	584875	12/09/19 21:12	B1H	TAL IRV
Total/NA	Prep	7471A			584680	12/09/19 11:23	MEM	TAL IRV
Total/NA	Analysis	7471A		1	585046	12/10/19 12:53	DB	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: 440-255674-1

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: 440-255674-1

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

Sample Summary

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

Job ID: 440-255674-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-255674-1	STSB27_0-0.5	Solid	11/21/19 09:15	11/26/19 10:50	
440-255674-2	STSB27_0.5-3	Solid	11/21/19 09:25	11/26/19 10:50	
440-255674-3	STSB27_3-6	Solid	11/21/19 09:31	11/26/19 10:50	
440-255674-5	STSB27_6-15	Solid	11/21/19 09:55	11/26/19 10:50	
440-255674-6	STSB28_0-0.5	Solid	11/21/19 11:45	11/26/19 10:50	
440-255674-7	STSB28-FD_0-0.5	Solid	11/21/19 11:50	11/26/19 10:50	
440-255674-8	STSB28_0.5-3	Solid	11/21/19 11:55	11/26/19 10:50	
440-255674-9	STSB28_3-6	Solid	11/21/19 12:15	11/26/19 10:50	
440-255674-10	STSB28_6-15	Solid	11/21/19 12:25	11/26/19 10:50	
440-255674-11	STSB29_0-0.5	Solid	11/21/19 15:00	11/26/19 10:50	
440-255674-12	STSB29_0.5-3	Solid	11/21/19 15:10	11/26/19 10:50	
440-255674-13	STSB29_3-6	Solid	11/21/19 15:30	11/26/19 10:50	
440-255674-14	STSB29_6-15	Solid	11/21/19 15:45	11/26/19 10:50	
440-255674-15	STSB29-FD_6-15	Solid	11/21/19 15:50	11/26/19 10:50	
440-255674-16	STSB30_0-0.5	Solid	11/22/19 08:55	11/26/19 10:50	
440-255674-17	STSB30_0.5-3	Solid	11/22/19 09:02	11/26/19 10:50	
440-255674-18	STSB30_3-6	Solid	11/22/19 09:10	11/26/19 10:50	
440-255674-20	STSB30_6-15	Solid	11/22/19 09:25	11/26/19 10:50	
440-255674-21	STSB31_0-0.5	Solid	11/22/19 11:56	11/26/19 10:50	
440-255674-22	STSB31_0.5-3	Solid	11/22/19 12:03	11/26/19 10:50	
440-255674-23	STSB31_3-6	Solid	11/22/19 12:10	11/26/19 10:50	
440-255674-24	STSB31_6-15	Solid	11/22/19 12:20	11/26/19 10:50	

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
EB01	440-255674-A-4	Plastic 250ml - with Nitric Acid	/		
FB01	440-255674-A-19	Plastic 250ml - with Nitric Acid	/		

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
	STSB27_0-0.5	11/21/19	0915	X				1	1						X	X							[1]Metals are: Al, B, Ca, Fe, K, Li, Mg,
	STSB27_0.5-3	11/21/19	0925	X				1	1						X	X							Na, P, Sr, Sn, Ti, by 6010B;
	STSB27_3-6	11/21/19	0931	X				1	1						X	X							As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn,
	EB01	11/21/19	0936		X			1			1				X	X	X						Mo, Ni, Sb, Se, Ag, Tl, V, Zn by 6020
	STSB27_6-15	11/21/19	0955	X				1	1						X	X							
	STSB28_0-0.5	11/21/19	1145	X				1	1						X	X							
	STSB28-FD_0-0.5	11/21/19	1150	X				1	1						X	X							Report soil on dry weight basis.
	STSB28_0.5-3	11/21/19	1155	X				1	1						X	X							
	STSB28_3-6	11/21/19	1215	X				1	1						X	X							
	STSB28_6-15	11/21/19	1225	X				1	1						X	X							

440-255674 Chain of Custody

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Bryce Johnson						
Sampler's Company: Wood	[signature] / Wood	11/25/19	1030	[signature]	11/26/19	1050
Shipment Method: Fed Ex Ship Date: 11/25/19						
Shipment Tracking No: 8137 9414 1751						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 5.3/5 °F/C | Trip Blank: Yes (No) | MS/MSD Sample Submitted: (Yes) / No

IA-93

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

11/26/19 CJ

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
	STSB29_0-0.5	11/21/19	1500	X				1	1						X	X								[1]Metals are. Al, B, Ca, Fe, K, Li, Mg,
	STSB29_0.5-3	11/21/19	1510	X				2	2						X	X							X	Na, P, Sr, Sn, Ti, by 6010B;
	STSB29_3-6	11/21/19	1530	X				1	1						X	X								As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn,
	STSB29_6-15	11/21/19	1545	X				1	1						X	X								Mo, Ni, Sb, Se, Ag, Tl, V, Zn by 6020
	STSB29-FD_6-15	11/21/19	1550	X				1	1						X	X								
	STSB30_0-0.5	11/22/19	~~0902~~	X				1	1						X	X								Sample Time = 0855 BJ 11/22/19
	STSB30_0.5-3	11/22/19	0902	X				1	1						X	X								Report soil on dry weight basis.
	STSB30_3-6	11/22/19	0910	X				1	1						X	X								
	FB01	11/22/19	0915	X				1			1				X	X	X							
	STSB30_6-15	11/22/19	0925	X				1	1						X	X								

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Bryce Johnson						
Sampler's Company: Wood	/ Wood	11/25/19	1030		11/26/19	1050
Shipment Method: Fed Ex Ship Date: 11/25/19						
Shipment Tracking No: 8137 9414 1751						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 5.3/5 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

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	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.)
	STSB31_0-0.5	11/22/19	1156	X				1	1						X	X									[1]Metals are: Al, B, Ca, Fe, K, Li, Mg,
	STSB31_0.5-3	11/22/19	1203	X				1	1						X	X									Na, P, Sr, Sn, Ti, by 6010B;
	STSB31_3-6	11/22/19	1210	X				1	1						X	X									As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn,
	STSB31_6-15	11/22/19	1220	X				1	1						X	X									Mo, Ni, Sb, Se, Ag, Tl, V, Zn by 6020
									BJ 11/25/19																Report soil on dry weight basis.

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Bryce Johnson						
Sampler's Company: Wood	[signature] /Wood	11/25/19	1030	[signature]	11/26/19	1050
Shipment Method: Fed Ex Ship Date: 11/25/19						
Shipment Tracking No: 8137 9414 1751						

Special Instructions:

THIS LINE - LAB USE ONLY. Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 5.3 / 5 °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: 440-255674-1

Login Number: 255674
List Number: 1
Creator: Bonta, Lucia F

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.	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").	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
440-255674	1	STSB27_0-0.5	Solid	440-5969065	440-255674-A-1	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	1	STSB27_0-0.5	Solid	440-5969065	440-255674-A-1	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	1	STSB27_0-0.5	Solid	440-5969065	440-255674-A-1	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	1	STSB27_0-0.5	Solid	440-5969065	440-255674-A-1	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	1	STSB27_0-0.5	Solid	440-5969065	440-255674-A-1	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	1	STSB27_0-0.5	Solid	440-5983772	440-255674-B-1	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	1	STSB27_0-0.5	Solid	440-5983772	440-255674-B-1	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	1	STSB27_0-0.5	Solid	440-5983772	440-255674-B-1	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	1	STSB27_0-0.5	Solid	440-5983772	440-255674-B-1	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	2	STSB27_0.5-3	Solid	440-5969066	440-255674-A-2	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	2	STSB27_0.5-3	Solid	440-5969066	440-255674-A-2	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	2	STSB27_0.5-3	Solid	440-5969066	440-255674-A-2	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	2	STSB27_0.5-3	Solid	440-5969066	440-255674-A-2	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	2	STSB27_0.5-3	Solid	440-5969066	440-255674-A-2	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	2	STSB27_0.5-3	Solid	440-5983773	440-255674-B-2	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	2	STSB27_0.5-3	Solid	440-5983773	440-255674-B-2	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	2	STSB27_0.5-3	Solid	440-5983773	440-255674-B-2	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	2	STSB27_0.5-3	Solid	440-5983773	440-255674-B-2	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	3	STSB27_3-6	Solid	440-5969067	440-255674-A-3	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	3	STSB27_3-6	Solid	440-5969067	440-255674-A-3	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	3	STSB27_3-6	Solid	440-5969067	440-255674-A-3	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	3	STSB27_3-6	Solid	440-5969067	440-255674-A-3	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	3	STSB27_3-6	Solid	440-5969067	440-255674-A-3	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	3	STSB27_3-6	Solid	440-5983774	440-255674-B-3	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	3	STSB27_3-6	Solid	440-5983774	440-255674-B-3	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	3	STSB27_3-6	Solid	440-5983774	440-255674-B-3	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	3	STSB27_3-6	Solid	440-5983774	440-255674-B-3	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	4	EB01	Water	440-5969068	440-255674-A-4	Plastic 250ml - with Nitric Acid	_Metals Prep	Mercado, Michael E	I	440-149464	12/04/19 11:01
440-255674	4	EB01	Water	440-5969068	440-255674-A-4	Plastic 250ml - with Nitric Acid	ICOCWI3-02	Mercado, Michael E	I	440-149485	12/04/19 13:11
440-255674	4	EB01	Water	440-5969068	440-255674-A-4	Plastic 250ml - with Nitric Acid	ICOCWI3-02	Garcia, Mayra 1	I	440-149276	11/30/19 08:35
440-255674	4	EB01	Water	440-5969068	440-255674-A-4	Plastic 250ml - with Nitric Acid	_Metals Prep	Garcia, Mayra 1	I	440-149220	11/29/19 12:26
440-255674	4	EB01	Water	440-5969068	440-255674-A-4	Plastic 250ml - with Nitric Acid	ICOCWI3-02	Bonta, Lucia F	I	440-149121	11/26/19 18:30
440-255674	5	STSB27_6-15	Solid	440-5969069	440-255674-A-5	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	5	STSB27_6-15	Solid	440-5969069	440-255674-A-5	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	5	STSB27_6-15	Solid	440-5969069	440-255674-A-5	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	5	STSB27_6-15	Solid	440-5969069	440-255674-A-5	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	5	STSB27_6-15	Solid	440-5969069	440-255674-A-5	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	5	STSB27_6-15	Solid	440-5983775	440-255674-B-5	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	5	STSB27_6-15	Solid	440-5983775	440-255674-B-5	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	5	STSB27_6-15	Solid	440-5983775	440-255674-B-5	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05

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
440-255674	5	STSB27_6-15	Solid	440-5983775	440-255674-B-5	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	6	STSB28_0-0.5	Solid	440-5969070	440-255674-A-6	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	6	STSB28_0-0.5	Solid	440-5969070	440-255674-A-6	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	6	STSB28_0-0.5	Solid	440-5969070	440-255674-A-6	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	6	STSB28_0-0.5	Solid	440-5969070	440-255674-A-6	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	6	STSB28_0-0.5	Solid	440-5969070	440-255674-A-6	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	6	STSB28_0-0.5	Solid	440-5983776	440-255674-B-6	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	6	STSB28_0-0.5	Solid	440-5983776	440-255674-B-6	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	6	STSB28_0-0.5	Solid	440-5983776	440-255674-B-6	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	6	STSB28_0-0.5	Solid	440-5983776	440-255674-B-6	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	7	STSB28-FD_0-0.5	Solid	440-5969071	440-255674-A-7	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	7	STSB28-FD_0-0.5	Solid	440-5969071	440-255674-A-7	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	7	STSB28-FD_0-0.5	Solid	440-5969071	440-255674-A-7	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	7	STSB28-FD_0-0.5	Solid	440-5969071	440-255674-A-7	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	7	STSB28-FD_0-0.5	Solid	440-5969071	440-255674-A-7	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	7	STSB28-FD_0-0.5	Solid	440-5983789	440-255674-B-7	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	7	STSB28-FD_0-0.5	Solid	440-5983789	440-255674-B-7	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	7	STSB28-FD_0-0.5	Solid	440-5983789	440-255674-B-7	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	7	STSB28-FD_0-0.5	Solid	440-5983789	440-255674-B-7	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	8	STSB28_0.5-3	Solid	440-5969072	440-255674-A-8	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	8	STSB28_0.5-3	Solid	440-5969072	440-255674-A-8	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	8	STSB28_0.5-3	Solid	440-5969072	440-255674-A-8	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	8	STSB28_0.5-3	Solid	440-5969072	440-255674-A-8	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	8	STSB28_0.5-3	Solid	440-5969072	440-255674-A-8	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	8	STSB28_0.5-3	Solid	440-5983790	440-255674-B-8	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	8	STSB28_0.5-3	Solid	440-5983790	440-255674-B-8	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	8	STSB28_0.5-3	Solid	440-5983790	440-255674-B-8	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	8	STSB28_0.5-3	Solid	440-5983790	440-255674-B-8	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	9	STSB28_3-6	Solid	440-5969073	440-255674-A-9	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	9	STSB28_3-6	Solid	440-5969073	440-255674-A-9	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	9	STSB28_3-6	Solid	440-5969073	440-255674-A-9	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	9	STSB28_3-6	Solid	440-5969073	440-255674-A-9	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	9	STSB28_3-6	Solid	440-5969073	440-255674-A-9	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	9	STSB28_3-6	Solid	440-5983791	440-255674-B-9	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	9	STSB28_3-6	Solid	440-5983791	440-255674-B-9	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	9	STSB28_3-6	Solid	440-5983791	440-255674-B-9	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	9	STSB28_3-6	Solid	440-5983791	440-255674-B-9	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	10	STSB28_6-15	Solid	440-5969074	440-255674-A-10	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	10	STSB28_6-15	Solid	440-5969074	440-255674-A-10	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	10	STSB28_6-15	Solid	440-5969074	440-255674-A-10	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44

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
440-255674	10	STSB28_6-15	Solid	440-5969074	440-255674-A-10	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	10	STSB28_6-15	Solid	440-5969074	440-255674-A-10	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	10	STSB28_6-15	Solid	440-5983792	440-255674-B-10	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	10	STSB28_6-15	Solid	440-5983792	440-255674-B-10	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	10	STSB28_6-15	Solid	440-5983792	440-255674-B-10	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	10	STSB28_6-15	Solid	440-5983792	440-255674-B-10	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	11	STSB29_0-0.5	Solid	440-5969075	440-255674-A-11	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	11	STSB29_0-0.5	Solid	440-5969075	440-255674-A-11	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	11	STSB29_0-0.5	Solid	440-5969075	440-255674-A-11	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	11	STSB29_0-0.5	Solid	440-5969075	440-255674-A-11	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	11	STSB29_0-0.5	Solid	440-5969075	440-255674-A-11	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	11	STSB29_0-0.5	Solid	440-5983793	440-255674-B-11	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	11	STSB29_0-0.5	Solid	440-5983793	440-255674-B-11	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	11	STSB29_0-0.5	Solid	440-5983793	440-255674-B-11	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	11	STSB29_0-0.5	Solid	440-5983793	440-255674-B-11	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	12	STSB29_0.5-3	Solid	440-5969076	440-255674-A-12	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	12	STSB29_0.5-3	Solid	440-5969076	440-255674-A-12	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	12	STSB29_0.5-3	Solid	440-5969076	440-255674-A-12	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	12	STSB29_0.5-3	Solid	440-5969076	440-255674-A-12	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	12	STSB29_0.5-3	Solid	440-5969076	440-255674-A-12	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	12	STSB29_0.5-3	Solid	440-5969102	440-255674-A-12	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	12	STSB29_0.5-3	Solid	440-5969102	440-255674-A-12	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	12	STSB29_0.5-3	Solid	440-5969102	440-255674-A-12	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	12	STSB29_0.5-3	Solid	440-5969102	440-255674-A-12	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	12	STSB29_0.5-3	Solid	440-5969102	440-255674-A-12	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	12	STSB29_0.5-3	Solid	440-5969103	440-255674-A-12	No Container	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	12	STSB29_0.5-3	Solid	440-5969103	440-255674-A-12	No Container	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	12	STSB29_0.5-3	Solid	440-5969103	440-255674-A-12	No Container	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	12	STSB29_0.5-3	Solid	440-5969103	440-255674-A-12	No Container	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	12	STSB29_0.5-3	Solid	440-5983794	440-255674-B-12	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	12	STSB29_0.5-3	Solid	440-5983794	440-255674-B-12	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	12	STSB29_0.5-3	Solid	440-5983794	440-255674-B-12	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	12	STSB29_0.5-3	Solid	440-5983794	440-255674-B-12	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149584	12/05/19 17:01
440-255674	12	STSB29_0.5-3	Solid	440-5983796	440-255674-B-12	No Container	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	12	STSB29_0.5-3	Solid	440-5983796	440-255674-B-12	No Container	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	12	STSB29_0.5-3	Solid	440-5983809	440-255674-C-12	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	12	STSB29_0.5-3	Solid	440-5983809	440-255674-C-12	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	12	STSB29_0.5-3	Solid	440-5983809	440-255674-C-12	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	12	STSB29_0.5-3	Solid	440-5983809	440-255674-C-12	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	13	STSB29_3-6	Solid	440-5969077	440-255674-A-13	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18

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
440-255674	13	STSB29_3-6	Solid	440-5969077	440-255674-A-13	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	13	STSB29_3-6	Solid	440-5969077	440-255674-A-13	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	13	STSB29_3-6	Solid	440-5969077	440-255674-A-13	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	13	STSB29_3-6	Solid	440-5969077	440-255674-A-13	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	13	STSB29_3-6	Solid	440-5983795	440-255674-B-13	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	13	STSB29_3-6	Solid	440-5983795	440-255674-B-13	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	13	STSB29_3-6	Solid	440-5983795	440-255674-B-13	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	13	STSB29_3-6	Solid	440-5983795	440-255674-B-13	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	14	STSB29_6-15	Solid	440-5969078	440-255674-A-14	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	14	STSB29_6-15	Solid	440-5969078	440-255674-A-14	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	14	STSB29_6-15	Solid	440-5969078	440-255674-A-14	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	14	STSB29_6-15	Solid	440-5969078	440-255674-A-14	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	14	STSB29_6-15	Solid	440-5969078	440-255674-A-14	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	14	STSB29_6-15	Solid	440-5983797	440-255674-B-14	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	14	STSB29_6-15	Solid	440-5983797	440-255674-B-14	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	14	STSB29_6-15	Solid	440-5983797	440-255674-B-14	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	14	STSB29_6-15	Solid	440-5983797	440-255674-B-14	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	15	STSB29-FD_6-15	Solid	440-5969079	440-255674-A-15	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	15	STSB29-FD_6-15	Solid	440-5969079	440-255674-A-15	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	15	STSB29-FD_6-15	Solid	440-5969079	440-255674-A-15	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	15	STSB29-FD_6-15	Solid	440-5969079	440-255674-A-15	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	15	STSB29-FD_6-15	Solid	440-5969079	440-255674-A-15	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	15	STSB29-FD_6-15	Solid	440-5983798	440-255674-B-15	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	15	STSB29-FD_6-15	Solid	440-5983798	440-255674-B-15	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	15	STSB29-FD_6-15	Solid	440-5983798	440-255674-B-15	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	15	STSB29-FD_6-15	Solid	440-5983798	440-255674-B-15	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	16	STSB30_0-0.5	Solid	440-5969080	440-255674-A-16	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	16	STSB30_0-0.5	Solid	440-5969080	440-255674-A-16	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	16	STSB30_0-0.5	Solid	440-5969080	440-255674-A-16	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	16	STSB30_0-0.5	Solid	440-5969080	440-255674-A-16	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	16	STSB30_0-0.5	Solid	440-5969080	440-255674-A-16	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	16	STSB30_0-0.5	Solid	440-5983799	440-255674-B-16	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	16	STSB30_0-0.5	Solid	440-5983799	440-255674-B-16	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	16	STSB30_0-0.5	Solid	440-5983799	440-255674-B-16	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	16	STSB30_0-0.5	Solid	440-5983799	440-255674-B-16	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	17	STSB30_0.5-3	Solid	440-5969081	440-255674-A-17	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	17	STSB30_0.5-3	Solid	440-5969081	440-255674-A-17	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	17	STSB30_0.5-3	Solid	440-5969081	440-255674-A-17	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	17	STSB30_0.5-3	Solid	440-5969081	440-255674-A-17	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	17	STSB30_0.5-3	Solid	440-5969081	440-255674-A-17	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30

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
440-255674	17	STSB30_0.5-3	Solid	440-5983800	440-255674-B-17	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	17	STSB30_0.5-3	Solid	440-5983800	440-255674-B-17	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	17	STSB30_0.5-3	Solid	440-5983800	440-255674-B-17	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	17	STSB30_0.5-3	Solid	440-5983800	440-255674-B-17	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	18	STSB30_3-6	Solid	440-5969082	440-255674-A-18	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	18	STSB30_3-6	Solid	440-5969082	440-255674-A-18	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	18	STSB30_3-6	Solid	440-5969082	440-255674-A-18	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	18	STSB30_3-6	Solid	440-5969082	440-255674-A-18	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	18	STSB30_3-6	Solid	440-5969082	440-255674-A-18	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	18	STSB30_3-6	Solid	440-5983801	440-255674-B-18	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	18	STSB30_3-6	Solid	440-5983801	440-255674-B-18	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	18	STSB30_3-6	Solid	440-5983801	440-255674-B-18	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	18	STSB30_3-6	Solid	440-5983801	440-255674-B-18	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	19	FB01	Water	440-5969083	440-255674-A-19	Plastic 250ml - with Nitric Acid	_Metals Prep	Mercado, Michael E	I	440-149464	12/04/19 11:01
440-255674	19	FB01	Water	440-5969083	440-255674-A-19	Plastic 250ml - with Nitric Acid	ICOCWI3-02	Mercado, Michael E	I	440-149485	12/04/19 13:11
440-255674	19	FB01	Water	440-5969083	440-255674-A-19	Plastic 250ml - with Nitric Acid	ICOCWI3-02	Garcia, Mayra 1	I	440-149276	11/30/19 08:35
440-255674	19	FB01	Water	440-5969083	440-255674-A-19	Plastic 250ml - with Nitric Acid	_Metals Prep	Garcia, Mayra 1	I	440-149220	11/29/19 12:26
440-255674	19	FB01	Water	440-5969083	440-255674-A-19	Plastic 250ml - with Nitric Acid	ICOCWI3-02	Bonta, Lucia F	I	440-149121	11/26/19 18:30
440-255674	20	STSB30_6-15	Solid	440-5969084	440-255674-A-20	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	20	STSB30_6-15	Solid	440-5969084	440-255674-A-20	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	20	STSB30_6-15	Solid	440-5969084	440-255674-A-20	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	20	STSB30_6-15	Solid	440-5969084	440-255674-A-20	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	20	STSB30_6-15	Solid	440-5969084	440-255674-A-20	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	20	STSB30_6-15	Solid	440-5983802	440-255674-B-20	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	20	STSB30_6-15	Solid	440-5983802	440-255674-B-20	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	20	STSB30_6-15	Solid	440-5983802	440-255674-B-20	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	20	STSB30_6-15	Solid	440-5983802	440-255674-B-20	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	21	STSB31_0-0.5	Solid	440-5969085	440-255674-A-21	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	21	STSB31_0-0.5	Solid	440-5969085	440-255674-A-21	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	21	STSB31_0-0.5	Solid	440-5969085	440-255674-A-21	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	21	STSB31_0-0.5	Solid	440-5969085	440-255674-A-21	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	21	STSB31_0-0.5	Solid	440-5969085	440-255674-A-21	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	21	STSB31_0-0.5	Solid	440-5983803	440-255674-B-21	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	21	STSB31_0-0.5	Solid	440-5983803	440-255674-B-21	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	21	STSB31_0-0.5	Solid	440-5983803	440-255674-B-21	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	21	STSB31_0-0.5	Solid	440-5983803	440-255674-B-21	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	22	STSB31_0.5-3	Solid	440-5969086	440-255674-A-22	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	22	STSB31_0.5-3	Solid	440-5969086	440-255674-A-22	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	22	STSB31_0.5-3	Solid	440-5969086	440-255674-A-22	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	22	STSB31_0.5-3	Solid	440-5969086	440-255674-A-22	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48

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
440-255674	22	STSB31_0.5-3	Solid	440-5969086	440-255674-A-22	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	22	STSB31_0.5-3	Solid	440-5983804	440-255674-B-22	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	22	STSB31_0.5-3	Solid	440-5983804	440-255674-B-22	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	22	STSB31_0.5-3	Solid	440-5983804	440-255674-B-22	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	22	STSB31_0.5-3	Solid	440-5983804	440-255674-B-22	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	23	STSB31_3-6	Solid	440-5969087	440-255674-A-23	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	23	STSB31_3-6	Solid	440-5969087	440-255674-A-23	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	23	STSB31_3-6	Solid	440-5969087	440-255674-A-23	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	23	STSB31_3-6	Solid	440-5969087	440-255674-A-23	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	23	STSB31_3-6	Solid	440-5969087	440-255674-A-23	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	23	STSB31_3-6	Solid	440-5983805	440-255674-B-23	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	23	STSB31_3-6	Solid	440-5983805	440-255674-B-23	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	23	STSB31_3-6	Solid	440-5983805	440-255674-B-23	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	23	STSB31_3-6	Solid	440-5983805	440-255674-B-23	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	24	STSB31_6-15	Solid	440-5969088	440-255674-A-24	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	24	STSB31_6-15	Solid	440-5969088	440-255674-A-24	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	24	STSB31_6-15	Solid	440-5969088	440-255674-A-24	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	24	STSB31_6-15	Solid	440-5969088	440-255674-A-24	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	24	STSB31_6-15	Solid	440-5969088	440-255674-A-24	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	24	STSB31_6-15	Solid	440-5983806	440-255674-B-24	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	24	STSB31_6-15	Solid	440-5983806	440-255674-B-24	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	24	STSB31_6-15	Solid	440-5983806	440-255674-B-24	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	24	STSB31_6-15	Solid	440-5983806	440-255674-B-24	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

Batch Number: 584711 Batch Start Date: 12/09/19 12:48 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 17:48

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP STD A 00003	ICP STD B 00003	ME 1:1 HNO3 00291	ME 30% H2O2 00108
MB 440-584711/1		3050B, 6010B		1.98 g	50 mL			5 mL	3 mL
LCS 440-584711/2		3050B, 6010B		2.00 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-23	STSB31_3-6	3050B, 6010B	T	2.02 g	50 mL			5 mL	3 mL
440-255674-B-23 MS	STSB31_3-6	3050B, 6010B	T	1.97 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-23 MSD	STSB31_3-6	3050B, 6010B	T	2.00 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-24	STSB31_6-15	3050B, 6010B	T	2.01 g	50 mL			5 mL	3 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00544	ME HNO3 00546
MB 440-584711/1		3050B, 6010B		5 mL	5 mL
LCS 440-584711/2		3050B, 6010B		5 mL	5 mL
440-255674-B-23	STSB31_3-6	3050B, 6010B	T	5 mL	5 mL
440-255674-B-23 MS	STSB31_3-6	3050B, 6010B	T	5 mL	5 mL
440-255674-B-23 MSD	STSB31_3-6	3050B, 6010B	T	5 mL	5 mL
440-255674-B-24	STSB31_6-15	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.: 440-255674-1

SDG No.:

Batch Number: 584711 Batch Start Date: 12/09/19 12:48 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 17:48

	Batch Notes
Balance ID	57
Batch Comment	Spike A&B=500 ul
Blank Soil Lot Number	25280382
Temperature - Corrected - End	96 Degrees C
Temperature - Corrected - Start	96 Degrees C
Digestion End Time	12/09/2019 17:30
Digestion Start Time	12/09/2019 14:00
Digestion Unit ID	12
Digestion Tube/Cup ID	1906257
Filter ID	19-107 Gr. 389
Hydrogen Peroxide ID	5960627
Hydrochloric Acid ID	5957716
Nitric Acid ID	5971078
Pipette/Syringe/Dispenser ID	#902
Analyst ID - Spike Analyst	NE
Thermometer ID	P-128 (Loc. # A9) CF=+1.00
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 Irvine Job No.: 440-255674-1

SDG No.:

Batch Number: 584717 Batch Start Date: 12/09/19 13:03 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 18:06

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP STD A 00003	ICP STD B 00003	ME 1:1 HNO3 00291	ME 30% H2O2 00108
MB 440-584717/1		3050B, 6010B		2.01 g	50 mL			5 mL	3 mL
LCS 440-584717/2		3050B, 6010B		2.00 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-C-12	STSB29_0.5-3	3050B, 6010B	T	2.00 g	50 mL			5 mL	3 mL
440-255674-B-12 MS	STSB29_0.5-3	3050B, 6010B	T	1.97 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-12 MSD	STSB29_0.5-3	3050B, 6010B	T	2.02 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-1	STSB27_0-0.5	3050B, 6010B	T	2.01 g	50 mL			5 mL	3 mL
440-255674-B-2	STSB27_0.5-3	3050B, 6010B	T	1.99 g	50 mL			5 mL	3 mL
440-255674-B-3	STSB27_3-6	3050B, 6010B	T	2.01 g	50 mL			5 mL	3 mL
440-255674-B-5	STSB27_6-15	3050B, 6010B	T	2.02 g	50 mL			5 mL	3 mL
440-255674-B-6	STSB28_0-0.5	3050B, 6010B	T	2.00 g	50 mL			5 mL	3 mL
440-255674-B-7	STSB28-FD_0-0.5	3050B, 6010B	T	1.98 g	50 mL			5 mL	3 mL
440-255674-B-8	STSB28_0.5-3	3050B, 6010B	T	2.01 g	50 mL			5 mL	3 mL
440-255674-B-9	STSB28_3-6	3050B, 6010B	T	2.04 g	50 mL			5 mL	3 mL
440-255674-B-10	STSB28_6-15	3050B, 6010B	T	1.98 g	50 mL			5 mL	3 mL
440-255674-B-11	STSB29_0-0.5	3050B, 6010B	T	1.99 g	50 mL			5 mL	3 mL
440-255674-B-13	STSB29_3-6	3050B, 6010B	T	2.03 g	50 mL			5 mL	3 mL
440-255674-B-14	STSB29_6-15	3050B, 6010B	T	2.04 g	50 mL			5 mL	3 mL
440-255674-B-15	STSB29-FD_6-15	3050B, 6010B	T	1.98 g	50 mL			5 mL	3 mL
440-255674-B-16	STSB30_0-0.5	3050B, 6010B	T	2.01 g	50 mL			5 mL	3 mL
440-255674-B-17	STSB30_0.5-3	3050B, 6010B	T	2.00 g	50 mL			5 mL	3 mL
440-255674-B-18	STSB30_3-6	3050B, 6010B	T	2.02 g	50 mL			5 mL	3 mL
440-255674-B-20	STSB30_6-15	3050B, 6010B	T	1.99 g	50 mL			5 mL	3 mL
440-255674-B-21	STSB31_0-0.5	3050B, 6010B	T	1.98 g	50 mL			5 mL	3 mL
440-255674-B-22	STSB31_0.5-3	3050B, 6010B	T	1.97 g	50 mL			5 mL	3 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00544	ME HNO3 00546				
MB 440-584717/1		3050B, 6010B		5 mL	5 mL				
LCS 440-584717/2		3050B, 6010B		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.: 440-255674-1

SDG No.:

Batch Number: 584717 Batch Start Date: 12/09/19 13:03 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 18:06

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00544	ME HNO3 00546			
440-255674-C-12	STSB29_0.5-3	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-12 MS	STSB29_0.5-3	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-12 MSD	STSB29_0.5-3	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-1	STSB27_0-0.5	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-2	STSB27_0.5-3	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-3	STSB27_3-6	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-5	STSB27_6-15	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-6	STSB28_0-0.5	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-7	STSB28-FD_0-0.5	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-8	STSB28_0.5-3	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-9	STSB28_3-6	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-10	STSB28_6-15	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-11	STSB29_0-0.5	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-13	STSB29_3-6	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-14	STSB29_6-15	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-15	STSB29-FD_6-15	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-16	STSB30_0-0.5	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-17	STSB30_0.5-3	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-18	STSB30_3-6	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-20	STSB30_6-15	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-21	STSB31_0-0.5	3050B, 6010B	T	5 mL	5 mL			
440-255674-B-22	STSB31_0.5-3	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.: 440-255674-1

SDG No.:

Batch Number: 584717 Batch Start Date: 12/09/19 13:03 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 18:06

Batch Notes	
Balance ID	57
Batch Comment	Spike A&B=500 ul
Blank Soil Lot Number	25280382
Temperature - Corrected - End	96 Degrees C
Temperature - Corrected - Start	96 Degrees C
Digestion End Time	12/09/2019 17:30
Digestion Start Time	12/09/2019 14:00
Digestion Unit ID	3
Digestion Tube/Cup ID	1906257
Filter ID	19-107 Gr. 389
Hydrogen Peroxide ID	5960627
Hydrochloric Acid ID	5957716
Nitric Acid ID	5971078
Pipette/Syringe/Dispenser ID	#902
Analyst ID - Spike Analyst	NE
Thermometer ID	P-090 (Loc. # A9) CF=-1.00
Temperature - Uncorrected - End	97 Degrees C
Temperature - Uncorrected - Start	97 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.: 440-255674-1

SDG No.:

Batch Number: 584711 Batch Start Date: 12/09/19 12:48 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 17:48

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP STD A 00003	ICP STD B 00003	ME 1:1 HNO3 00291	ME 30% H2O2 00108
MB 440-584711/1		3050B, 6020		1.98 g	50 mL			5 mL	3 mL
LCS 440-584711/2		3050B, 6020		2.00 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-23	STSB31_3-6	3050B, 6020	T	2.02 g	50 mL			5 mL	3 mL
440-255674-B-23 MS	STSB31_3-6	3050B, 6020	T	1.97 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-23 MSD	STSB31_3-6	3050B, 6020	T	2.00 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-24	STSB31_6-15	3050B, 6020	T	2.01 g	50 mL			5 mL	3 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00544	ME HNO3 00546
MB 440-584711/1		3050B, 6020		5 mL	5 mL
LCS 440-584711/2		3050B, 6020		5 mL	5 mL
440-255674-B-23	STSB31_3-6	3050B, 6020	T	5 mL	5 mL
440-255674-B-23 MS	STSB31_3-6	3050B, 6020	T	5 mL	5 mL
440-255674-B-23 MSD	STSB31_3-6	3050B, 6020	T	5 mL	5 mL
440-255674-B-24	STSB31_6-15	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.: 440-255674-1

SDG No.:

Batch Number: 584711 Batch Start Date: 12/09/19 12:48 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 17:48

	Batch Notes
Balance ID	57
Batch Comment	Spike A&B=500 ul
Blank Soil Lot Number	25280382
Temperature - Corrected - End	96 Degrees C
Temperature - Corrected - Start	96 Degrees C
Digestion End Time	12/09/2019 17:30
Digestion Start Time	12/09/2019 14:00
Digestion Unit ID	12
Digestion Tube/Cup ID	1906257
Filter ID	19-107 Gr. 389
Hydrogen Peroxide ID	5960627
Hydrochloric Acid ID	5957716
Nitric Acid ID	5971078
Pipette/Syringe/Dispenser ID	#902
Analyst ID - Spike Analyst	NE
Thermometer ID	P-128 (Loc. # A9) CF=+1.00
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 Irvine Job No.: 440-255674-1

SDG No.:

Batch Number: 584717 Batch Start Date: 12/09/19 13:03 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 18:06

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP STD A 00003	ICP STD B 00003	ME 1:1 HNO3 00291	ME 30% H2O2 00108
MB 440-584717/1		3050B, 6020		2.01 g	50 mL			5 mL	3 mL
LCS 440-584717/2		3050B, 6020		2.00 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-C-12	STSB29_0.5-3	3050B, 6020	T	2.00 g	50 mL			5 mL	3 mL
440-255674-B-12 MS	STSB29_0.5-3	3050B, 6020	T	1.97 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-12 MSD	STSB29_0.5-3	3050B, 6020	T	2.02 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-1	STSB27_0-0.5	3050B, 6020	T	2.01 g	50 mL			5 mL	3 mL
440-255674-B-2	STSB27_0.5-3	3050B, 6020	T	1.99 g	50 mL			5 mL	3 mL
440-255674-B-3	STSB27_3-6	3050B, 6020	T	2.01 g	50 mL			5 mL	3 mL
440-255674-B-5	STSB27_6-15	3050B, 6020	T	2.02 g	50 mL			5 mL	3 mL
440-255674-B-6	STSB28_0-0.5	3050B, 6020	T	2.00 g	50 mL			5 mL	3 mL
440-255674-B-7	STSB28-FD_0-0.5	3050B, 6020	T	1.98 g	50 mL			5 mL	3 mL
440-255674-B-8	STSB28_0.5-3	3050B, 6020	T	2.01 g	50 mL			5 mL	3 mL
440-255674-B-9	STSB28_3-6	3050B, 6020	T	2.04 g	50 mL			5 mL	3 mL
440-255674-B-10	STSB28_6-15	3050B, 6020	T	1.98 g	50 mL			5 mL	3 mL
440-255674-B-11	STSB29_0-0.5	3050B, 6020	T	1.99 g	50 mL			5 mL	3 mL
440-255674-B-13	STSB29_3-6	3050B, 6020	T	2.03 g	50 mL			5 mL	3 mL
440-255674-B-14	STSB29_6-15	3050B, 6020	T	2.04 g	50 mL			5 mL	3 mL
440-255674-B-15	STSB29-FD_6-15	3050B, 6020	T	1.98 g	50 mL			5 mL	3 mL
440-255674-B-16	STSB30_0-0.5	3050B, 6020	T	2.01 g	50 mL			5 mL	3 mL
440-255674-B-17	STSB30_0.5-3	3050B, 6020	T	2.00 g	50 mL			5 mL	3 mL
440-255674-B-18	STSB30_3-6	3050B, 6020	T	2.02 g	50 mL			5 mL	3 mL
440-255674-B-20	STSB30_6-15	3050B, 6020	T	1.99 g	50 mL			5 mL	3 mL
440-255674-B-21	STSB31_0-0.5	3050B, 6020	T	1.98 g	50 mL			5 mL	3 mL
440-255674-B-22	STSB31_0.5-3	3050B, 6020	T	1.97 g	50 mL			5 mL	3 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00544	ME HNO3 00546	
MB 440-584717/1		3050B, 6020		5 mL	5 mL	
LCS 440-584717/2		3050B, 6020		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.: 440-255674-1

SDG No.:

Batch Number: 584717 Batch Start Date: 12/09/19 13:03 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 18:06

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00544	ME HNO3 00546
440-255674-C-12	STSB29_0.5-3	3050B, 6020	T	5 mL	5 mL
440-255674-B-12 MS	STSB29_0.5-3	3050B, 6020	T	5 mL	5 mL
440-255674-B-12 MSD	STSB29_0.5-3	3050B, 6020	T	5 mL	5 mL
440-255674-B-1	STSB27_0-0.5	3050B, 6020	T	5 mL	5 mL
440-255674-B-2	STSB27_0.5-3	3050B, 6020	T	5 mL	5 mL
440-255674-B-3	STSB27_3-6	3050B, 6020	T	5 mL	5 mL
440-255674-B-5	STSB27_6-15	3050B, 6020	T	5 mL	5 mL
440-255674-B-6	STSB28_0-0.5	3050B, 6020	T	5 mL	5 mL
440-255674-B-7	STSB28-FD_0-0.5	3050B, 6020	T	5 mL	5 mL
440-255674-B-8	STSB28_0.5-3	3050B, 6020	T	5 mL	5 mL
440-255674-B-9	STSB28_3-6	3050B, 6020	T	5 mL	5 mL
440-255674-B-10	STSB28_6-15	3050B, 6020	T	5 mL	5 mL
440-255674-B-11	STSB29_0-0.5	3050B, 6020	T	5 mL	5 mL
440-255674-B-13	STSB29_3-6	3050B, 6020	T	5 mL	5 mL
440-255674-B-14	STSB29_6-15	3050B, 6020	T	5 mL	5 mL
440-255674-B-15	STSB29-FD_6-15	3050B, 6020	T	5 mL	5 mL
440-255674-B-16	STSB30_0-0.5	3050B, 6020	T	5 mL	5 mL
440-255674-B-17	STSB30_0.5-3	3050B, 6020	T	5 mL	5 mL
440-255674-B-18	STSB30_3-6	3050B, 6020	T	5 mL	5 mL
440-255674-B-20	STSB30_6-15	3050B, 6020	T	5 mL	5 mL
440-255674-B-21	STSB31_0-0.5	3050B, 6020	T	5 mL	5 mL
440-255674-B-22	STSB31_0.5-3	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.: 440-255674-1

SDG No.:

Batch Number: 584717 Batch Start Date: 12/09/19 13:03 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 18:06

Batch Notes	
Balance ID	57
Batch Comment	Spike A&B=500 ul
Blank Soil Lot Number	25280382
Temperature - Corrected - End	96 Degrees C
Temperature - Corrected - Start	96 Degrees C
Digestion End Time	12/09/2019 17:30
Digestion Start Time	12/09/2019 14:00
Digestion Unit ID	3
Digestion Tube/Cup ID	1906257
Filter ID	19-107 Gr. 389
Hydrogen Peroxide ID	5960627
Hydrochloric Acid ID	5957716
Nitric Acid ID	5971078
Pipette/Syringe/Dispenser ID	#902
Analyst ID - Spike Analyst	NE
Thermometer ID	P-090 (Loc. # A9) CF=-1.00
Temperature - Uncorrected - End	97 Degrees C
Temperature - Uncorrected - Start	97 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.: 440-255674-1

SDG No.:

Batch Number: 584679 Batch Start Date: 12/09/19 11:21 Batch Analyst: Mercado, Michael E

Batch Method: 7471A Batch End Date: 12/09/19 19:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ME 1 PPM HG1 00406	ME Aqua Regia 00769	ME HYDROX SOL 00114	ME KMN04 00186
MB 440-584679/1		7471A, 7471A		0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
LCS 440-584679/2		7471A, 7471A		0.50 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-255674-C-12	STSB29_0.5-3	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-12 MS	STSB29_0.5-3	7471A, 7471A	T	0.51 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-255674-B-12 MSD	STSB29_0.5-3	7471A, 7471A	T	0.51 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-255674-B-1	STSB27_0-0.5	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-2	STSB27_0.5-3	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-3	STSB27_3-6	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-5	STSB27_6-15	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-6	STSB28_0-0.5	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-7	STSB28-FD_0-0.5	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-8	STSB28_0.5-3	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-9	STSB28_3-6	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-10	STSB28_6-15	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-11	STSB29_0-0.5	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-13	STSB29_3-6	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-14	STSB29_6-15	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-15	STSB29-FD_6-15	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-16	STSB30_0-0.5	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-17	STSB30_0.5-3	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-18	STSB30_3-6	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-20	STSB30_6-15	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-21	STSB31_0-0.5	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-22	STSB31_0.5-3	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.: 440-255674-1

SDG No.:

Batch Number: 584679 Batch Start Date: 12/09/19 11:21 Batch Analyst: Mercado, Michael E

Batch Method: 7471A Batch End Date: 12/09/19 19:45

Batch Notes	
Balance ID	63
Batch Comment	MB Loc: A6
Blank Matrix ID	25280382
Temperature - Corrected - End	93 Degrees C
Temperature - Corrected - Start	94 Degrees C
Digestion End Time	12/09/2019 15:04
Digestion Start Time	12/09/2019 14:34
Digestion Unit ID	2
Hydrochloric Acid ID	Lot: 0000240180
Nitric Acid ID	Lot: 0000221803
Hydroxylamine ID	5901782 @ 12/09/2019 18:45
Potassium Permanganate ID	5949091
Pipette/Syringe/Dispenser ID	801
Analyst ID - Spike Analyst	MM
Thermometer ID	P-144 CF 0 Loc: A9
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	93 Degrees C
Temperature - Uncorrected - Start	94 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.: 440-255674-1

SDG No.:

Batch Number: 584680 Batch Start Date: 12/09/19 11:23 Batch Analyst: Mercado, Michael E

Batch Method: 7471A Batch End Date: 12/09/19 19:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ME 1 PPM HGl 00406	ME Aqua Regia 00769	ME HYDROX SOL 00114	ME KMN04 00186
MB 440-584680/1		7471A, 7471A		0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
LCS 440-584680/2		7471A, 7471A		0.50 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-255674-B-23	STSB31_3-6	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-23 MS	STSB31_3-6	7471A, 7471A	T	0.49 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-255674-B-23 MSD	STSB31_3-6	7471A, 7471A	T	0.50 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-255674-B-24	STSB31_6-15	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL

Batch Notes

Balance ID	63
Batch Comment	MB Loc: B11
Blank Matrix ID	25280382
Temperature - Corrected - End	93 Degrees C
Temperature - Corrected - Start	94 Degrees C
Digestion End Time	12/09/2019 15:04
Digestion Start Time	12/09/2019 14:34
Digestion Unit ID	2
Hydrochloric Acid ID	Lot: 0000240180
Nitric Acid ID	Lot: 0000221803
Hydroxylamine ID	5901782 @ 12/09/2019 18:45
Potassium Permanganate ID	5949091
Pipette/Syringe/Dispenser ID	801
Analyst ID - Spike Analyst	MM
Thermometer ID	P-144 CF 0 Loc: A9
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	93 Degrees C
Temperature - Uncorrected - Start	94 Degrees C

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.: 440-255674-1

SDG No.:

Batch Number: 584680

Batch Start Date: 12/09/19 11:23

Batch Analyst: Mercado, Michael E

Batch Method: 7471A

Batch End Date: 12/09/19 19:45

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.: 440-255674-1

SDG No.:

Batch Number: 584099 Batch Start Date: 12/05/19 16:05 Batch Analyst: Le, Xuan

Batch Method: Moisture Batch End Date: 12/10/19 12:18

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry	AnalysisComment
440-255674-B-1	STSB27_0-0.5	Moisture	T	2.0061 g	12.2584 g	11.9588 g	11.9587
440-255674-B-2	STSB27_0.5-3	Moisture	T	2.0203 g	12.3068 g	11.9175 g	11.9174
440-255674-B-3	STSB27_3-6	Moisture	T	2.0674 g	12.0525 g	11.5381 g	11.5380
440-255674-B-5	STSB27_6-15	Moisture	T	2.0110 g	12.1075 g	11.0760 g	11.0761
440-255674-B-6	STSB28_0-0.5	Moisture	T	2.0521 g	12.1691 g	11.5472 g	11.5471
440-255674-B-7	STSB28-FD_0-0.5	Moisture	T	2.0902 g	12.1762 g	11.5784 g	11.5783
440-255674-B-8	STSB28_0.5-3	Moisture	T	2.0670 g	12.2577 g	11.7414 g	11.7415
440-255674-B-9	STSB28_3-6	Moisture	T	2.0093 g	12.4137 g	11.4571 g	11.4570
440-255674-B-10	STSB28_6-15	Moisture	T	1.9727 g	12.2112 g	10.5561 g	10.5563
440-255674-B-11	STSB29_0-0.5	Moisture	T	2.0185 g	12.5306 g	11.9495 g	11.9496
440-255674-C-12	STSB29_0.5-3	Moisture	T	2.0555 g	12.0969 g	11.4942 g	11.4944
440-255674-C-12 DU	STSB29_0.5-3	Moisture	T	2.0135 g	12.3520 g	11.7664 g	11.7665
440-255674-C-12 MS	STSB29_0.5-3	Moisture	T	2.0135 g	12.3520 g	11.7664 g	11.7665
440-255674-C-12 MSD	STSB29_0.5-3	Moisture	T	2.0135 g	12.3520 g	11.7664 g	11.7665
440-255674-B-13	STSB29_3-6	Moisture	T	2.0379 g	12.1448 g	11.6464 g	11.6466
440-255674-B-14	STSB29_6-15	Moisture	T	2.0300 g	12.2290 g	11.0757 g	11.0759
440-255674-B-15	STSB29-FD_6-15	Moisture	T	2.0364 g	12.1699 g	11.0824 g	11.0825
440-255674-B-16	STSB30_0-0.5	Moisture	T	2.0191 g	12.1278 g	11.5463 g	11.5464
440-255674-B-17	STSB30_0.5-3	Moisture	T	2.0090 g	12.1060 g	11.5279 g	11.5278
440-255674-B-18	STSB30_3-6	Moisture	T	2.0688 g	12.0755 g	11.5563 g	11.5562
440-255674-B-20	STSB30_6-15	Moisture	T	2.0720 g	12.1124 g	11.0083 g	11.0084
440-255674-B-21	STSB31_0-0.5	Moisture	T	2.0356 g	12.2589 g	11.5052 g	11.5053
440-255674-B-22	STSB31_0.5-3	Moisture	T	2.0343 g	12.2090 g	11.6007 g	11.6006

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.: 440-255674-1

SDG No.:

Batch Number: 584099 Batch Start Date: 12/05/19 16:05 Batch Analyst: Le, Xuan

Batch Method: Moisture Batch End Date: 12/10/19 12:18

Batch Notes	
Balance ID	65
Batch Comment	Put samples back to oven for another 30 minutes
Date and Time Samples in Desiccator	12/06/2019 12:32
Date and Time Samples out of Desiccator	12/10/2019 10:00
Date samples were placed in the oven	12/05/2019
Oven Temp In	105 Degrees C
Time samples were place in the oven	18:00
Date samples were removed from oven	12/06/2019
Oven Temp Out	105 Degrees C
Time Samples were removed from oven	12:30
Oven ID	06
Thermometer ID	p139, cf=0.0
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.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

Batch Number: 584101 Batch Start Date: 12/05/19 16:09 Batch Analyst: Le, Xuan

Batch Method: Moisture Batch End Date: 12/10/19 12:21

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry	AnalysisComment
440-255674-B-23	STSB31_3-6	Moisture	T	2.0422 g	12.6105 g	11.9792 g	11.9794
440-255674-B-24	STSB31_6-15	Moisture	T	2.0667 g	12.0966 g	10.7404 g	10.7405
440-255674-B-24 DU	STSB31_6-15	Moisture	T	2.0335 g	12.4326 g	11.0336 g	11.0333

Batch Notes

Balance ID	65
Batch Comment	Put samples back to oven for another 30 minutes
Date and Time Samples in Desiccator	12/06/2019 12:32
Date and Time Samples out of Desiccator	12/10/2019 10:00
Date samples were placed in the oven	12/05/2019
Oven Temp In	105 Degrees C
Time samples were place in the oven	18:00
Date samples were removed from oven	12/06/2019
Oven Temp Out	105 Degrees C
Time Samples were removed from oven	12:30
Oven ID	06
Thermometer ID	p139, cf=0.0
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.

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB27_0-0.5
Lab Sample ID: 440-255674-1
Lab Name: Eurofins Irvine
Job No.: 440-255674-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/21/2019 09:15
Reporting Basis: DRY
Date Received: 11/26/2019 10:50
% Solids: 97.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	8000	10	7.9	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.1	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	7200	26	14	mg/Kg			5	6010B
7439-89-6	Iron	11000	10	7.1	mg/Kg		B	5	6010B
7439-93-2	Lithium	7.4	5.1	2.9	mg/Kg			5	6010B
7439-95-4	Magnesium	6600	10	5.1	mg/Kg			5	6010B
7723-14-0	Phosphorus	340	5.1	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	450	64	33	mg/Kg			5	6010B
7440-23-5	Sodium	290	64	33	mg/Kg			5	6010B
7440-24-6	Strontium	79	5.1	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.1	mg/Kg			5	6010B
7440-32-6	Titanium	290	2.0	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	1.3	1.0	0.28	mg/Kg			20	6020
7440-38-2	Arsenic	4.7	0.51	0.26	mg/Kg			20	6020
7440-39-3	Barium	43	0.51	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	ND	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	9.0	1.0	0.51	mg/Kg			20	6020
7440-48-4	Cobalt	3.8	0.51	0.22	mg/Kg			20	6020
7440-50-8	Copper	600	1.0	0.51	mg/Kg		B	20	6020
7439-92-1	Lead	3.2	0.51	0.26	mg/Kg			20	6020
7439-96-5	Manganese	77	0.51	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	2.5	1.0	0.51	mg/Kg			20	6020
7440-02-0	Nickel	11	1.0	0.51	mg/Kg			20	6020
7782-49-2	Selenium	2.4	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	18	1.0	0.51	mg/Kg			20	6020
7440-66-6	Zinc	8.9	10	5.1	mg/Kg	J		20	6020
7439-97-6	Mercury	0.21	0.021	0.012	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB27_0-0.5

Lab Sample ID: 440-255674-1

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 09:15

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 97.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	8000	10	7.9	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.1	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	7200	26	14	mg/Kg			5	6010B
7439-89-6	Iron	11000	10	7.1	mg/Kg		B	5	6010B
7439-93-2	Lithium	7.4	5.1	2.9	mg/Kg			5	6010B
7439-95-4	Magnesium	6600	10	5.1	mg/Kg			5	6010B
7723-14-0	Phosphorus	340	5.1	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	450	64	33	mg/Kg			5	6010B
7440-23-5	Sodium	290	64	33	mg/Kg			5	6010B
7440-24-6	Strontium	79	5.1	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.1	mg/Kg			5	6010B
7440-32-6	Titanium	290	2.0	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	1.3	1.0	0.28	mg/Kg			20	6020
7440-38-2	Arsenic	4.7	0.51	0.26	mg/Kg			20	6020
7440-39-3	Barium	43	0.51	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	ND	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	9.0	1.0	0.51	mg/Kg			20	6020
7440-48-4	Cobalt	3.8	0.51	0.22	mg/Kg			20	6020
7440-50-8	Copper	600	1.0	0.51	mg/Kg		B	20	6020
7439-92-1	Lead	3.2	0.51	0.26	mg/Kg			20	6020
7439-96-5	Manganese	77	0.51	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	2.5	1.0	0.51	mg/Kg			20	6020
7440-02-0	Nickel	11	1.0	0.51	mg/Kg			20	6020
7782-49-2	Selenium	2.4	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	18	1.0	0.51	mg/Kg			20	6020
7440-66-6	Zinc	8.9	10	5.1	mg/Kg	J		20	6020
7439-97-6	Mercury	0.21	0.021	0.012	mg/Kg			1	7471A

Rev

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB27_0.5-3

Lab Sample ID: 440-255674-2

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 09:25

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 96.2

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	8200	10	8.0	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.2	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	6200	26	14	mg/Kg			5	6010B
7439-89-6	Iron	12000	10	7.2	mg/Kg		B	5	6010B
7439-93-2	Lithium	5.8	5.2	2.9	mg/Kg			5	6010B
7439-95-4	Magnesium	7000	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	350	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	390	65	34	mg/Kg			5	6010B
7440-23-5	Sodium	270	65	33	mg/Kg			5	6010B
7440-24-6	Strontium	70	5.2	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.2	mg/Kg			5	6010B
7440-32-6	Titanium	300	2.1	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	0.83	1.0	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	4.4	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	36.6 36	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.1656 0.16	0.31	0.16	mg/Kg	J		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	4.1	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	660	1.0	0.52	mg/Kg		B	20	6020
7439-92-1	Lead	3.1	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	84	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	2.3	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	11	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	2.2	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	20	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	9.8	10	5.2	mg/Kg	J		20	6020
7439-97-6	Mercury	0.15	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB27_0.5-3

Lab Sample ID: 440-255674-2

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 09:25

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 96.2

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	8200	10	8.0	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.2	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	6200	26	14	mg/Kg			5	6010B
7439-89-6	Iron	12000	10	7.2	mg/Kg		B	5	6010B
7439-93-2	Lithium	5.8	5.2	2.9	mg/Kg			5	6010B
7439-95-4	Magnesium	7000	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	350	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	390	65	34	mg/Kg			5	6010B
7440-23-5	Sodium	270	65	33	mg/Kg			5	6010B
7440-24-6	Strontium	70	5.2	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.2	mg/Kg			5	6010B
7440-32-6	Titanium	300	2.1	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	0.83	1.0	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	4.5	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	37	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.17	0.31	0.16	mg/Kg	J		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	4.1	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	660	1.0	0.52	mg/Kg		B	20	6020
7439-92-1	Lead	3.1	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	84	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	2.3	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	11	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	2.2	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	20	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	9.9	10	5.2	mg/Kg	J		20	6020
7439-97-6	Mercury	0.15	0.021	0.013	mg/Kg			1	7471A

Red

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB27_3-6
Lab Sample ID: 440-255674-3
Lab Name: Eurofins Irvine
Job No.: 440-255674-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/21/2019 09:31
Reporting Basis: DRY
Date Received: 11/26/2019 10:50
% Solids: 94.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7800	10	8.1	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.2	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	2900	26	14	mg/Kg			5	6010B
7439-89-6	Iron	10000	10	7.2	mg/Kg		B	5	6010B
7439-93-2	Lithium	3.6	5.2	2.9	mg/Kg	J		5	6010B
7439-95-4	Magnesium	6800	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	360	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	250	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	38	66	34	mg/Kg	J		5	6010B
7440-24-6	Strontium	69	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	0.69	1.0	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	5.5	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	25	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.19	0.31	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.52	0.26	mg/Kg			20	6020
7440-47-3	Chromium	5.2	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	4.2	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	890	1.0	0.52	mg/Kg		B	20	6020
7439-92-1	Lead	3.0	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	36	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	2.6	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	7.2	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	4.2	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	19	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	5.7	10	5.2	mg/Kg	J		20	6020
7439-97-6	Mercury	0.11	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB27_3-6

Lab Sample ID: 440-255674-3

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 09:31

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 94.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7800	10	8.1	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.2	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	2900	26	14	mg/Kg			5	6010B
7439-89-6	Iron	10000	10	7.2	mg/Kg		B	5	6010B
7439-93-2	Lithium	3.6	5.2	2.9	mg/Kg	J		5	6010B
7439-95-4	Magnesium	6800	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	360	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	250	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	38	66	34	mg/Kg	J		5	6010B
7440-24-6	Strontium	69	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	0.70	1.0	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	5.5	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	25	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.20	0.31	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.52	0.26	mg/Kg			20	6020
7440-47-3	Chromium	5.2	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	4.2	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	910	1.0	0.52	mg/Kg		B	20	6020
7439-92-1	Lead	3.0	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	36	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	2.6	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	7.3	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	4.3	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	19	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	5.8	10	5.2	mg/Kg	J		20	6020
7439-97-6	Mercury	0.11	0.021	0.013	mg/Kg			1	7471A

Rev

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB27_6-15

Lab Sample ID: 440-255674-5

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 09:55

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 89.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	5900	11	8.5	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.5	2.8	mg/Kg			5	6010B
7440-70-2	Calcium	4300	28	15	mg/Kg			5	6010B
7439-89-6	Iron	14000	11	7.6	mg/Kg		B	5	6010B
7439-93-2	Lithium	3.5	5.5	3.1	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5500	11	5.5	mg/Kg			5	6010B
7723-14-0	Phosphorus	650	5.5	2.8	mg/Kg			5	6010B
7440-09-7	Potassium	1200	69	36	mg/Kg			5	6010B
7440-23-5	Sodium	59	69	35	mg/Kg	J		5	6010B
7440-24-6	Strontium	38	5.5	2.8	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.5	mg/Kg			5	6010B
7440-32-6	Titanium	380	2.2	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.32	1.2	0.32	mg/Kg	J		20	6020
7440-38-2	Arsenic	2.0	0.58	0.29	mg/Kg			20	6020
7440-39-3	Barium	36	0.58	0.29	mg/Kg			20	6020
7440-41-7	Beryllium	0.27	0.35	0.18	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.58	0.29	mg/Kg			20	6020
7440-47-3	Chromium	7.1	1.2	0.58	mg/Kg			20	6020
7440-48-4	Cobalt	6.7 7.1	0.58	0.25	mg/Kg			20	6020
7440-50-8	Copper	820	1.2	0.58	mg/Kg		B	20	6020
7439-92-1	Lead	1.7	0.58	0.29	mg/Kg			20	6020
7439-96-5	Manganese	85	0.58	0.29	mg/Kg			20	6020
7439-98-7	Molybdenum	2.4	1.2	0.58	mg/Kg			20	6020
7440-02-0	Nickel	8.6	1.2	0.58	mg/Kg			20	6020
7782-49-2	Selenium	1.9	1.2	0.23	mg/Kg			20	6020
7440-22-4	Silver	ND	0.58	0.12	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.58	0.29	mg/Kg			20	6020
7440-62-2	Vanadium	20	1.2	0.58	mg/Kg			20	6020
7440-66-6	Zinc	14	12	5.8	mg/Kg			20	6020
7439-97-6	Mercury	0.042	0.022	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB27_6-15

Lab Sample ID: 440-255674-5

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 09:55

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 89.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	5900	11	8.5	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.5	2.8	mg/Kg			5	6010B
7440-70-2	Calcium	4300	28	15	mg/Kg			5	6010B
7439-89-6	Iron	14000	11	7.6	mg/Kg		B	5	6010B
7439-93-2	Lithium	3.5	5.5	3.1	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5500	11	5.5	mg/Kg			5	6010B
7723-14-0	Phosphorus	650	5.5	2.8	mg/Kg			5	6010B
7440-09-7	Potassium	1200	69	36	mg/Kg			5	6010B
7440-23-5	Sodium	59	69	35	mg/Kg	J		5	6010B
7440-24-6	Strontium	38	5.5	2.8	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.5	mg/Kg			5	6010B
7440-32-6	Titanium	380	2.2	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.30	1.1	0.30	mg/Kg	J		20	6020
7440-38-2	Arsenic	1.9	0.55	0.28	mg/Kg			20	6020
7440-39-3	Barium	34	0.55	0.28	mg/Kg			20	6020
7440-41-7	Beryllium	0.26	0.33	0.17	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.55	0.28	mg/Kg			20	6020
7440-47-3	Chromium	6.7	1.1	0.55	mg/Kg			20	6020
7440-48-4	Cobalt	6.7	0.55	0.23	mg/Kg			20	6020
7440-50-8	Copper	770	1.1	0.55	mg/Kg		B	20	6020
7439-92-1	Lead	1.6	0.55	0.28	mg/Kg			20	6020
7439-96-5	Manganese	80	0.55	0.28	mg/Kg			20	6020
7439-98-7	Molybdenum	2.3	1.1	0.55	mg/Kg			20	6020
7440-02-0	Nickel	8.1	1.1	0.55	mg/Kg			20	6020
7782-49-2	Selenium	1.7	1.1	0.22	mg/Kg			20	6020
7440-22-4	Silver	ND	0.55	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.55	0.28	mg/Kg			20	6020
7440-62-2	Vanadium	19	1.1	0.55	mg/Kg			20	6020
7440-66-6	Zinc	13	11	5.5	mg/Kg			20	6020
7439-97-6	Mercury	0.042	0.022	0.013	mg/Kg			1	7471A

Red

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB28_0-0.5
Lab Sample ID: 440-255674-6
Lab Name: Eurofins Irvine
Job No.: 440-255674-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/21/2019 11:45
Reporting Basis: DRY
Date Received: 11/26/2019 10:50
% Solids: 93.9

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7200	11	8.2	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.3	2.7	mg/Kg			5	6010B
7440-70-2	Calcium	3800	27	14	mg/Kg			5	6010B
7439-89-6	Iron	9800	11	7.4	mg/Kg		B	5	6010B
7439-93-2	Lithium	ND	5.3	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	5600	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	430	5.3	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	1200	67	35	mg/Kg			5	6010B
7440-23-5	Sodium	89	67	34	mg/Kg			5	6010B
7440-24-6	Strontium	96	5.3	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	450	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	1.3	1.0	0.28	mg/Kg			20	6020
7440-38-2	Arsenic	6.5	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	55	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.23	0.31	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.52	0.26	mg/Kg			20	6020
7440-47-3	Chromium	5.1	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	3.7	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper 474	460	1.0	0.52	mg/Kg		B	20	6020
7439-92-1	Lead	2.6	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	37	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	2.6	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	6.5	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	4.6	1.0	0.21	mg/Kg			20	6020
7440-22-4	Silver	0.13	0.52	0.10	mg/Kg	J		20	6020
7440-28-0	Thallium	ND	0.52	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	19	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	8.8	10	5.2	mg/Kg	J		20	6020
7439-97-6	Mercury	0.38	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB28_0-0.5

Lab Sample ID: 440-255674-6

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 11:45

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 93.9

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7200	11	8.2	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.3	2.7	mg/Kg			5	6010B
7440-70-2	Calcium	3800	27	14	mg/Kg			5	6010B
7439-89-6	Iron	9800	11	7.4	mg/Kg		B	5	6010B
7439-93-2	Lithium	ND	5.3	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	5600	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	430	5.3	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	1200	67	35	mg/Kg			5	6010B
7440-23-5	Sodium	89	67	34	mg/Kg			5	6010B
7440-24-6	Strontium	96	5.3	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	450	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	1.4	1.1	0.29	mg/Kg			20	6020
7440-38-2	Arsenic	6.7	0.53	0.27	mg/Kg			20	6020
7440-39-3	Barium	57	0.53	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	0.23	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	5.3	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	3.8	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	470	1.1	0.53	mg/Kg		B	20	6020
7439-92-1	Lead	2.6	0.53	0.27	mg/Kg			20	6020
7439-96-5	Manganese	38	0.53	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	2.7	1.1	0.53	mg/Kg			20	6020
7440-02-0	Nickel	6.6	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	4.7	1.1	0.21	mg/Kg			20	6020
7440-22-4	Silver	0.13	0.53	0.11	mg/Kg	J		20	6020
7440-28-0	Thallium	ND	0.53	0.27	mg/Kg			20	6020
7440-62-2	Vanadium	20	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	9.0	11	5.3	mg/Kg	J		20	6020
7439-97-6	Mercury	0.38	0.021	0.013	mg/Kg			1	7471A

Rev

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB28-FD_0-0.5

Lab Sample ID: 440-255674-7

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 11:50

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 94.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	6800	11	8.3	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.4	2.7	mg/Kg			5	6010B
7440-70-2	Calcium	3700	27	14	mg/Kg			5	6010B
7439-89-6	Iron	10000	11	7.4	mg/Kg		B	5	6010B
7439-93-2	Lithium	ND	5.4	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	5400	11	5.4	mg/Kg			5	6010B
7723-14-0	Phosphorus	360	5.4	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	680	67	35	mg/Kg			5	6010B
7440-23-5	Sodium	100	67	34	mg/Kg			5	6010B
7440-24-6	Strontium	71	5.4	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.4	mg/Kg			5	6010B
7440-32-6	Titanium	390	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	1.3	1.0	0.28	mg/Kg			20	6020
7440-38-2	Arsenic	6.0	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	34	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	ND	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	4.6	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	2.5	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	440	1.0	0.52	mg/Kg		B	20	6020
7439-92-1	Lead 2.36	2.3	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	31	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	2.5	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	5.3	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	4.1	1.0	0.21	mg/Kg			20	6020
7440-22-4	Silver	0.12	0.52	0.10	mg/Kg	J		20	6020
7440-28-0	Thallium	ND	0.52	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	16	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	7.1	10	5.2	mg/Kg	J		20	6020
7439-97-6	Mercury	0.71	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB28-FD_0-0.5

Lab Sample ID: 440-255674-7

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 11:50

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 94.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	6800	11	8.3	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.4	2.7	mg/Kg			5	6010B
7440-70-2	Calcium	3700	27	14	mg/Kg			5	6010B
7439-89-6	Iron	10000	11	7.4	mg/Kg		B	5	6010B
7439-93-2	Lithium	ND	5.4	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	5400	11	5.4	mg/Kg			5	6010B
7723-14-0	Phosphorus	360	5.4	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	680	67	35	mg/Kg			5	6010B
7440-23-5	Sodium	100	67	34	mg/Kg			5	6010B
7440-24-6	Strontium	71	5.4	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.4	mg/Kg			5	6010B
7440-32-6	Titanium	390	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	1.4	1.1	0.29	mg/Kg			20	6020
7440-38-2	Arsenic	6.1	0.54	0.27	mg/Kg			20	6020
7440-39-3	Barium	35	0.54	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	ND	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	4.7	1.1	0.54	mg/Kg			20	6020
7440-48-4	Cobalt	2.6	0.54	0.23	mg/Kg			20	6020
7440-50-8	Copper	450	1.1	0.54	mg/Kg		B	20	6020
7439-92-1	Lead	2.4	0.54	0.27	mg/Kg			20	6020
7439-96-5	Manganese	32	0.54	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	2.6	1.1	0.54	mg/Kg			20	6020
7440-02-0	Nickel	5.5	1.1	0.54	mg/Kg			20	6020
7782-49-2	Selenium	4.2	1.1	0.21	mg/Kg			20	6020
7440-22-4	Silver	0.12	0.54	0.11	mg/Kg	J		20	6020
7440-28-0	Thallium	ND	0.54	0.27	mg/Kg			20	6020
7440-62-2	Vanadium	17	1.1	0.54	mg/Kg			20	6020
7440-66-6	Zinc	7.3	11	5.4	mg/Kg	J		20	6020
7439-97-6	Mercury	0.71	0.021	0.013	mg/Kg			1	7471A

Rev

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INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB28_0.5-3

Lab Sample ID: 440-255674-8

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 11:55

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 94.9

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7200	10	8.1	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.2	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	3500	26	14	mg/Kg			5	6010B
7439-89-6	Iron	10000	10	7.2	mg/Kg		B	5	6010B
7439-93-2	Lithium	ND	5.2	2.9	mg/Kg			5	6010B
7439-95-4	Magnesium	6200	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	380	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	650	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	41	66	34	mg/Kg	J		5	6010B
7440-24-6	Strontium	51	5.2	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.2	mg/Kg			5	6010B
7440-32-6	Titanium	360	2.1	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	1.6	1.0	0.28	mg/Kg			20	6020
7440-38-2	Arsenic	4.8	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	34	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	ND	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	6.0	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	3.5	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	580	1.0	0.52	mg/Kg		B	20	6020
7439-92-1	Lead	2.4	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	44	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	2.7	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	6.9	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	3.1	1.0	0.21	mg/Kg			20	6020
7440-22-4	Silver	0.10	0.52	0.10	mg/Kg	J		20	6020
7440-28-0	Thallium	ND	0.52	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	15	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	6.8	10	5.2	mg/Kg	J		20	6020
7439-97-6	Mercury	0.66	0.021	0.012	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB28_0.5-3

Lab Sample ID: 440-255674-8

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 11:55

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 94.9

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7200	10	8.1	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.2	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	3500	26	14	mg/Kg			5	6010B
7439-89-6	Iron	10000	10	7.2	mg/Kg		B	5	6010B
7439-93-2	Lithium	ND	5.2	2.9	mg/Kg			5	6010B
7439-95-4	Magnesium	6200	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	380	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	650	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	41	66	34	mg/Kg	J		5	6010B
7440-24-6	Strontium	51	5.2	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.2	mg/Kg			5	6010B
7440-32-6	Titanium	360	2.1	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	1.6	1.0	0.28	mg/Kg			20	6020
7440-38-2	Arsenic	4.7	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	34	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	ND	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	6.0	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	3.5	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	580	1.0	0.52	mg/Kg		B	20	6020
7439-92-1	Lead	2.4	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	44	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	2.7	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	6.9	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	3.1	1.0	0.21	mg/Kg			20	6020
7440-22-4	Silver	0.10	0.52	0.10	mg/Kg	J		20	6020
7440-28-0	Thallium	ND	0.52	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	15	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	6.8	10	5.2	mg/Kg	J		20	6020
7439-97-6	Mercury	0.66	0.021	0.012	mg/Kg			1	7471A

Rev

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB28_3-6

Lab Sample ID: 440-255674-9

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 12:15

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 90.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	4100	11	8.3	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.4	2.7	mg/Kg			5	6010B
7440-70-2	Calcium	2800	27	15	mg/Kg			5	6010B
7439-89-6	Iron	9200	11	7.4	mg/Kg		B	5	6010B
7439-93-2	Lithium	ND	5.4	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	3600	11	5.4	mg/Kg			5	6010B
7723-14-0	Phosphorus	460	5.4	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	680	67	35	mg/Kg			5	6010B
7440-23-5	Sodium	49	67	35	mg/Kg	J		5	6010B
7440-24-6	Strontium	27	5.4	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.4	mg/Kg			5	6010B
7440-32-6	Titanium	190	2.2	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.51	1.0	0.28	mg/Kg	J		20	6020
7440-38-2	Arsenic	2.0	0.51	0.26	mg/Kg			20	6020
7440-39-3	Barium	25	0.51	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	ND	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	4.8	1.0	0.51	mg/Kg			20	6020
7440-48-4	Cobalt	2.2	0.51	0.22	mg/Kg			20	6020
7440-50-8	Copper	400	1.0	0.51	mg/Kg		B	20	6020
7439-92-1	Lead	1.3	0.51	0.26	mg/Kg			20	6020
7439-96-5	Manganese	37	0.51	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	1.5	1.0	0.51	mg/Kg			20	6020
7440-02-0	Nickel	4.8	1.0	0.51	mg/Kg			20	6020
7782-49-2	Selenium	1.8	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	10 10.86	1.0	0.51	mg/Kg			20	6020
7440-66-6	Zinc	7.9	10	5.1	mg/Kg	J		20	6020
7439-97-6	Mercury	0.40	0.022	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB28_3-6

Lab Sample ID: 440-255674-9

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 12:15

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 90.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	4100	11	8.3	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.4	2.7	mg/Kg			5	6010B
7440-70-2	Calcium	2800	27	15	mg/Kg			5	6010B
7439-89-6	Iron	9200	11	7.4	mg/Kg		B	5	6010B
7439-93-2	Lithium	ND	5.4	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	3600	11	5.4	mg/Kg			5	6010B
7723-14-0	Phosphorus	460	5.4	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	680	67	35	mg/Kg			5	6010B
7440-23-5	Sodium	49	67	35	mg/Kg	J		5	6010B
7440-24-6	Strontium	27	5.4	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.4	mg/Kg			5	6010B
7440-32-6	Titanium	190	2.2	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.54	1.1	0.29	mg/Kg	J		20	6020
7440-38-2	Arsenic	2.1	0.54	0.27	mg/Kg			20	6020
7440-39-3	Barium	26	0.54	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	ND	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	5.0	1.1	0.54	mg/Kg			20	6020
7440-48-4	Cobalt	2.3	0.54	0.23	mg/Kg			20	6020
7440-50-8	Copper	420	1.1	0.54	mg/Kg		B	20	6020
7439-92-1	Lead	1.4	0.54	0.27	mg/Kg			20	6020
7439-96-5	Manganese	39	0.54	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	1.6	1.1	0.54	mg/Kg			20	6020
7440-02-0	Nickel	5.0	1.1	0.54	mg/Kg			20	6020
7782-49-2	Selenium	1.8	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	11	1.1	0.54	mg/Kg			20	6020
7440-66-6	Zinc	8.3	11	5.4	mg/Kg	J		20	6020
7439-97-6	Mercury	0.40	0.022	0.013	mg/Kg			1	7471A

Rev

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB28_6-15

Lab Sample ID: 440-255674-10

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 12:25

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 83.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	9300	12	9.3	mg/Kg			5	6010B
7440-42-8	Boron	ND	6.0	3.0	mg/Kg			5	6010B
7440-70-2	Calcium	6000	30	16	mg/Kg			5	6010B
7439-89-6	Iron	16000	12	8.3	mg/Kg		B	5	6010B
7439-93-2	Lithium	4.4	6.0	3.4	mg/Kg	J		5	6010B
7439-95-4	Magnesium	7300	12	6.0	mg/Kg			5	6010B
7723-14-0	Phosphorus	670	6.0	3.0	mg/Kg			5	6010B
7440-09-7	Potassium	2100	75	39	mg/Kg			5	6010B
7440-23-5	Sodium	150	75	39	mg/Kg			5	6010B
7440-24-6	Strontium	50	6.0	3.0	mg/Kg			5	6010B
7440-31-5	Tin	ND	12	6.0	mg/Kg			5	6010B
7440-32-6	Titanium	500	2.4	1.2	mg/Kg			5	6010B
7440-36-0	Antimony	0.36	1.2	0.33	mg/Kg	J		20	6020
7440-38-2	Arsenic	2.5	0.60	0.30	mg/Kg			20	6020
7440-39-3	Barium	65	0.60	0.30	mg/Kg			20	6020
7440-41-7	Beryllium	0.49	0.36	0.18	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.60	0.30	mg/Kg			20	6020
7440-47-3	Chromium	9.6	1.2	0.60	mg/Kg			20	6020
7440-48-4	Cobalt	8.3	0.60	0.25	mg/Kg			20	6020
7440-50-8	Copper	710	1.2	0.60	mg/Kg		B	20	6020
7439-92-1	Lead	2.4	0.60	0.30	mg/Kg			20	6020
7439-96-5	Manganese 106	110	0.60	0.30	mg/Kg			20	6020
7439-98-7	Molybdenum	2.4	1.2	0.60	mg/Kg			20	6020
7440-02-0	Nickel	12	1.2	0.60	mg/Kg			20	6020
7782-49-2	Selenium	2.6	1.2	0.24	mg/Kg			20	6020
7440-22-4	Silver	ND	0.60	0.12	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.60	0.30	mg/Kg			20	6020
7440-62-2	Vanadium	23	1.2	0.60	mg/Kg			20	6020
7440-66-6	Zinc	20	12	6.0	mg/Kg			20	6020
7439-97-6	Mercury	0.084	0.024	0.014	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB28_6-15

Lab Sample ID: 440-255674-10

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 12:25

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 83.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	9300	12	9.3	mg/Kg			5	6010B
7440-42-8	Boron	ND	6.0	3.0	mg/Kg			5	6010B
7440-70-2	Calcium	6000	30	16	mg/Kg			5	6010B
7439-89-6	Iron	16000	12	8.3	mg/Kg		B	5	6010B
7439-93-2	Lithium	4.4	6.0	3.4	mg/Kg	J		5	6010B
7439-95-4	Magnesium	7300	12	6.0	mg/Kg			5	6010B
7723-14-0	Phosphorus	670	6.0	3.0	mg/Kg			5	6010B
7440-09-7	Potassium	2100	75	39	mg/Kg			5	6010B
7440-23-5	Sodium	150	75	39	mg/Kg			5	6010B
7440-24-6	Strontium	50	6.0	3.0	mg/Kg			5	6010B
7440-31-5	Tin	ND	12	6.0	mg/Kg			5	6010B
7440-32-6	Titanium	500	2.4	1.2	mg/Kg			5	6010B
7440-36-0	Antimony	0.35	1.2	0.33	mg/Kg	J		20	6020
7440-38-2	Arsenic	2.5	0.60	0.30	mg/Kg			20	6020
7440-39-3	Barium	65	0.60	0.30	mg/Kg			20	6020
7440-41-7	Beryllium	0.48	0.36	0.18	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.60	0.30	mg/Kg			20	6020
7440-47-3	Chromium	9.5	1.2	0.60	mg/Kg			20	6020
7440-48-4	Cobalt	8.3	0.60	0.25	mg/Kg			20	6020
7440-50-8	Copper	710	1.2	0.60	mg/Kg		B	20	6020
7439-92-1	Lead	2.4	0.60	0.30	mg/Kg			20	6020
7439-96-5	Manganese	110	0.60	0.30	mg/Kg			20	6020
7439-98-7	Molybdenum	2.4	1.2	0.60	mg/Kg			20	6020
7440-02-0	Nickel	12	1.2	0.60	mg/Kg			20	6020
7782-49-2	Selenium	2.6	1.2	0.24	mg/Kg			20	6020
7440-22-4	Silver	ND	0.60	0.12	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.60	0.30	mg/Kg			20	6020
7440-62-2	Vanadium	23	1.2	0.60	mg/Kg			20	6020
7440-66-6	Zinc	19	12	6.0	mg/Kg			20	6020
7439-97-6	Mercury	0.084	0.024	0.014	mg/Kg			1	7471A

Rev

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB29_0-0.5

Lab Sample ID: 440-255674-11

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 15:00

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 94.5

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7300	11	8.2	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.3	2.7	mg/Kg			5	6010B
7440-70-2	Calcium	3000	27	14	mg/Kg			5	6010B
7439-89-6	Iron	8800	11	7.3	mg/Kg		B	5	6010B
7439-93-2	Lithium	3.5	5.3	3.0	mg/Kg	J		5	6010B
7439-95-4	Magnesium	6100	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	320	5.3	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	400	66	35	mg/Kg			5	6010B
7440-23-5	Sodium	77	66	34	mg/Kg			5	6010B
7440-24-6	Strontium	130	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	5.9	1.0	0.28	mg/Kg			20	6020
7440-38-2	Arsenic	8.9	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	43	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.20	0.31	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.52	0.26	mg/Kg			20	6020
7440-47-3	Chromium	5.6	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	2.8	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	1300	1.0	0.52	mg/Kg		B	20	6020
7439-92-1	Lead	3.0	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	29	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	2.72 2.7	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	6.7	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	3.6	1.0	0.21	mg/Kg			20	6020
7440-22-4	Silver	0.18	0.52	0.10	mg/Kg	J		20	6020
7440-28-0	Thallium	ND	0.52	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	18	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	ND	10	5.2	mg/Kg			20	6020
7439-97-6	Mercury	0.57	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB29_0-0.5

Lab Sample ID: 440-255674-11

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 15:00

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 94.5

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7300	11	8.2	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.3	2.7	mg/Kg			5	6010B
7440-70-2	Calcium	3000	27	14	mg/Kg			5	6010B
7439-89-6	Iron	8800	11	7.3	mg/Kg		B	5	6010B
7439-93-2	Lithium	3.5	5.3	3.0	mg/Kg	J		5	6010B
7439-95-4	Magnesium	6100	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	320	5.3	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	400	66	35	mg/Kg			5	6010B
7440-23-5	Sodium	77	66	34	mg/Kg			5	6010B
7440-24-6	Strontium	130	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	6.0	1.1	0.29	mg/Kg			20	6020
7440-38-2	Arsenic	9.0	0.53	0.27	mg/Kg			20	6020
7440-39-3	Barium	44	0.53	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	0.20	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	5.7	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	2.8	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	1300	1.1	0.53	mg/Kg		B	20	6020
7439-92-1	Lead	3.0	0.53	0.27	mg/Kg			20	6020
7439-96-5	Manganese	30	0.53	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	2.7	1.1	0.53	mg/Kg			20	6020
7440-02-0	Nickel	6.8	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	3.6	1.1	0.21	mg/Kg			20	6020
7440-22-4	Silver	0.18	0.53	0.11	mg/Kg	J		20	6020
7440-28-0	Thallium	ND	0.53	0.27	mg/Kg			20	6020
7440-62-2	Vanadium	19	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	ND	11	5.3	mg/Kg			20	6020
7439-97-6	Mercury	0.57	0.021	0.013	mg/Kg			1	7471A

Rev

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB29_0.5-3

Lab Sample ID: 440-255674-12

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 15:10

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 94.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	5900	11	8.2	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.3	2.7	mg/Kg			5	6010B
7440-70-2	Calcium	3600	27	14	mg/Kg			5	6010B
7439-89-6	Iron	13000	11	7.3	mg/Kg		B	5	6010B
7439-93-2	Lithium	3.6	5.3	3.0	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5000	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	640	5.3	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	1200	66	35	mg/Kg		F1	5	6010B
7440-23-5	Sodium	37	66	34	mg/Kg	J		5	6010B
7440-24-6	Strontium	42	5.3	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	330	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	2.2	1.1	0.28	mg/Kg		F1	20	6020
7440-38-2	Arsenic	3.2	0.53	0.26	mg/Kg			20	6020
7440-39-3	Barium	33	0.53	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.20	0.32	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.53	0.26	mg/Kg			20	6020
7440-47-3	Chromium	5.6	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	2.3	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	810	1.1	0.53	mg/Kg		B	20	6020
7439-92-1	Lead	1.6	0.53	0.26	mg/Kg			20	6020
7439-96-5	Manganese	36	0.53	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	1.8	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	2.5	1.1	0.21	mg/Kg			20	6020
7440-22-4	Silver	0.11	0.53	0.11	mg/Kg	J		20	6020
7440-28-0	Thallium	ND	0.53	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	18	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	8.1	11	5.3	mg/Kg	J		20	6020
7439-97-6	Mercury	0.20	0.021	0.013	mg/Kg		F1	1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB29_0.5-3

Lab Sample ID: 440-255674-12

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 15:10

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 94.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	5900	11	8.2	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.3	2.7	mg/Kg			5	6010B
7440-70-2	Calcium	3600	27	14	mg/Kg			5	6010B
7439-89-6	Iron	13000	11	7.3	mg/Kg		B	5	6010B
7439-93-2	Lithium	3.6	5.3	3.0	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5000	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	640	5.3	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	1200	66	35	mg/Kg		F1	5	6010B
7440-23-5	Sodium	37	66	34	mg/Kg	J		5	6010B
7440-24-6	Strontium	42	5.3	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	330	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	2.2	1.1	0.29	mg/Kg		F1	20	6020
7440-38-2	Arsenic	3.3	0.53	0.27	mg/Kg			20	6020
7440-39-3	Barium	34	0.53	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	0.20	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	5.6	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	2.3	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	820	1.1	0.53	mg/Kg		B	20	6020
7439-92-1	Lead	1.6	0.53	0.27	mg/Kg			20	6020
7439-96-5	Manganese	36	0.53	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	1.8	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	2.5	1.1	0.21	mg/Kg			20	6020
7440-22-4	Silver	0.11	0.53	0.11	mg/Kg	J		20	6020
7440-28-0	Thallium	ND	0.53	0.27	mg/Kg			20	6020
7440-62-2	Vanadium	18	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	8.2	11	5.3	mg/Kg	J		20	6020
7439-97-6	Mercury	0.20	0.021	0.013	mg/Kg		F1	1	7471A

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1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB29_3-6

Lab Sample ID: 440-255674-13

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 15:30

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 95.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	4900	10	8.0	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.2	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	3400	26	14	mg/Kg			5	6010B
7439-89-6	Iron	13000	10	7.2	mg/Kg		B	5	6010B
7439-93-2	Lithium	4.8	5.2	2.9	mg/Kg	J		5	6010B
7439-95-4	Magnesium	4900	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	630	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1300	65	34	mg/Kg			5	6010B
7440-23-5	Sodium	45	65	33	mg/Kg	J		5	6010B
7440-24-6	Strontium	30	5.2	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.2	mg/Kg			5	6010B
7440-32-6	Titanium	410	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	1.1	0.51	0.26	mg/Kg			20	6020
7440-39-3	Barium	27	0.51	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.25	0.31	0.15	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.51	0.26	mg/Kg			20	6020
7440-47-3	Chromium	5.4	1.0	0.51	mg/Kg			20	6020
7440-48-4	Cobalt	7.8	0.51	0.21	mg/Kg			20	6020
7440-50-8	Copper	1900	1.0	0.51	mg/Kg		B	20	6020
7439-92-1	Lead	1.4	0.51	0.26	mg/Kg			20	6020
7439-96-5	Manganese	91	0.51	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	1.4	1.0	0.51	mg/Kg			20	6020
7440-02-0	Nickel 8-69	8.6	1.0	0.51	mg/Kg			20	6020
7782-49-2	Selenium	1.7	1.0	0.20	mg/Kg			20	6020
7440-22-4	Silver	0.11	0.51	0.10	mg/Kg	J		20	6020
7440-28-0	Thallium	ND	0.51	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	18	1.0	0.51	mg/Kg			20	6020
7440-66-6	Zinc	17	10	5.1	mg/Kg			20	6020
7439-97-6	Mercury	ND	0.021	0.013	mg/Kg			1	7471A

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INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB29_3-6

Lab Sample ID: 440-255674-13

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 15:30

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 95.1

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	4900	10	8.0	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.2	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	3400	26	14	mg/Kg			5	6010B
7439-89-6	Iron	13000	10	7.2	mg/Kg		B	5	6010B
7439-93-2	Lithium	4.8	5.2	2.9	mg/Kg	J		5	6010B
7439-95-4	Magnesium	4900	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	630	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1300	65	34	mg/Kg			5	6010B
7440-23-5	Sodium	45	65	33	mg/Kg	J		5	6010B
7440-24-6	Strontium	30	5.2	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.2	mg/Kg			5	6010B
7440-32-6	Titanium	410	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	1.2	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	28	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.25	0.31	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.52	0.26	mg/Kg			20	6020
7440-47-3	Chromium	5.4	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	7.9	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	1900	1.0	0.52	mg/Kg		B	20	6020
7439-92-1	Lead	1.4	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	92	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	1.4	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	8.7	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	1.7	1.0	0.21	mg/Kg			20	6020
7440-22-4	Silver	0.11	0.52	0.10	mg/Kg	J		20	6020
7440-28-0	Thallium	ND	0.52	0.26	mg/Kg			20	6020
7440-62-2	Vanadium	19	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	17	10	5.2	mg/Kg			20	6020
7439-97-6	Mercury	ND	0.021	0.013	mg/Kg			1	7471A

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INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB29_6-15

Lab Sample ID: 440-255674-14

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 15:45

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 88.7

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	5700	11	8.5	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.5	2.8	mg/Kg			5	6010B
7440-70-2	Calcium	5100	28	15	mg/Kg			5	6010B
7439-89-6	Iron	11000	11	7.6	mg/Kg		B	5	6010B
7439-93-2	Lithium	3.5	5.5	3.1	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5200	11	5.5	mg/Kg			5	6010B
7723-14-0	Phosphorus	590	5.5	2.8	mg/Kg			5	6010B
7440-09-7	Potassium	1400	69	36	mg/Kg			5	6010B
7440-23-5	Sodium	83	69	35	mg/Kg			5	6010B
7440-24-6	Strontium	34	5.5	2.8	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.5	mg/Kg			5	6010B
7440-32-6	Titanium	380	2.2	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	ND	1.1	0.30	mg/Kg			20	6020
7440-38-2	Arsenic	1.4	0.56	0.28	mg/Kg			20	6020
7440-39-3	Barium	40	0.56	0.28	mg/Kg			20	6020
7440-41-7	Beryllium	ND	0.33	0.17	mg/Kg		^	20	6020
7440-43-9	Cadmium	ND	0.56	0.28	mg/Kg			20	6020
7440-47-3	Chromium	8.0	1.1	0.56	mg/Kg			20	6020
7440-48-4	Cobalt	4.6	0.56	0.23	mg/Kg			20	6020
7440-50-8	Copper	850	1.1	0.56	mg/Kg		B	20	6020
7439-92-1	Lead	1.6	0.56	0.28	mg/Kg			20	6020
7439-96-5	Manganese	65	0.56	0.28	mg/Kg			20	6020
7439-98-7	Molybdenum	1.8	1.1	0.56	mg/Kg			20	6020
7440-02-0	Nickel	8.4	1.1	0.56	mg/Kg			20	6020
7782-49-2	Selenium	1.9	1.1	0.22	mg/Kg			20	6020
7440-22-4	Silver	0.12	0.56	0.11	mg/Kg	J		20	6020
7440-28-0	Thallium	ND	0.56	0.28	mg/Kg			20	6020
7440-62-2	Vanadium	17	1.1	0.56	mg/Kg			20	6020
7440-66-6	Zinc	12.7 13	11	5.6	mg/Kg			20	6020
7439-97-6	Mercury	ND	0.023	0.014	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB29_6-15

Lab Sample ID: 440-255674-14

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 15:45

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 88.7

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	5700	11	8.5	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.5	2.8	mg/Kg			5	6010B
7440-70-2	Calcium	5100	28	15	mg/Kg			5	6010B
7439-89-6	Iron	11000	11	7.6	mg/Kg		B	5	6010B
7439-93-2	Lithium	3.5	5.5	3.1	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5200	11	5.5	mg/Kg			5	6010B
7723-14-0	Phosphorus	590	5.5	2.8	mg/Kg			5	6010B
7440-09-7	Potassium	1400	69	36	mg/Kg			5	6010B
7440-23-5	Sodium	83	69	35	mg/Kg			5	6010B
7440-24-6	Strontium	34	5.5	2.8	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.5	mg/Kg			5	6010B
7440-32-6	Titanium	380	2.2	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	ND	1.1	0.30	mg/Kg			20	6020
7440-38-2	Arsenic	1.4	0.55	0.28	mg/Kg			20	6020
7440-39-3	Barium	39	0.55	0.28	mg/Kg			20	6020
7440-41-7	Beryllium	ND	0.33	0.17	mg/Kg		^	20	6020
7440-43-9	Cadmium	ND	0.55	0.28	mg/Kg			20	6020
7440-47-3	Chromium	7.9	1.1	0.55	mg/Kg			20	6020
7440-48-4	Cobalt	4.6	0.55	0.23	mg/Kg			20	6020
7440-50-8	Copper	840	1.1	0.55	mg/Kg		B	20	6020
7439-92-1	Lead	1.6	0.55	0.28	mg/Kg			20	6020
7439-96-5	Manganese	65	0.55	0.28	mg/Kg			20	6020
7439-98-7	Molybdenum	1.8	1.1	0.55	mg/Kg			20	6020
7440-02-0	Nickel	8.3	1.1	0.55	mg/Kg			20	6020
7782-49-2	Selenium	1.9	1.1	0.22	mg/Kg			20	6020
7440-22-4	Silver	0.12	0.55	0.11	mg/Kg	J		20	6020
7440-28-0	Thallium	ND	0.55	0.28	mg/Kg			20	6020
7440-62-2	Vanadium	16	1.1	0.55	mg/Kg			20	6020
7440-66-6	Zinc	13	11	5.5	mg/Kg			20	6020
7439-97-6	Mercury	ND	0.023	0.014	mg/Kg			1	7471A

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INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB29-FD_6-15

Lab Sample ID: 440-255674-15

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 15:50

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 89.3

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	5900	11	8.7	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.7	2.8	mg/Kg			5	6010B
7440-70-2	Calcium	5500	28	15	mg/Kg			5	6010B
7439-89-6	Iron	11000	11	7.8	mg/Kg		B	5	6010B
7439-93-2	Lithium	3.3	5.7	3.2	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5400	11	5.7	mg/Kg			5	6010B
7723-14-0	Phosphorus	580	5.7	2.8	mg/Kg			5	6010B
7440-09-7	Potassium	1300	71	37	mg/Kg			5	6010B
7440-23-5	Sodium	82	71	36	mg/Kg			5	6010B
7440-24-6	Strontium	37	5.7	2.8	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.7	mg/Kg			5	6010B
7440-32-6	Titanium	430	2.3	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	ND	1.1	0.31	mg/Kg			20	6020
7440-38-2	Arsenic	1.3	0.57	0.28	mg/Kg			20	6020
7440-39-3	Barium	36	0.57	0.28	mg/Kg			20	6020
7440-41-7	Beryllium	ND	0.34	0.17	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.57	0.28	mg/Kg			20	6020
7440-47-3	Chromium	8.6	1.1	0.57	mg/Kg			20	6020
7440-48-4	Cobalt	4.5	0.57	0.24	mg/Kg			20	6020
7440-50-8	Copper	840	1.1	0.57	mg/Kg		B	20	6020
7439-92-1	Lead	1.5	0.57	0.28	mg/Kg			20	6020
7439-96-5	Manganese	70	0.57	0.28	mg/Kg			20	6020
7439-98-7	Molybdenum	1.9	1.1	0.57	mg/Kg			20	6020
7440-02-0	Nickel	8.5	1.1	0.57	mg/Kg			20	6020
7782-49-2	Selenium	1.7 1.71	1.1	0.23	mg/Kg			20	6020
7440-22-4	Silver	ND	0.57	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.57	0.28	mg/Kg			20	6020
7440-62-2	Vanadium	17	1.1	0.57	mg/Kg			20	6020
7440-66-6	Zinc	13	11	5.7	mg/Kg			20	6020
7439-97-6	Mercury	0.027	0.022	0.013	mg/Kg			1	7471A

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INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB29-FD_6-15

Lab Sample ID: 440-255674-15

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/21/2019 15:50

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 89.3

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	5900	11	8.7	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.7	2.8	mg/Kg			5	6010B
7440-70-2	Calcium	5500	28	15	mg/Kg			5	6010B
7439-89-6	Iron	11000	11	7.8	mg/Kg		B	5	6010B
7439-93-2	Lithium	3.3	5.7	3.2	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5400	11	5.7	mg/Kg			5	6010B
7723-14-0	Phosphorus	580	5.7	2.8	mg/Kg			5	6010B
7440-09-7	Potassium	1300	71	37	mg/Kg			5	6010B
7440-23-5	Sodium	82	71	36	mg/Kg			5	6010B
7440-24-6	Strontium	37	5.7	2.8	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.7	mg/Kg			5	6010B
7440-32-6	Titanium	430	2.3	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	ND	1.1	0.31	mg/Kg			20	6020
7440-38-2	Arsenic	1.3	0.57	0.28	mg/Kg			20	6020
7440-39-3	Barium	36	0.57	0.28	mg/Kg			20	6020
7440-41-7	Beryllium	ND	0.34	0.17	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.57	0.28	mg/Kg			20	6020
7440-47-3	Chromium	8.6	1.1	0.57	mg/Kg			20	6020
7440-48-4	Cobalt	4.5	0.57	0.24	mg/Kg			20	6020
7440-50-8	Copper	840	1.1	0.57	mg/Kg		B	20	6020
7439-92-1	Lead	1.5	0.57	0.28	mg/Kg			20	6020
7439-96-5	Manganese	70	0.57	0.28	mg/Kg			20	6020
7439-98-7	Molybdenum	1.9	1.1	0.57	mg/Kg			20	6020
7440-02-0	Nickel	8.5	1.1	0.57	mg/Kg			20	6020
7782-49-2	Selenium	1.7	1.1	0.23	mg/Kg			20	6020
7440-22-4	Silver	ND	0.57	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.57	0.28	mg/Kg			20	6020
7440-62-2	Vanadium	17	1.1	0.57	mg/Kg			20	6020
7440-66-6	Zinc	13	11	5.7	mg/Kg			20	6020
7439-97-6	Mercury	0.027	0.022	0.013	mg/Kg			1	7471A

Rev

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB30_0-0.5
Lab Sample ID: 440-255674-16
Lab Name: Eurofins Irvine
Job No.: 440-255674-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/22/2019 08:55
Reporting Basis: DRY
Date Received: 11/26/2019 10:50
% Solids: 94.2

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	6300	11	8.1	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.3	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	4500	26	14	mg/Kg			5	6010B
7439-89-6	Iron	8700	11	7.3	mg/Kg		B	5	6010B
7439-93-2	Lithium	ND	5.3	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	4700	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	360	5.3	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	270	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	62	66	34	mg/Kg	J		5	6010B
7440-24-6	Strontium	65	5.3	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	220	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	2.0	1.0	0.28	mg/Kg			20	6020
7440-38-2	Arsenic	5.8	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	35	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.34	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	4.9	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	4.1	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	670	1.0	0.52	mg/Kg		B	20	6020
7439-92-1	Lead	4.9	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	38	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	3.4	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	7.3	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	3.4	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	15.3 15	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	7.4	10	5.2	mg/Kg	J		20	6020
7439-97-6	Mercury	0.28	0.022	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB30_0-0.5

Lab Sample ID: 440-255674-16

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/22/2019 08:55

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 94.2

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	6300	11	8.1	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.3	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	4500	26	14	mg/Kg			5	6010B
7439-89-6	Iron	8700	11	7.3	mg/Kg		B	5	6010B
7439-93-2	Lithium	ND	5.3	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	4700	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	360	5.3	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	270	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	62	66	34	mg/Kg	J		5	6010B
7440-24-6	Strontium	65	5.3	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	220	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	2.0	1.1	0.29	mg/Kg			20	6020
7440-38-2	Arsenic	5.9	0.53	0.26	mg/Kg			20	6020
7440-39-3	Barium	35	0.53	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.34	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	4.9	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	4.1	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	680	1.1	0.53	mg/Kg		B	20	6020
7439-92-1	Lead	4.9	0.53	0.26	mg/Kg			20	6020
7439-96-5	Manganese	38	0.53	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	3.5	1.1	0.53	mg/Kg			20	6020
7440-02-0	Nickel	7.4	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	3.5	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	15	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	7.5	11	5.3	mg/Kg	J		20	6020
7439-97-6	Mercury	0.28	0.022	0.013	mg/Kg			1	7471A

Rev

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB30_0.5-3

Lab Sample ID: 440-255674-17

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/22/2019 09:02

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 94.3

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	6500	11	8.2	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.3	2.7	mg/Kg			5	6010B
7440-70-2	Calcium	2800	27	14	mg/Kg			5	6010B
7439-89-6	Iron	8900	11	7.3	mg/Kg		B	5	6010B
7439-93-2	Lithium	ND	5.3	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	4700	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	330	5.3	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	280	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	56	66	34	mg/Kg	J		5	6010B
7440-24-6	Strontium	54	5.3	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	260	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	1.2	1.0	0.28	mg/Kg			20	6020
7440-38-2	Arsenic	4.5	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	33	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.31	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	4.9	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	2.9	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	650	1.0	0.52	mg/Kg		B	20	6020
7439-92-1	Lead	3.7	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	45	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	2.2	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	6.6	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	3.1	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	15	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	6.7 6.76	10	5.2	mg/Kg	J		20	6020
7439-97-6	Mercury	0.31	0.022	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB30_0.5-3

Lab Sample ID: 440-255674-17

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/22/2019 09:02

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 94.3

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	6500	11	8.2	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.3	2.7	mg/Kg			5	6010B
7440-70-2	Calcium	2800	27	14	mg/Kg			5	6010B
7439-89-6	Iron	8900	11	7.3	mg/Kg		B	5	6010B
7439-93-2	Lithium	ND	5.3	3.0	mg/Kg			5	6010B
7439-95-4	Magnesium	4700	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	330	5.3	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	280	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	56	66	34	mg/Kg	J		5	6010B
7440-24-6	Strontium	54	5.3	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	260	2.1	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	1.2	1.1	0.29	mg/Kg			20	6020
7440-38-2	Arsenic	4.6	0.53	0.27	mg/Kg			20	6020
7440-39-3	Barium	33	0.53	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	0.31	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	5.0	1.1	0.53	mg/Kg			20	6020
7440-48-4	Cobalt	3.0	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	670	1.1	0.53	mg/Kg		B	20	6020
7439-92-1	Lead	3.8	0.53	0.27	mg/Kg			20	6020
7439-96-5	Manganese	46	0.53	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	2.3	1.1	0.53	mg/Kg			20	6020
7440-02-0	Nickel	6.7	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	3.2	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	0.27	mg/Kg			20	6020
7440-62-2	Vanadium	15	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	6.8	11	5.3	mg/Kg	J		20	6020
7439-97-6	Mercury	0.31	0.022	0.013	mg/Kg			1	7471A

Rev

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB30_3-6

Lab Sample ID: 440-255674-18

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/22/2019 09:10

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 94.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7600	10	8.0	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.2	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	4200	26	14	mg/Kg			5	6010B
7439-89-6	Iron	9700	10	7.2	mg/Kg		B	5	6010B
7439-93-2	Lithium	3.1	5.2	2.9	mg/Kg	J		5	6010B
7439-95-4	Magnesium	6000	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	410	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	340	65	34	mg/Kg			5	6010B
7440-23-5	Sodium	51	65	33	mg/Kg	J		5	6010B
7440-24-6	Strontium	58	5.2	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.2	mg/Kg			5	6010B
7440-32-6	Titanium	360	2.1	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	1.3	1.0	0.28	mg/Kg			20	6020
7440-38-2	Arsenic	6.5	0.51	0.26	mg/Kg			20	6020
7440-39-3	Barium	37	0.51	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.20	0.31	0.15	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.51	0.26	mg/Kg			20	6020
7440-47-3	Chromium	6.0	1.0	0.51	mg/Kg			20	6020
7440-48-4	Cobalt	3.5	0.51	0.22	mg/Kg			20	6020
7440-50-8	Copper	860	1.0	0.51	mg/Kg		B	20	6020
7439-92-1	Lead	3.9	0.51	0.26	mg/Kg			20	6020
7439-96-5	Manganese	41	0.51	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	2.4	1.0	0.51	mg/Kg			20	6020
7440-02-0	Nickel	8.1	1.0	0.51	mg/Kg			20	6020
7782-49-2	Selenium	5.1	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	19	1.0	0.51	mg/Kg			20	6020
7440-66-6	Zinc	7.9	10	5.1	mg/Kg	J		20	6020
7439-97-6	Mercury	0.23	0.021	0.012	mg/Kg			1	7471A

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INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB30_3-6

Lab Sample ID: 440-255674-18

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/22/2019 09:10

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 94.8

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7600	10	8.0	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.2	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	4200	26	14	mg/Kg			5	6010B
7439-89-6	Iron	9700	10	7.2	mg/Kg		B	5	6010B
7439-93-2	Lithium	3.1	5.2	2.9	mg/Kg	J		5	6010B
7439-95-4	Magnesium	6000	10	5.2	mg/Kg			5	6010B
7723-14-0	Phosphorus	410	5.2	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	340	65	34	mg/Kg			5	6010B
7440-23-5	Sodium	51	65	33	mg/Kg	J		5	6010B
7440-24-6	Strontium	58	5.2	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	10	5.2	mg/Kg			5	6010B
7440-32-6	Titanium	360	2.1	1.0	mg/Kg			5	6010B
7440-36-0	Antimony	1.3	1.0	0.28	mg/Kg			20	6020
7440-38-2	Arsenic	6.6	0.52	0.26	mg/Kg			20	6020
7440-39-3	Barium	38	0.52	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	0.20	0.31	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.52	0.26	mg/Kg			20	6020
7440-47-3	Chromium	6.1	1.0	0.52	mg/Kg			20	6020
7440-48-4	Cobalt	3.6	0.52	0.22	mg/Kg			20	6020
7440-50-8	Copper	880	1.0	0.52	mg/Kg		B	20	6020
7439-92-1	Lead	4.0	0.52	0.26	mg/Kg			20	6020
7439-96-5	Manganese	42	0.52	0.26	mg/Kg			20	6020
7439-98-7	Molybdenum	2.5	1.0	0.52	mg/Kg			20	6020
7440-02-0	Nickel	8.2	1.0	0.52	mg/Kg			20	6020
7782-49-2	Selenium	5.2	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	19	1.0	0.52	mg/Kg			20	6020
7440-66-6	Zinc	8.1	10	5.2	mg/Kg	J		20	6020
7439-97-6	Mercury	0.23	0.021	0.012	mg/Kg			1	7471A

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1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB30_6-15

Lab Sample ID: 440-255674-20

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/22/2019 09:25

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 89.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	6500	11	8.7	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.6	2.8	mg/Kg			5	6010B
7440-70-2	Calcium	6700	28	15	mg/Kg			5	6010B
7439-89-6	Iron	12000	11	7.8	mg/Kg		B	5	6010B
7439-93-2	Lithium	3.3	5.6	3.2	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5700	11	5.6	mg/Kg			5	6010B
7723-14-0	Phosphorus	570	5.6	2.8	mg/Kg			5	6010B
7440-09-7	Potassium	1200	71	37	mg/Kg			5	6010B
7440-23-5	Sodium	97	71	36	mg/Kg			5	6010B
7440-24-6	Strontium	65	5.6	2.8	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.6	mg/Kg			5	6010B
7440-32-6	Titanium	420	2.3	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.63	1.2	0.33	mg/Kg	J		20	6020
7440-38-2	Arsenic 2.51	2.7	0.61	0.30	mg/Kg			20	6020
7440-39-3	Barium	55	0.61	0.30	mg/Kg			20	6020
7440-41-7	Beryllium	0.43	0.36	0.18	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.61	0.30	mg/Kg			20	6020
7440-47-3	Chromium	8.1	1.2	0.61	mg/Kg			20	6020
7440-48-4	Cobalt	7.2	0.61	0.26	mg/Kg			20	6020
7440-50-8	Copper	800	1.2	0.61	mg/Kg		B	20	6020
7439-92-1	Lead	2.4	0.61	0.30	mg/Kg			20	6020
7439-96-5	Manganese	79	0.61	0.30	mg/Kg			20	6020
7439-98-7	Molybdenum	2.3	1.2	0.61	mg/Kg			20	6020
7440-02-0	Nickel	10	1.2	0.61	mg/Kg			20	6020
7782-49-2	Selenium	2.4	1.2	0.24	mg/Kg			20	6020
7440-22-4	Silver	ND	0.61	0.12	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.61	0.30	mg/Kg			20	6020
7440-62-2	Vanadium	21	1.2	0.61	mg/Kg			20	6020
7440-66-6	Zinc	13	12	6.1	mg/Kg			20	6020
7439-97-6	Mercury	0.075	0.022	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB30_6-15

Lab Sample ID: 440-255674-20

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/22/2019 09:25

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 89.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	6500	11	8.7	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.6	2.8	mg/Kg			5	6010B
7440-70-2	Calcium	6700	28	15	mg/Kg			5	6010B
7439-89-6	Iron	12000	11	7.8	mg/Kg		B	5	6010B
7439-93-2	Lithium	3.3	5.6	3.2	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5700	11	5.6	mg/Kg			5	6010B
7723-14-0	Phosphorus	570	5.6	2.8	mg/Kg			5	6010B
7440-09-7	Potassium	1200	71	37	mg/Kg			5	6010B
7440-23-5	Sodium	97	71	36	mg/Kg			5	6010B
7440-24-6	Strontium	65	5.6	2.8	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.6	mg/Kg			5	6010B
7440-32-6	Titanium	420	2.3	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.59	1.1	0.30	mg/Kg	J		20	6020
7440-38-2	Arsenic	2.5	0.56	0.28	mg/Kg			20	6020
7440-39-3	Barium	51	0.56	0.28	mg/Kg			20	6020
7440-41-7	Beryllium	0.40	0.34	0.17	mg/Kg			20	6020
7440-43-9	Cadmium	ND	0.56	0.28	mg/Kg			20	6020
7440-47-3	Chromium	7.5	1.1	0.56	mg/Kg			20	6020
7440-48-4	Cobalt	6.7	0.56	0.24	mg/Kg			20	6020
7440-50-8	Copper	740	1.1	0.56	mg/Kg		B	20	6020
7439-92-1	Lead	2.2	0.56	0.28	mg/Kg			20	6020
7439-96-5	Manganese	74	0.56	0.28	mg/Kg			20	6020
7439-98-7	Molybdenum	2.1	1.1	0.56	mg/Kg			20	6020
7440-02-0	Nickel	9.3	1.1	0.56	mg/Kg			20	6020
7782-49-2	Selenium	2.2	1.1	0.23	mg/Kg			20	6020
7440-22-4	Silver	ND	0.56	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.56	0.28	mg/Kg			20	6020
7440-62-2	Vanadium	19	1.1	0.56	mg/Kg			20	6020
7440-66-6	Zinc	13	11	5.6	mg/Kg			20	6020
7439-97-6	Mercury	0.075	0.022	0.013	mg/Kg			1	7471A

Rev

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB31_0-0.5
Lab Sample ID: 440-255674-21
Lab Name: Eurofins Irvine
Job No.: 440-255674-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/22/2019 11:56
Reporting Basis: DRY
Date Received: 11/26/2019 10:50
% Solids: 92.6

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7500	11	8.4	mg/Kg			5	6010B
7440-42-8	Boron	2.7	5.5	2.7	mg/Kg	J		5	6010B
7440-70-2	Calcium	3000	27	15	mg/Kg			5	6010B
7439-89-6	Iron	14000	11	7.5	mg/Kg		B	5	6010B
7439-93-2	Lithium	5.3	5.5	3.1	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5600	11	5.5	mg/Kg			5	6010B
7723-14-0	Phosphorus	360	5.5	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	1200	68	35	mg/Kg			5	6010B
7440-23-5	Sodium	220	68	35	mg/Kg			5	6010B
7440-24-6	Strontium	38	5.5	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.5	mg/Kg			5	6010B
7440-32-6	Titanium	230	2.2	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.95	1.1	0.29	mg/Kg	J		20	6020
7440-38-2	Arsenic	6.8	0.54	0.27	mg/Kg			20	6020
7440-39-3	Barium	45.7 45	0.54	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	0.26	0.33	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.54	0.27	mg/Kg			20	6020
7440-47-3	Chromium	6.0	1.1	0.54	mg/Kg			20	6020
7440-48-4	Cobalt	4.3	0.54	0.23	mg/Kg			20	6020
7440-50-8	Copper	1900	1.1	0.54	mg/Kg		B	20	6020
7439-92-1	Lead	3.3	0.54	0.27	mg/Kg			20	6020
7439-96-5	Manganese	65	0.54	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	4.8	1.1	0.54	mg/Kg			20	6020
7440-02-0	Nickel	8.1	1.1	0.54	mg/Kg			20	6020
7782-49-2	Selenium	3.3	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	21	1.1	0.54	mg/Kg			20	6020
7440-66-6	Zinc	21	11	5.4	mg/Kg			20	6020
7439-97-6	Mercury	0.067	0.021	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB31_0-0.5

Lab Sample ID: 440-255674-21

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/22/2019 11:56

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 92.6

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7500	11	8.4	mg/Kg			5	6010B
7440-42-8	Boron	2.7	5.5	2.7	mg/Kg	J		5	6010B
7440-70-2	Calcium	3000	27	15	mg/Kg			5	6010B
7439-89-6	Iron	14000	11	7.5	mg/Kg		B	5	6010B
7439-93-2	Lithium	5.3	5.5	3.1	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5600	11	5.5	mg/Kg			5	6010B
7723-14-0	Phosphorus	360	5.5	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	1200	68	35	mg/Kg			5	6010B
7440-23-5	Sodium	220	68	35	mg/Kg			5	6010B
7440-24-6	Strontium	38	5.5	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.5	mg/Kg			5	6010B
7440-32-6	Titanium	230	2.2	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.96	1.1	0.29	mg/Kg	J		20	6020
7440-38-2	Arsenic	6.8	0.55	0.27	mg/Kg			20	6020
7440-39-3	Barium	46	0.55	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	0.26	0.33	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.55	0.27	mg/Kg			20	6020
7440-47-3	Chromium	6.0	1.1	0.55	mg/Kg			20	6020
7440-48-4	Cobalt	4.3	0.55	0.23	mg/Kg			20	6020
7440-50-8	Copper	1900	1.1	0.55	mg/Kg		B	20	6020
7439-92-1	Lead	3.3	0.55	0.27	mg/Kg			20	6020
7439-96-5	Manganese	65	0.55	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	4.9	1.1	0.55	mg/Kg			20	6020
7440-02-0	Nickel	8.2	1.1	0.55	mg/Kg			20	6020
7782-49-2	Selenium	3.3	1.1	0.22	mg/Kg			20	6020
7440-22-4	Silver	ND	0.55	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.55	0.27	mg/Kg			20	6020
7440-62-2	Vanadium	21	1.1	0.55	mg/Kg			20	6020
7440-66-6	Zinc	21	11	5.5	mg/Kg			20	6020
7439-97-6	Mercury	0.067	0.021	0.013	mg/Kg			1	7471A

Rev

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INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB31_0.5-3
Lab Sample ID: 440-255674-22
Lab Name: Eurofins Irvine
Job No.: 440-255674-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/22/2019 12:03
Reporting Basis: DRY
Date Received: 11/26/2019 10:50
% Solids: 94.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	6400	11	8.3	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.4	2.7	mg/Kg			5	6010B
7440-70-2	Calcium	2500	27	15	mg/Kg			5	6010B
7439-89-6	Iron	15000	11	7.5	mg/Kg		B	5	6010B
7439-93-2	Lithium	4.3	5.4	3.0	mg/Kg	J		5	6010B
7439-95-4	Magnesium	4800	11	5.4	mg/Kg			5	6010B
7723-14-0	Phosphorus	300	5.4	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	1100	67	35	mg/Kg			5	6010B
7440-23-5	Sodium	45	67	35	mg/Kg	J		5	6010B
7440-24-6	Strontium	50	5.4	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.4	mg/Kg			5	6010B
7440-32-6	Titanium	200	2.2	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.74	1.1	0.29	mg/Kg	J		20	6020
7440-38-2	Arsenic	6.9	0.54	0.27	mg/Kg			20	6020
7440-39-3	Barium	48	0.54	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	0.17	0.33	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.54	0.27	mg/Kg			20	6020
7440-47-3	Chromium	5.1	1.1	0.54	mg/Kg			20	6020
7440-48-4	Cobalt	3.5	0.54	0.23	mg/Kg			20	6020
7440-50-8	Copper	1300	1.1	0.54	mg/Kg		B	20	6020
7439-92-1	Lead	3.5	0.54	0.27	mg/Kg			20	6020
7439-96-5	Manganese	50	0.54	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	4.2	1.1	0.54	mg/Kg			20	6020
7440-02-0	Nickel	6.7	1.1	0.54	mg/Kg			20	6020
7782-49-2	Selenium	2.8	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	18	1.1	0.54	mg/Kg			20	6020
7440-66-6	Zinc	18	11	5.4	mg/Kg			20	6020
7439-97-6	Mercury	0.21	0.022	0.013	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB31_0.5-3

Lab Sample ID: 440-255674-22

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/22/2019 12:03

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 94.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	6400	11	8.3	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.4	2.7	mg/Kg			5	6010B
7440-70-2	Calcium	2500	27	15	mg/Kg			5	6010B
7439-89-6	Iron	15000	11	7.5	mg/Kg		B	5	6010B
7439-93-2	Lithium	4.3	5.4	3.0	mg/Kg	J		5	6010B
7439-95-4	Magnesium	4800	11	5.4	mg/Kg			5	6010B
7723-14-0	Phosphorus	300	5.4	2.7	mg/Kg			5	6010B
7440-09-7	Potassium	1100	67	35	mg/Kg			5	6010B
7440-23-5	Sodium	45	67	35	mg/Kg	J		5	6010B
7440-24-6	Strontium	50	5.4	2.7	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.4	mg/Kg			5	6010B
7440-32-6	Titanium	200	2.2	1.1	mg/Kg			5	6010B
7440-36-0	Antimony	0.74	1.1	0.29	mg/Kg	J		20	6020
7440-38-2	Arsenic	6.9	0.54	0.27	mg/Kg			20	6020
7440-39-3	Barium	47	0.54	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	0.17	0.32	0.16	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.54	0.27	mg/Kg			20	6020
7440-47-3	Chromium	5.1	1.1	0.54	mg/Kg			20	6020
7440-48-4	Cobalt	3.5	0.54	0.23	mg/Kg			20	6020
7440-50-8	Copper	1300	1.1	0.54	mg/Kg		B	20	6020
7439-92-1	Lead	3.5	0.54	0.27	mg/Kg			20	6020
7439-96-5	Manganese	49	0.54	0.27	mg/Kg			20	6020
7439-98-7	Molybdenum	4.1	1.1	0.54	mg/Kg			20	6020
7440-02-0	Nickel	6.6	1.1	0.54	mg/Kg			20	6020
7782-49-2	Selenium	2.8	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	18	1.1	0.54	mg/Kg			20	6020
7440-66-6	Zinc	18	11	5.4	mg/Kg			20	6020
7439-97-6	Mercury	0.21	0.022	0.013	mg/Kg			1	7471A

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INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB31_3-6

Lab Sample ID: 440-255674-23

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/22/2019 12:10

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 94.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7000	11	8.1	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.3	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	2700	26	14	mg/Kg			5	6010B
7439-89-6	Iron	15000	11	7.3	mg/Kg			5	6010B
7439-93-2	Lithium	4.8	5.3	2.9	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5100	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	350	5.3	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1100	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	49	66	34	mg/Kg	J		5	6010B
7440-24-6	Strontium	40	5.3	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	200	2.1	1.1	mg/Kg		F1	5	6010B
7440-36-0	Antimony	0.63	1.1	0.29	mg/Kg	J	F1	20	6020
7440-38-2	Arsenic	6.9	0.53	0.27	mg/Kg			20	6020
7440-39-3	Barium	47	0.53	0.27	mg/Kg			20	6020
7440-41-7	Beryllium	ND	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	5.4	1.1	0.53	mg/Kg		F2	20	6020
7440-48-4	Cobalt	3.3	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	1100	1.1	0.53	mg/Kg			20	6020
7439-92-1	Lead	3.0	0.53	0.27	mg/Kg			20	6020
7439-96-5	Manganese	50.8 51	0.53	0.27	mg/Kg		F1	20	6020
7439-98-7	Molybdenum	4.6	1.1	0.53	mg/Kg			20	6020
7440-02-0	Nickel	6.1	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	3.6	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	17	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	16	11	5.3	mg/Kg			20	6020
7439-97-6	Mercury	0.25	0.021	0.013	mg/Kg			1	7471A

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INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB31_3-6

Lab Sample ID: 440-255674-23

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/22/2019 12:10

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 94.0

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7000	11	8.1	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.3	2.6	mg/Kg			5	6010B
7440-70-2	Calcium	2700	26	14	mg/Kg			5	6010B
7439-89-6	Iron	15000	11	7.3	mg/Kg			5	6010B
7439-93-2	Lithium	4.8	5.3	2.9	mg/Kg	J		5	6010B
7439-95-4	Magnesium	5100	11	5.3	mg/Kg			5	6010B
7723-14-0	Phosphorus	350	5.3	2.6	mg/Kg			5	6010B
7440-09-7	Potassium	1100	66	34	mg/Kg			5	6010B
7440-23-5	Sodium	49	66	34	mg/Kg	J		5	6010B
7440-24-6	Strontium	40	5.3	2.6	mg/Kg			5	6010B
7440-31-5	Tin	ND	11	5.3	mg/Kg			5	6010B
7440-32-6	Titanium	200	2.1	1.1	mg/Kg		F1	5	6010B
7440-36-0	Antimony	0.63	1.1	0.28	mg/Kg	J	F1	20	6020
7440-38-2	Arsenic	6.8	0.53	0.26	mg/Kg			20	6020
7440-39-3	Barium	47	0.53	0.26	mg/Kg			20	6020
7440-41-7	Beryllium	ND	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	5.4	1.1	0.53	mg/Kg		F2	20	6020
7440-48-4	Cobalt	3.3	0.53	0.22	mg/Kg			20	6020
7440-50-8	Copper	1100	1.1	0.53	mg/Kg			20	6020
7439-92-1	Lead	3.0	0.53	0.26	mg/Kg			20	6020
7439-96-5	Manganese	51	0.53	0.26	mg/Kg		F1	20	6020
7439-98-7	Molybdenum	4.6	1.1	0.53	mg/Kg			20	6020
7440-02-0	Nickel	6.0	1.1	0.53	mg/Kg			20	6020
7782-49-2	Selenium	3.5	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	17	1.1	0.53	mg/Kg			20	6020
7440-66-6	Zinc	16	11	5.3	mg/Kg			20	6020
7439-97-6	Mercury	0.25	0.021	0.013	mg/Kg			1	7471A

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1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB31_6-15
Lab Sample ID: 440-255674-24
Lab Name: Eurofins Irvine
Job No.: 440-255674-1
SDG ID.:
Matrix: Solid
Date Sampled: 11/22/2019 12:20
Reporting Basis: DRY
Date Received: 11/26/2019 10:50
% Solids: 86.5

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7900	12	8.9	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.8	2.9	mg/Kg			5	6010B
7440-70-2	Calcium	5600	29	16	mg/Kg			5	6010B
7439-89-6	Iron	17000	12	7.9	mg/Kg			5	6010B
7439-93-2	Lithium	4.9	5.8	3.2	mg/Kg	J		5	6010B
7439-95-4	Magnesium	6600	12	5.8	mg/Kg			5	6010B
7723-14-0	Phosphorus	690	5.8	2.9	mg/Kg			5	6010B
7440-09-7	Potassium	1600	72	37	mg/Kg			5	6010B
7440-23-5	Sodium	110	72	37	mg/Kg			5	6010B
7440-24-6	Strontium	48	5.8	2.9	mg/Kg			5	6010B
7440-31-5	Tin	ND	12	5.8	mg/Kg			5	6010B
7440-32-6	Titanium	460	2.3	1.2	mg/Kg			5	6010B
7440-36-0	Antimony	0.41	1.1	0.31	mg/Kg	J		20	6020
7440-38-2	Arsenic	3.7	0.57	0.28	mg/Kg			20	6020
7440-39-3	Barium	44	0.57	0.28	mg/Kg			20	6020
7440-41-7	Beryllium	0.23	0.34	0.17	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.57	0.28	mg/Kg			20	6020
7440-47-3	Chromium	7.8	1.1	0.57	mg/Kg			20	6020
7440-48-4	Cobalt	6.1	0.57	0.24	mg/Kg			20	6020
7440-50-8	Copper	720	1.1	0.57	mg/Kg			20	6020
7439-92-1	Lead	2.2	0.57	0.28	mg/Kg			20	6020
7439-96-5	Manganese	85	0.57	0.28	mg/Kg			20	6020
7439-98-7	Molybdenum	2.2	1.1	0.57	mg/Kg			20	6020
7440-02-0	Nickel	9.49 9.3	1.1	0.57	mg/Kg			20	6020
7782-49-2	Selenium	2.7	1.1	0.23	mg/Kg			20	6020
7440-22-4	Silver	ND	0.57	0.11	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.57	0.28	mg/Kg			20	6020
7440-62-2	Vanadium	21	1.1	0.57	mg/Kg			20	6020
7440-66-6	Zinc	15	11	5.7	mg/Kg			20	6020
7439-97-6	Mercury	0.12	0.023	0.014	mg/Kg			1	7471A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: STSB31_6-15

Lab Sample ID: 440-255674-24

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG ID.:

Matrix: Solid

Date Sampled: 11/22/2019 12:20

Reporting Basis: DRY

Date Received: 11/26/2019 10:50

% Solids: 86.5

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	7900	12	8.9	mg/Kg			5	6010B
7440-42-8	Boron	ND	5.8	2.9	mg/Kg			5	6010B
7440-70-2	Calcium	5600	29	16	mg/Kg			5	6010B
7439-89-6	Iron	17000	12	7.9	mg/Kg			5	6010B
7439-93-2	Lithium	4.9	5.8	3.2	mg/Kg	J		5	6010B
7439-95-4	Magnesium	6600	12	5.8	mg/Kg			5	6010B
7723-14-0	Phosphorus	690	5.8	2.9	mg/Kg			5	6010B
7440-09-7	Potassium	1600	72	37	mg/Kg			5	6010B
7440-23-5	Sodium	110	72	37	mg/Kg			5	6010B
7440-24-6	Strontium	48	5.8	2.9	mg/Kg			5	6010B
7440-31-5	Tin	ND	12	5.8	mg/Kg			5	6010B
7440-32-6	Titanium	460	2.3	1.2	mg/Kg			5	6010B
7440-36-0	Antimony	0.41	1.2	0.31	mg/Kg	J		20	6020
7440-38-2	Arsenic	3.8	0.58	0.29	mg/Kg			20	6020
7440-39-3	Barium	45	0.58	0.29	mg/Kg			20	6020
7440-41-7	Beryllium	0.23	0.35	0.17	mg/Kg	J		20	6020
7440-43-9	Cadmium	ND	0.58	0.29	mg/Kg			20	6020
7440-47-3	Chromium	8.0	1.2	0.58	mg/Kg			20	6020
7440-48-4	Cobalt	6.2	0.58	0.24	mg/Kg			20	6020
7440-50-8	Copper	740	1.2	0.58	mg/Kg			20	6020
7439-92-1	Lead	2.2	0.58	0.29	mg/Kg			20	6020
7439-96-5	Manganese	87	0.58	0.29	mg/Kg			20	6020
7439-98-7	Molybdenum	2.3	1.2	0.58	mg/Kg			20	6020
7440-02-0	Nickel	9.5	1.2	0.58	mg/Kg			20	6020
7782-49-2	Selenium	2.7	1.2	0.23	mg/Kg			20	6020
7440-22-4	Silver	ND	0.58	0.12	mg/Kg			20	6020
7440-28-0	Thallium	ND	0.58	0.29	mg/Kg			20	6020
7440-62-2	Vanadium	21	1.2	0.58	mg/Kg			20	6020
7440-66-6	Zinc	15	12	5.8	mg/Kg			20	6020
7439-97-6	Mercury	0.12	0.023	0.014	mg/Kg			1	7471A

Rev

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

ICV Source: ME ICP ICV2_02352 Concentration Units: mg/L

CCV Source: ME ICP STD3_03033

	ICV 440-584991/5 12/10/2019 09:21				CCV 440-584991/28 12/10/2019 10:33							
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	0.991		1.00	99	1.07		1.00	107				
Boron	1.01		1.00	101	1.01		1.00	101				
Calcium	5.09		5.00	102	5.05		5.00	101				
Iron	1.02		1.00	102	1.09		1.00	109				
Lithium	1.01		1.00	101	1.01		1.00	101				
Magnesium	5.07		5.00	101	5.04		5.00	101				
Phosphorus	2.05		2.00	103	1.02		1.00	102				
Potassium	5.13		5.00	103	10.0		10.0	100				
Strontium	1.01		1.00	101	1.01		1.00	101				
Tin	1.99		2.00	99	1.01		1.00	101				
Titanium	1.01		1.00	101	1.03		1.00	103				

±10%
ICV/CCV

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.: 440-255674-1

SDG No.:

ICV Source: ME ICP ICV2_02352 Concentration Units: mg/L

CCV Source: ME ICP STD3_03033

	ICV 440-584992/5 12/10/2019 09:21				CCV 440-584992/51 12/10/2019 12:26				CCV 440-584992/63 12/10/2019 12:53			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	0.991		1.00	99	1.01		1.00	101	1.01		1.00	101
Boron	1.01		1.00	101	1.01		1.00	101	0.998		1.00	100
Calcium	5.09		5.00	102	5.03		5.00	101	5.01		5.00	100
Iron	1.02		1.00	102	1.04		1.00	104	1.04		1.00	104
Lithium	1.01		1.00	101	1.00		1.00	100	0.994		1.00	99
Magnesium	5.07		5.00	101	5.10		5.00	102	5.04		5.00	101
Phosphorus	2.05		2.00	103	1.00		1.00	100	0.991		1.00	99
Potassium	5.13		5.00	103	10.1		10.0	101	10.1		10.0	101
Strontium	1.01		1.00	101	1.00		1.00	100	0.997		1.00	100
Tin	1.99		2.00	99	1.01		1.00	101	1.02		1.00	102
Titanium	1.01		1.00	101	1.02		1.00	102	1.02		1.00	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 Irvine Job No.: 440-255674-1

SDG No.:

ICV Source: ME ICP ICV2_02352 Concentration Units: mg/L

CCV Source: ME ICP STD3_03033

Analyte	CCV 440-584992/75 12/10/2019 13:21				CCV 440-584992/83 12/10/2019 13:41							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	1.00		1.00	100	0.998		1.00	100				
Boron	0.999		1.00	100	0.990		1.00	99				
Calcium	5.02		5.00	100	5.00		5.00	100				
Iron	1.03		1.00	103	1.03		1.00	103				
Lithium	0.999		1.00	100	0.987		1.00	99				
Magnesium	5.13		5.00	103	5.03		5.00	101				
Phosphorus	1.01		1.00	101	0.992		1.00	99				
Potassium	10.1		10.0	101	9.99		10.0	100				
Strontium	1.00		1.00	100	0.991		1.00	99				
Tin	1.01		1.00	101	1.01		1.00	101				
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.: 440-255674-1

SDG No.:

ICV Source: ICV SODIUM_00069 Concentration Units: mg/L

CCV Source: ME ICP STD3_03033

	ICV 440-584991/8 12/10/2019 09:39				CCV 440-584991/28 12/10/2019 10:33							
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Sodium	4.96	✓	5.00	99	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.: 440-255674-1

SDG No.:

ICV Source: ICV SODIUM_00069 Concentration Units: mg/L

CCV Source: ME ICP STD3_03033

Analyte	ICV 440-584992/8 12/10/2019 09:39				CCV 440-584992/51 12/10/2019 12:26				CCV 440-584992/63 12/10/2019 12:53			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Sodium	4.96		5.00	99	10.0		10.0	100	9.90		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.: 440-255674-1

SDG No.:

ICV Source: ICV SODIUM_00069 Concentration Units: mg/L

CCV Source: ME ICP STD3_03033

	CCV 440-584992/75 12/10/2019 13:21				CCV 440-584992/83 12/10/2019 13:41							
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Sodium	9.97		10.0	100	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.: 440-255674-1

SDG No.:

ICV Source: MEICPMS ICV 00295 Concentration Units: ug/L

CCV Source: MEICPMS CCV_00293

	ICV 440-584881/8 12/09/2019 19:20				CCV 440-584881/20 12/09/2019 22:40				CCV 440-584881/28 12/09/2019 23:00			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	23.6		25.0	95	49.4		50.0	99	49.9		50.0	100
Arsenic	24.6		25.0	98	49.8		50.0	100	50.2		50.0	100
Barium	24.9		25.0	100	49.2		50.0	98	49.6		50.0	99
Beryllium	24.2		25.0	97	47.9		50.0	96	47.0		50.0	94
Cadmium	24.4		25.0	97	49.4		50.0	99	49.0		50.0	98
Chromium	25.0		25.0	100	50.7		50.0	101	50.6		50.0	101
Cobalt	25.2		25.0	101	50.9		50.0	102	51.2		50.0	102
Copper	25.1		25.0	100	50.4		50.0	101	52.0		50.0	104
Lead	23.8		25.0	95	48.2		50.0	96	48.4		50.0	97
Manganese	25.1		25.0	100	50.0		50.0	100	50.6		50.0	101
Molybdenum	24.9		25.0	99	50.1		50.0	100	49.5		50.0	99
Nickel	25.3		25.0	101	50.6		50.0	101	50.8		50.0	102
Selenium	25.8		25.0	103	49.6		50.0	99	50.8		50.0	102
Silver	25.4		25.0	101	49.6		50.0	99	49.6		50.0	99
Thallium	23.2		25.0	93	47.2		50.0	94	47.3		50.0	95
Vanadium	25.0		25.0	100	50.5		50.0	101	50.8		50.0	102
Zinc	26.2		25.0	105	50.0		50.0	100	50.0		50.0	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.: 440-255674-1

SDG No.:

ICV Source: MEICPMS ICV_00295 Concentration Units: ug/L

CCV Source: MEICPMS CCV_00293

	CCV 440-584881/40 12/09/2019 23:28											
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	48.1		50.0	96								
Arsenic	49.0		50.0	98								
Barium	48.6		50.0	97								
Beryllium	46.7		50.0	93								
Cadmium	48.1		50.0	96								
Chromium	50.2		50.0	100								
Cobalt	50.3		50.0	101								
Copper	51.1		50.0	102								
Lead	48.2		50.0	96								
Manganese	50.0		50.0	100								
Molybdenum	48.9		50.0	98								
Nickel	50.1		50.0	100								
Selenium	48.0		50.0	96								
Silver	48.6		50.0	97								
Thallium	47.2		50.0	94								
Vanadium	50.0		50.0	100								
Zinc	49.4		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.: 440-255674-1

SDG No.:

ICV Source: MEICPMS ICV_00296 Concentration Units: ug/L

CCV Source: MEICPMS CCV_00294

Analyte	ICV 440-584960/8 12/10/2019 10:10				CCV 440-584960/19 12/10/2019 10:47				CCV 440-584960/29 12/10/2019 11:28			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	23.9		25.0	95	49.8		50.0	100	50.0		50.0	100
Arsenic	24.3		25.0	97	49.5		50.0	99	50.7		50.0	101
Barium	24.5		25.0	98	50.1		50.0	100	50.2		50.0	100
Beryllium	24.4		25.0	97	49.7		50.0	99	49.5		50.0	99
Cadmium	24.9		25.0	100	50.3		50.0	101	50.9		50.0	102
Chromium	25.1		25.0	100	50.5		50.0	101	50.7		50.0	101
Cobalt	25.6		25.0	102	50.1		50.0	100	50.9		50.0	102
Copper	25.2		25.0	101	49.1		50.0	98	51.0		50.0	102
Lead	24.3		25.0	97	47.7		50.0	95	48.9		50.0	98
Manganese	25.1		25.0	101	50.4		50.0	101	50.0		50.0	100
Molybdenum	25.1		25.0	100	49.3		50.0	99	50.5		50.0	101
Nickel	25.4		25.0	102	49.8		50.0	100	51.3		50.0	103
Selenium	23.8		25.0	95	50.0		50.0	100	49.6		50.0	99
Silver	25.6		25.0	102	49.3		50.0	99	51.0		50.0	102
Thallium	23.5		25.0	94	45.9		50.0	92	47.5		50.0	95
Vanadium	25.3		25.0	101	50.0		50.0	100	51.1		50.0	102
Zinc	25.9		25.0	104	50.1		50.0	100	49.9		50.0	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.: 440-255674-1

SDG No.:

ICV Source: MEICPMS ICV_00296 Concentration Units: ug/L

CCV Source: MEICPMS CCV_00294

	CCV 440-584960/35 12/10/2019 11:45											
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	50.7		50.0	101								
Arsenic	49.8		50.0	100								
Barium	49.7		50.0	99								
Beryllium	51.6		50.0	103								
Cadmium	51.3		50.0	103								
Chromium	51.6		50.0	103								
Cobalt	52.2		50.0	104								
Copper	52.2		50.0	104								
Lead	48.7		50.0	97								
Manganese	50.9		50.0	102								
Molybdenum	50.6		50.0	101								
Nickel	52.1		50.0	104								
Selenium	47.4		50.0	95								
Silver	51.1		50.0	102								
Thallium	47.4		50.0	95								
Vanadium	51.8		50.0	104								
Zinc	49.6		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.: 440-255674-1

SDG No.:

ICV Source: MEICPMS ICV_00295 Concentration Units: ug/L

CCV Source: MEICPMS CCV_00293

	ICV 440-584875/8 12/09/2019 19:28				CCV 440-584875/20 12/09/2019 19:59				CCV 440-584875/29 12/09/2019 20:29			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	24.8		25.0	99	48.3		50.0	97	48.0		50.0	96
Arsenic	25.4		25.0	102	48.6		50.0	97	48.6		50.0	97
Barium	25.3		25.0	101	48.0		50.0	96	47.8		50.0	96
Beryllium	24.9		25.0	100	46.7		50.0	93	46.3		50.0	93
Cadmium	25.3		25.0	101	48.2		50.0	96	48.0		50.0	96
Chromium	25.3		25.0	101	48.5		50.0	97	48.4		50.0	97
Cobalt	25.2		25.0	101	48.1		50.0	96	48.0		50.0	96
Copper	25.0		25.0	100	48.0		50.0	96	48.1		50.0	96
Lead	25.5		25.0	102	47.9		50.0	96	48.4		50.0	97
Manganese	25.2		25.0	101	48.6		50.0	97	48.4		50.0	97
Molybdenum	25.4		25.0	101	48.6		50.0	97	48.0		50.0	96
Nickel	25.5		25.0	102	48.2		50.0	96	48.2		50.0	96
Selenium	24.6		25.0	99	48.0		50.0	96	49.0		50.0	98
Silver	26.3		25.0	105	48.9		50.0	98	48.4		50.0	97
Thallium	24.4		25.0	98	46.5		50.0	93	46.7		50.0	93
Vanadium	24.6		25.0	98	47.0		50.0	94	46.9		50.0	94
Zinc	25.4		25.0	101	48.3		50.0	97	47.4		50.0	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.: 440-255674-1

SDG No.:

ICV Source: MEICPMS ICV_00295 Concentration Units: ug/L

CCV Source: MEICPMS CCV_00293

	CCV 440-584875/37 12/09/2019 20:46				CCV 440-584875/48 12/09/2019 21:37							
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	48.2		50.0	96	48.7		50.0	97				
Arsenic	48.6		50.0	97	49.2		50.0	98				
Barium	47.7		50.0	95	48.5		50.0	97				
Beryllium	45.2		50.0	90	46.1		50.0	92				
Cadmium	47.7		50.0	95	48.3		50.0	97				
Chromium	48.1		50.0	96	49.0		50.0	98				
Cobalt	47.7		50.0	95	48.5		50.0	97				
Copper	47.8		50.0	96	48.5		50.0	97				
Lead	48.1		50.0	96	48.2		50.0	96				
Manganese	48.3		50.0	97	49.3		50.0	99				
Molybdenum	47.8		50.0	96	48.9		50.0	98				
Nickel	47.6		50.0	95	48.5		50.0	97				
Selenium	49.2		50.0	98	48.7		50.0	97				
Silver	48.3		50.0	97	48.7		50.0	97				
Thallium	46.6		50.0	93	46.8		50.0	94				
Vanadium	46.9		50.0	94	47.8		50.0	96				
Zinc	47.6		50.0	95	48.8		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.: 440-255674-1

SDG No.:

ICV Source: MEICPMS ICV_00296 Concentration Units: ug/L

CCV Source: MEICPMS CCV_00294

	ICV 440-584938/8 12/10/2019 09:12				CCV 440-584938/20 12/10/2019 09:39				CCV 440-584938/30 12/10/2019 10:08			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	24.4		25.0	98	51.6		50.0	103	51.6		50.0	103
Arsenic	24.9		25.0	100	51.2		50.0	102	51.1		50.0	102
Barium	25.2		25.0	101	51.2		50.0	102	51.2		50.0	102
Beryllium	25.4		25.0	102	54.4		50.0	109	57.4			115%
Cadmium	25.0		25.0	100	51.8		50.0	104	51.9		50.0	104
Chromium	25.1		25.0	100	51.8		50.0	104	52.6		50.0	105
Cobalt	25.1		25.0	100	51.6		50.0	103	53.0		50.0	106
Copper	24.9		25.0	100	52.1		50.0	104	53.7		50.0	107
Lead	24.9		25.0	99	50.6		50.0	101	50.7		50.0	101
Manganese	25.3		25.0	101	51.4		50.0	103	51.7		50.0	103
Molybdenum	25.2		25.0	101	51.4		50.0	103	51.4		50.0	103
Nickel	25.4		25.0	102	51.8		50.0	104	53.3		50.0	107
Selenium	25.3		25.0	101	51.5		50.0	103	50.1		50.0	100
Silver	26.3		25.0	105	52.3		50.0	105	52.8		50.0	106
Thallium	24.1		25.0	97	49.7		50.0	99	49.5		50.0	99
Vanadium	25.1		25.0	100	51.1		50.0	102	52.0		50.0	104
Zinc	25.2		25.0	101	52.3		50.0	105	52.5		50.0	105

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no Be
ok

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.: 440-255674-1

SDG No.:

ICV Source: ME 1 PPM HG1_00407 Concentration Units: mg/Kg

CCV Source: ME 1 PPM HG1_00406

Analyte	ICV 440-584674/1-A 12/10/2019 11:03				CCV 440-584674/3-A 12/10/2019 11:10				CCV 440-584674/3-A 12/10/2019 11:40			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	0.386		0.400	97	0.417		0.400	104	0.392		0.400	98

3.86 ppb 4.17 ppb 3.92 ppb

100 x factor from digest prep.

all %R confirmed ✓

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.: 440-255674-1

SDG No.:

ICV Source: ME 1 PPM HG1_00407 Concentration Units: mg/Kg

CCV Source: ME 1 PPM HG1_00406

	CCV 440-584674/3-A 12/10/2019 12:10				CCV 440-584674/3-A 12/10/2019 12:28				CCV 440-584674/3-A 12/10/2019 12:36			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	0.377		0.400	94	0.411		0.400	103	0.406		0.400	102

3.77 4.11 4.06

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.: 440-255674-1

SDG No.:

ICV Source: ME 1 PPM HG1_00407 Concentration Units: mg/Kg

CCV Source: ME 1 PPM HG1_00406

	CCV 440-584674/3-A 12/10/2019 13:08											
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	0.387		0.400	97								

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.: 440-255674-1

SDG No.:

Method: 6010B | Instrument ID: ICP8

Lab Sample ID: CRI 440-584991/16 | Concentration Units: mg/L

CRQL Check Standard Source: ME ICP RL_01092

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	0.200	0.196		98	50-150
Boron	0.100	0.0995		100	50-150
Calcium	0.200	0.191		96	50-150
Iron	0.200	0.208		104	50-150
Lithium	0.100	0.101	J	101	50-150
Magnesium	0.0400	0.0518		130	50-150
Phosphorus	0.400	0.407		102	50-150
Potassium	1.00	1.07		107	50-150
Sodium	1.00	0.993		99	50-150
Strontium	0.0400	0.0402		101	50-150
Tin	0.200	0.195		97	50-150
Titanium	0.0100	0.00970		97	50-150

Lab Sample ID: CRI 440-584992/16 | Concentration Units: mg/L

CRQL Check Standard Source: ME ICP RL_01092

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	0.200	0.196		98	50-150
Boron	0.100	0.0995		100	50-150
Calcium	0.200	0.191		96	50-150
Iron	0.200	0.208		104	50-150
Lithium	0.100	0.101	J	101	50-150
Magnesium	0.0400	0.0518		130	50-150
Phosphorus	0.400	0.407		102	50-150
Potassium	1.00	1.07		107	50-150
Sodium	1.00	0.993		99	50-150
Strontium	0.0400	0.0402		101	50-150
Tin	0.200	0.195		97	50-150
Titanium	0.0100	0.00970		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.: 440-255674-1

SDG No.:

Method: 6010B | Instrument ID: ICP8

Lab Sample ID: CRI 440-584991/38 | Concentration Units: mg/L

CRQL Check Standard Source: ME ICP RL_01092

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	0.200	0.190		95	50-150
Boron	0.100	0.102		102	50-150
Calcium	0.200	0.192		96	50-150
Iron	0.200	0.206		103	50-150
Lithium	0.100	0.0926	J	93	50-150
Magnesium	0.0400	0.0446		112	50-150
Phosphorus	0.400	0.414		103	50-150
Potassium	1.00	0.967		97	50-150
Sodium	1.00	0.950		95	50-150
Strontium	0.0400	0.0398		100	50-150
Tin	0.200	0.201		100	50-150
Titanium	0.0100	0.0110		110	50-150

Lab Sample ID: CRI 440-584992/85 | Concentration Units: mg/L

CRQL Check Standard Source: ME ICP RL_01092

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	0.200	0.190		95	50-150
Boron	0.100	0.102		102	50-150
Calcium	0.200	0.192		96	50-150
Iron	0.200	0.206		103	50-150
Lithium	0.100	0.0926	J	93	50-150
Magnesium	0.0400	0.0446		112	50-150
Phosphorus	0.400	0.414		103	50-150
Potassium	1.00	0.967		97	50-150
Sodium	1.00	0.950		95	50-150
Strontium	0.0400	0.0398		100	50-150
Tin	0.200	0.201		100	50-150
Titanium	0.0100	0.0110		110	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.: 440-255674-1

SDG No.:

Method: 6020 | Instrument ID: ICPMS5

Lab Sample ID: CRI 440-584881/12 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI1_00297

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	1.00	1.04	J	104	50-150
Arsenic	1.00	1.05		105	50-150
Barium	1.00	1.08		108	50-150
Beryllium	0.500	0.576		115	50-150
Cadmium	1.00	1.06		106	50-150
Chromium	1.00	0.989	J	99	50-150
Cobalt	1.00	1.06		106	50-150
Copper	1.00	1.07	J	107	50-150
Lead	1.00	0.953	J	95	50-150
Manganese	1.00	1.04		104	50-150
Molybdenum	1.00	1.05	J	105	50-150
Nickel	1.00	1.01	J	101	50-150
Selenium	1.00	0.962	J	96	50-150
Silver	1.00	1.05		105	50-150
Thallium	1.00	0.936	J	94	50-150
Vanadium	1.00	1.02	J	102	50-150
Zinc	10.0	10.5	J	105	50-150

Lab Sample ID: CRI 440-584881/13 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00294

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.07		104	50-150
Arsenic	2.00	2.11		105	50-150
Barium	2.00	2.11		105	50-150
Beryllium	1.00	0.715		72	50-150
Cadmium	2.00	2.13		107	50-150
Chromium	2.00	2.15		107	50-150
Cobalt	2.00	2.16		108	50-150
Copper	2.00	2.23		112	50-150
Lead	2.00	1.99		100	50-150
Manganese	2.00	2.20		110	50-150
Molybdenum	2.00	2.12		106	50-150
Nickel	2.00	2.20		110	50-150
Selenium	2.00	2.41		121	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.: 440-255674-1

SDG No.:

Method: 6020 | Instrument ID: ICPMS5

Lab Sample ID: CRI 440-584881/13 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00294

Analyte	CRQL Check Standard True	Found	Qualifiers	%R(1)	Limits
Silver	2.00	2.15		108	50-150
Thallium	2.00	1.97		99	50-150
Vanadium	2.00	2.14		107	50-150
Zinc	20.0	21.4		107	50-150

Lab Sample ID: CRI 440-584881/42 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00294

Analyte	CRQL Check Standard True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.13		107	50-150
Arsenic	2.00	2.01		100	50-150
Barium	2.00	2.03		101	50-150
Beryllium	1.00	0.921		92	50-150
Cadmium	2.00	2.04		102	50-150
Chromium	2.00	2.09		105	50-150
Cobalt	2.00	2.10		105	50-150
Copper	2.00	2.19		109	50-150
Lead	2.00	1.97		98	50-150
Manganese	2.00	2.18		109	50-150
Molybdenum	2.00	2.13		106	50-150
Nickel	2.00	2.15		108	50-150
Selenium	2.00	2.56		128	50-150
Silver	2.00	2.07		104	50-150
Thallium	2.00	1.92		96	50-150
Vanadium	2.00	2.00		100	50-150
Zinc	20.0	20.2		101	50-150

Lab Sample ID: CRI 440-584960/12 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI1_00298

Analyte	CRQL Check Standard True	Found	Qualifiers	%R(1)	Limits
Antimony	1.00	1.02	J	102	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.: 440-255674-1

SDG No.:

Method: 6020 | Instrument ID: ICPMS5

Lab Sample ID: CRI 440-584960/12 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI1_00298

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	1.00	1.02		102	50-150
Barium	1.00	1.02		102	50-150
Beryllium	0.500	0.487	J	97	50-150
Cadmium	1.00	1.09		109	50-150
Chromium	1.00	1.06	J	106	50-150
Cobalt	1.00	1.06		106	50-150
Copper	1.00	1.07	J	107	50-150
Lead	1.00	0.964	J	96	50-150
Manganese	1.00	1.02		102	50-150
Molybdenum	1.00	1.07	J	107	50-150
Nickel	1.00	1.04	J	104	50-150
Selenium	1.00	0.986	J	99	50-150
Silver	1.00	1.06		106	50-150
Thallium	1.00	0.934	J	93	50-150
Vanadium	1.00	1.05	J	105	50-150
Zinc	10.0	10.7	J	107	50-150

Lab Sample ID: CRI 440-584960/13 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00295

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.13		106	50-150
Arsenic	2.00	2.13		107	50-150
Barium	2.00	2.18		109	50-150
Beryllium	1.00	1.10		110	50-150
Cadmium	2.00	2.14		107	50-150
Chromium	2.00	2.11		106	50-150
Cobalt	2.00	2.10		105	50-150
Copper	2.00	2.08		104	50-150
Lead	2.00	2.03		101	50-150
Manganese	2.00	2.10		105	50-150
Molybdenum	2.00	2.15		108	50-150
Nickel	2.00	2.21		110	50-150
Selenium	2.00	1.78	J	89	50-150
Silver	2.00	2.13		107	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.: 440-255674-1

SDG No.:

Method: 6020 | Instrument ID: ICPMS5

Lab Sample ID: CRI 440-584960/13 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00295

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Thallium	2.00	1.95		98	50-150
Vanadium	2.00	2.14		107	50-150
Zinc	20.0	21.4		107	50-150

Lab Sample ID: CRI 440-584960/37 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00295

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.39		119	50-150
Arsenic	2.00	2.20		110	50-150
Barium	2.00	2.18		109	50-150
Beryllium	1.00	1.42		142	50-150
Cadmium	2.00	2.16		108	50-150
Chromium	2.00	2.25		113	50-150
Cobalt	2.00	2.21		111	50-150
Copper	2.00	2.09		105	50-150
Lead	2.00	2.02		101	50-150
Manganese	2.00	2.18		109	50-150
Molybdenum	2.00	2.22		111	50-150
Nickel	2.00	2.26		113	50-150
Selenium	2.00	2.15		107	50-150
Silver	2.00	2.20		110	50-150
Thallium	2.00	1.97		98	50-150
Vanadium	2.00	2.28		114	50-150
Zinc	20.0	21.3		106	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.: 440-255674-1

SDG No.:

Method: 6020 | Instrument ID: ICPMS6

Lab Sample ID: CRI 440-584875/12 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI1_00297

Analyte	CRQL Check Standard True	Found	Qualifiers	%R(1)	Limits
Antimony	1.00	1.08	J	108	50-150
Arsenic	1.00	0.996	J	100	50-150
Barium	1.00	1.08		108	50-150
Beryllium	0.500	0.511		102	50-150
Cadmium	1.00	1.04		104	50-150
Chromium	1.00	1.03	J	103	50-150
Cobalt	1.00	1.03		103	50-150
Copper	1.00	1.07	J	107	50-150
Lead	1.00	1.04		104	50-150
Manganese	1.00	1.06		106	50-150
Molybdenum	1.00	1.08	J	108	50-150
Nickel	1.00	1.05	J	105	50-150
Selenium	1.00	0.976	J	98	50-150
Silver	1.00	1.05		105	50-150
Thallium	1.00	0.991	J	99	50-150
Vanadium	1.00	ND		98	50-150
Zinc	10.0	10.4	J	104	50-150

Lab Sample ID: CRI 440-584875/13 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00294

Analyte	CRQL Check Standard True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.11		105	50-150
Arsenic	2.00	2.03		102	50-150
Barium	2.00	2.20		110	50-150
Beryllium	1.00	1.03		103	50-150
Cadmium	2.00	2.08		104	50-150
Chromium	2.00	2.05		102	50-150
Cobalt	2.00	2.04		102	50-150
Copper	2.00	2.08		104	50-150
Lead	2.00	2.03		102	50-150
Manganese	2.00	2.06		103	50-150
Molybdenum	2.00	2.12		106	50-150
Nickel	2.00	2.12		106	50-150
Selenium	2.00	2.16		108	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.: 440-255674-1

SDG No.:

Method: 6020 | Instrument ID: ICPMS6

Lab Sample ID: CRI 440-584875/13 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00294

Analyte	CRQL Check Standard True	Found	Qualifiers	%R(1)	Limits
Silver	2.00	2.11		105	50-150
Thallium	2.00	1.98		99	50-150
Vanadium	2.00	1.96	J	98	50-150
Zinc	20.0	20.6		103	50-150

Lab Sample ID: CRI 440-584875/58 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00294

Analyte	CRQL Check Standard True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.07		104	50-150
Arsenic	2.00	2.05		102	50-150
Barium	2.00	2.06		103	50-150
Beryllium	1.00	0.968		97	50-150
Cadmium	2.00	2.06		103	50-150
Chromium	2.00	2.01		100	50-150
Cobalt	2.00	2.04		102	50-150
Copper	2.00	2.04		102	50-150
Lead	2.00	2.01		100	50-150
Manganese	2.00	2.03		101	50-150
Molybdenum	2.00	2.05		102	50-150
Nickel	2.00	2.05		103	50-150
Selenium	2.00	2.29		114	50-150
Silver	2.00	2.09		105	50-150
Thallium	2.00	2.00		100	50-150
Vanadium	2.00	1.97	J	99	50-150
Zinc	20.0	19.8	J	99	50-150

Lab Sample ID: CRI 440-584938/12 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI1_00298

Analyte	CRQL Check Standard True	Found	Qualifiers	%R(1)	Limits
Antimony	1.00	1.11	J	111	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.: 440-255674-1

SDG No.:

Method: 6020 | Instrument ID: ICPMS6

Lab Sample ID: CRI 440-584938/12 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI1_00298

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Arsenic	1.00	1.09		109	50-150
Barium	1.00	1.11		111	50-150
Beryllium	0.500	0.573		115	50-150
Cadmium	1.00	1.10		110	50-150
Chromium	1.00	1.10	J	110	50-150
Cobalt	1.00	1.09		109	50-150
Copper	1.00	1.15	J	115	50-150
Lead	1.00	1.06		106	50-150
Manganese	1.00	1.09		109	50-150
Molybdenum	1.00	1.11	J	111	50-150
Nickel	1.00	1.11	J	111	50-150
Selenium	1.00	0.868	J	87	50-150
Silver	1.00	1.13		113	50-150
Thallium	1.00	1.03		103	50-150
Vanadium	1.00	1.08	J	108	50-150
Zinc	10.0	10.9	J	109	50-150

Lab Sample ID: CRI 440-584938/13 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00295

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.14		107	50-150
Arsenic	2.00	2.13		107	50-150
Barium	2.00	2.20		110	50-150
Beryllium	1.00	1.13		113	50-150
Cadmium	2.00	2.19		109	50-150
Chromium	2.00	2.19		110	50-150
Cobalt	2.00	2.16		108	50-150
Copper	2.00	2.19		109	50-150
Lead	2.00	2.09		104	50-150
Manganese	2.00	2.15		108	50-150
Molybdenum	2.00	2.18		109	50-150
Nickel	2.00	2.14		107	50-150
Selenium	2.00	2.06		103	50-150
Silver	2.00	2.20		110	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.: 440-255674-1

SDG No.:

Method: 6020 | Instrument ID: ICPMS6

Lab Sample ID: CRI 440-584938/13 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00295

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Thallium	2.00	2.04		102	50-150
Vanadium	2.00	2.12		106	50-150
Zinc	20.0	21.4		107	50-150

Lab Sample ID: CRI 440-584938/41 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00295

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.26		113	50-150
Arsenic	2.00	2.17		109	50-150
Barium	2.00	2.20		110	50-150
Beryllium	1.00	1.34		134	50-150
Cadmium	2.00	2.19		109	50-150
Chromium	2.00	2.25		113	50-150
Cobalt	2.00	2.22		111	50-150
Copper	2.00	2.44		122	50-150
Lead	2.00	2.10		105	50-150
Manganese	2.00	2.18		109	50-150
Molybdenum	2.00	2.24		112	50-150
Nickel	2.00	2.27		113	50-150
Selenium	2.00	2.02		101	50-150
Silver	2.00	2.28		114	50-150
Thallium	2.00	2.06		103	50-150
Vanadium	2.00	2.14		107	50-150
Zinc	20.0	21.5		108	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.: 440-255674-1

SDG No.:

Method: 7471A | Instrument ID: CV-HG4

Lab Sample ID: CRA 440-584674/5-A | Concentration Units: mg/Kg

CRQL Check Standard Source: ME 1 PPM HG1_00406

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.0200	0.0162	J	81	70-130

Lab Sample ID: CRA 440-584674/5-A | Concentration Units: mg/Kg

CRQL Check Standard Source: ME 1 PPM HG1_00406

0.162

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.0200	0.0170	J	85	70-130

Lab Sample ID: CRA 440-584674/5-A | Concentration Units: mg/Kg

CRQL Check Standard Source: ME 1 PPM HG1_00406

0.170

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.0200	0.0171	J	86	70-130

0.171

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.: 440-255674-1

SDG No.:

Concentration Units: mg/L

		ICB 440-584991/10 12/10/2019 09:44		CCB 440-584991/29 12/10/2019 10:35					
Analyte	RL	Found	C	Found	C	Found	C	Found	C
Aluminum	0.10	ND		ND					
Boron	0.050	ND		ND					
Calcium	0.10	ND		ND					
Iron	0.10	ND		ND					
Lithium	0.50	ND		ND					
Magnesium	0.020	ND		ND					
Phosphorus	0.20	ND		ND					
Potassium	0.50	ND		ND					
Sodium	0.50	ND		ND					
Strontium	0.020	ND		ND					
Tin	0.10	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.: 440-255674-1

SDG No.:

Concentration Units: mg/L

		ICB 440-584992/10 12/10/2019 09:44		CCB 440-584992/52 12/10/2019 12:30		CCB 440-584992/64 12/10/2019 12:58		CCB 440-584992/76 12/10/2019 13:25	
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.: 440-255674-1

SDG No.:

Concentration Units: mg/L

CCB 440-584992/84
12/10/2019 13:45

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.: 440-255674-1

SDG No.:

Concentration Units: ug/L

		ICB 440-584881/10 12/09/2019 19:34		CCB 440-584881/21 12/09/2019 22:43		CCB 440-584881/29 12/09/2019 23:02		CCB 440-584881/41 12/09/2019 23:31	
Analyte	RL	Found	C	Found	C	Found	C	Found	C
Antimony	2.0	ND		0.639	J	0.940	J	0.614	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	
Vanadium	2.0	ND		ND		ND		ND	
Zinc	20	ND		ND		ND		ND	

12	4.09
1, ~~2, 3, 5~~	2.46
2	1.60
3	1.33
5	0.54

Sb - U - 4
1, 2, 3, 5, 12

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 440-584960/10 12/10/2019 10:23 Found	C	CCB 440-584960/20 12/10/2019 10:49 Found	C	CCB 440-584960/30 12/10/2019 11:30 Found	C	CCB 440-584960/36 12/10/2019 11:48 Found	C
				2.93		3.34		3.28	
Antimony	2.0	ND		0.585	J	0.667	J	0.655	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	
Vanadium	2.0	ND		ND		ND		ND	
Zinc	20	ND		ND		ND		ND	

	6	2.54	18	2.49
	7	2.54	20	1.04
	10	0.59	21	1.76
75x	11 ok	11.3	22	1.37
	13	0.39		
	15	0.50		
75x	16 ok	3.87		
	17	2.24		

6, 7, 10, 13, 15, 17, 18, 20, 21, 22 Sb - U - Y

Italicized analytes were not requested for this sequence.

FORM III-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

Concentration Units: ug/L

		ICB 440-584875/10 12/09/2019 19:39		CCB 440-584875/21 12/09/2019 20:01		CCB 440-584875/30 12/09/2019 20:31		CCB 440-584875/38 12/09/2019 20:48	
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.: 440-255674-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 440-584875/49 12/09/2019 21:39 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.: 440-255674-1

SDG No.:

Concentration Units: ug/L

		ICB 440-584938/10 12/10/2019 09:17		CCB 440-584938/21 12/10/2019 09:41		CCB 440-584938/31 12/10/2019 10:10			
Analyte	RL	Found	C	Found	C	Found	C	Found	C
Antimony	2.0	ND		ND		ND			
Arsenic	1.0	ND		ND		ND			
Barium	1.0	ND		ND		ND			
Beryllium	0.50	ND		ND		ND			
Cadmium	1.0	ND		ND		ND			
Chromium	2.0	ND		ND		ND			
Cobalt	1.0	ND		ND		ND			
Copper	2.0	ND		ND		ND			
Lead	1.0	ND		ND		ND			
Manganese	1.0	ND		ND		ND			
Molybdenum	2.0	ND		ND		ND			
Nickel	2.0	ND		ND		ND			
Selenium	2.0	ND		ND		ND			
Silver	1.0	ND		ND		ND			
Thallium	1.0	ND		ND		ND			
Vanadium	2.0	ND		ND		ND			
Zinc	20	ND		ND		ND			

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

Concentration Units: mg/Kg

Analyte	RL	ICB 440-584674/2-A 12/10/2019 11:06		CCB 440-584674/4-A 12/10/2019 11:12		CCB 440-584674/4-A 12/10/2019 11:43		CCB 440-584674/4-A 12/10/2019 12:12	
		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.: 440-255674-1

SDG No.:

Concentration Units: mg/Kg

		CCB 440-584674/4-A 12/10/2019 12:31		CCB 440-584674/4-A 12/10/2019 12:39		CCB 440-584674/4-A 12/10/2019 13:11			
Analyte	RL	Found	C	Found	C	Found	C	Found	C
Mercury	0.020	ND		ND		ND			

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Irvine | Job No.: 440-255674-1

SDG No.:

Concentration Units: mg/Kg | Lab Sample ID: MB 440-584711/1-A ^5

Instrument Code: ICP8 | Batch No.: 584991

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.: 440-255674-1

SDG No.:

Concentration Units: mg/Kg | Lab Sample ID: MB 440-584717/1-A ^5

Instrument Code: ICP8 | Batch No.: 584992

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	27.9			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

5x
139.5

1-3, 5-18, 20-22

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No Qual

FORM III-IN

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG No.:

Concentration Units: mg/Kg

Lab Sample ID: MB 440-584711/1-A ^20

Instrument Code: ICPMS6

Batch No.: 584875

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.: 440-255674-1

SDG No.:

Concentration Units: mg/Kg | Lab Sample ID: MB 440-584717/1-A ^20

Instrument Code: ICPMS5 | Batch No.: 584881

5x

CAS No.	Analyte	Concentration 3.32	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	0.663	J		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

1-3, 5, 12
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No Qual

FORM III-IN

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Irvine | Job No.: 440-255674-1

SDG No.:

Concentration Units: mg/Kg | Lab Sample ID: MB 440-584679/1-A

Instrument Code: CV-HG4 | Batch No.: 585046

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

FORM III-IN

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 440-584680/1-A

Instrument Code: CV-HG4 Batch No.: 585046

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSA 440-584991/11 | Instrument ID: ICP8

Lab File ID: 191210-2a.csv | ICS Source: ME ICP IFA_02350

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	600	651	109
Boron		-0.0032	
Calcium	600	620	103
Iron	600	568	95
Lithium		-0.0169	
Magnesium	600	577	96
Phosphorus		-0.0462	
Potassium		-0.398	
Sodium		-0.571	
Strontium		-0.0070	
Tin		-0.0159	
Titanium		-0.0007	Unspiked
Antimony		*0.0193*	< 2x MDL
Arsenic		*-0.0088*	
Barium		*0.0022*	
Beryllium		*-0.0003*	
Cadmium		*0.0011*	
Chromium		*0.0025*	
Cobalt		*0.0001*	
Copper		*0.0047*	
Lead		*-0.0046*	
Manganese		*-0.0089*	
Molybdenum		*-0.0013*	
Nickel		*0.0072*	
Selenium		*-0.0030*	
Silicon		*-0.0491*	
Silver		*-0.0063*	
Thallium		*-0.0026*	
Tungsten		*-0.0089*	
Vanadium		*0.0005*	
Zinc		*0.0023*	
Zirconium		*0.173*	

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSA 440-584992/11 | Instrument ID: ICP8

Lab File ID: 191210-2b.csv | ICS Source: ME ICP IFA_02350

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	600	651	109
Boron		-0.0032	
Calcium	600	620	103
Iron	600	568	95
Lithium		-0.0169	
Magnesium	600	577	96
Phosphorus		-0.0462	
Potassium		-0.398	
Sodium		-0.571	
Strontium		-0.0070	
Tin		-0.0159	
Titanium		-0.0007	
Antimony		*0.0193*	
Arsenic		*-0.0088*	
Barium		*0.0022*	
Beryllium		*-0.0003*	
Cadmium		*0.0011*	
Chromium		*0.0025*	
Cobalt		*0.0001*	
Copper		*0.0047*	
Lead		*-0.0046*	
Manganese		*-0.0089*	
Molybdenum		*-0.0013*	
Nickel		*0.0072*	
Selenium		*-0.0030*	
Silicon		*-0.0491*	
Silver		*-0.0063*	
Thallium		*-0.0026*	
Tungsten		*-0.0089*	
Vanadium		*0.0005*	
Zinc		*0.0023*	
Zirconium		*0.173*	

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSAB 440-584991/12 | Instrument ID: ICP8

Lab File ID: 191210-2a.csv | ICS Source: ME ICP IFB_02371

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**601**	**659**	**110**
Boron	**0.500**	**0.519**	**104**
Calcium	**603**	**618**	**103**
Iron	**601**	**571**	**95**
Lithium	**0.500**	**0.514**	**103**
Magnesium	**603**	**577**	**96**
Phosphorus	**0.500**	**0.489**	**98**
Potassium	**5.00**	**4.92**	**98**
Sodium	**5.00**	**4.67**	**93**
Strontium	**0.500**	**0.500**	**100**
Tin	**0.500**	**0.453**	**91**
Titanium	**0.500**	**0.524**	**105**
Antimony	*0.500*	*0.560*	*112*
Arsenic	*0.500*	*0.491*	*98*
Barium	*0.500*	*0.465*	*93*
Beryllium	*0.500*	*0.523*	*105*
Cadmium	*0.500*	*0.451*	*90*
Chromium	*0.500*	*0.489*	*98*
Cobalt	*0.500*	*0.452*	*90*
Copper	*0.500*	*0.573*	*115*
Lead	*0.500*	*0.457*	*91*
Manganese	*0.500*	*0.476*	*95*
Molybdenum	*0.500*	*0.491*	*98*
Nickel	*0.500*	*0.449*	*90*
Selenium	*0.500*	*0.459*	*92*
Silicon	*2.50*	*2.61*	*104*
Silver	*0.250*	*0.268*	*107*
Thallium	*0.500*	*0.435*	*87*
Tungsten	*0.500*	*0.429*	*86*
Vanadium	*0.500*	*0.510*	*102*
Zinc	*0.500*	*0.426*	*85*
Zirconium	*0.500*	*0.463*	*93*

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSAB 440-584992/12 | Instrument ID: ICP8

Lab File ID: 191210-2b.csv | ICS Source: ME ICP IFB_02371

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	601	659	110
Boron	0.500	0.519	104
Calcium	603	618	103
Iron	601	571	95
Lithium	0.500	0.514	103
Magnesium	603	577	96
Phosphorus	0.500	0.489	98
Potassium	5.00	4.92	98
Sodium	5.00	4.67	93
Strontium	0.500	0.500	100
Tin	0.500	0.453	91
Titanium	0.500	0.524	105
Antimony	*0.500*	*0.560*	*112*
Arsenic	*0.500*	*0.491*	*98*
Barium	*0.500*	*0.465*	*93*
Beryllium	*0.500*	*0.523*	*105*
Cadmium	*0.500*	*0.451*	*90*
Chromium	*0.500*	*0.489*	*98*
Cobalt	*0.500*	*0.452*	*90*
Copper	*0.500*	*0.573*	*115*
Lead	*0.500*	*0.457*	*91*
Manganese	*0.500*	*0.476*	*95*
Molybdenum	*0.500*	*0.491*	*98*
Nickel	*0.500*	*0.449*	*90*
Selenium	*0.500*	*0.459*	*92*
Silicon	*2.50*	*2.61*	*104*
Silver	*0.250*	*0.268*	*107*
Thallium	*0.500*	*0.435*	*87*
Tungsten	*0.500*	*0.429*	*86*
Vanadium	*0.500*	*0.510*	*102*
Zinc	*0.500*	*0.426*	*85*
Zirconium	*0.500*	*0.463*	*93*

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSA 440-584991/39 | Instrument ID: ICP8

Lab File ID: 191210-2a.csv | ICS Source: ME ICP IFA_02350

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	600	653	109
Boron		0.0035	MDL
Calcium	600	617	103
Iron	600	572	95
Lithium		-0.0208	
Magnesium	600	587	98
Phosphorus		-0.0168	
Potassium		-0.495	
Sodium		-0.596	
Strontium		-0.0070	
Tin		-0.0169	
Titanium		-0.0005	
Arsenic		*-0.0113*	
Barium		*0.0023*	
Beryllium		*0.0021*	
Cadmium		*0.0015*	
Chromium		*-0.0060*	
Cobalt		*-0.0003*	
Copper		*0.0038*	
Lead		*0.0055*	
Manganese		*-0.0038*	
Molybdenum		*-0.0011*	
Nickel		*0.0051*	
Selenium		*-0.0085*	
Silicon		*-0.0514*	
Silver		*-0.0070*	
Thallium		*0.0128*	
Tungsten		*-0.0048*	
Vanadium		*0.0012*	
Zinc		*0.0037*	
Zirconium		*0.175*	

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSA 440-584992/86 | Instrument ID: ICP8

Lab File ID: 191210-2b.csv | ICS Source: ME ICP IFA_02350

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	600	653	109
Boron		0.0035	← MDL
Calcium	600	617	103
Iron	600	572	95
Lithium		-0.0208	
Magnesium	600	587	98
Phosphorus		-0.0168	
Potassium		-0.495	✓
Sodium		-0.596	
Strontium		-0.0070	
Tin		-0.0169	
Titanium		-0.0005	✓
Arsenic		*-0.0113*	
Barium		*0.0023*	
Beryllium		*0.0021*	
Cadmium		*0.0015*	
Chromium		*-0.0060*	
Cobalt		*-0.0003*	
Copper		*0.0038*	
Lead		*0.0055*	
Manganese		*-0.0038*	
Molybdenum		*-0.0011*	
Nickel		*0.0051*	
Selenium		*-0.0085*	
Silicon		*-0.0514*	
Silver		*-0.0070*	
Thallium		*0.0128*	
Tungsten		*-0.0048*	
Vanadium		*0.0012*	
Zinc		*0.0037*	
Zirconium		*0.175*	

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSAB 440-584991/40 | Instrument ID: ICP8

Lab File ID: 191210-2a.csv | ICS Source: ME ICP IFB_02371

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**601**	**653**	**109**
Boron	**0.500**	**0.516**	**103**
Calcium	**603**	**613**	**102**
Iron	**601**	**573**	**95**
Lithium	**0.500**	**0.503**	**101**
Magnesium	**603**	**584**	**97**
Phosphorus	**0.500**	**0.479**	**96**
Potassium	**5.00**	**4.87**	**97**
Sodium	**5.00**	**4.56**	**91**
Strontium	**0.500**	**0.494**	**99**
Tin	**0.500**	**0.451**	**90**
Titanium	**0.500**	**0.522**	**104**
Antimony	*0.500*	*0.526*	*105*
Arsenic	*0.500*	*0.479*	*96*
Barium	*0.500*	*0.468*	*94*
Beryllium	*0.500*	*0.518*	*104*
Cadmium	*0.500*	*0.454*	*91*
Chromium	*0.500*	*0.490*	*98*
Cobalt	*0.500*	*0.454*	*91*
Copper	*0.500*	*0.561*	*112*
Lead	*0.500*	*0.461*	*92*
Manganese	*0.500*	*0.477*	*95*
Molybdenum	*0.500*	*0.496*	*99*
Nickel	*0.500*	*0.452*	*90*
Selenium	*0.500*	*0.455*	*91*
Silicon	*2.50*	*2.60*	*104*
Silver	*0.250*	*0.264*	*106*
Thallium	*0.500*	*0.446*	*89*
Tungsten	*0.500*	*0.433*	*87*
Vanadium	*0.500*	*0.509*	*102*
Zinc	*0.500*	*0.430*	*86*
Zirconium	*0.500*	*0.465*	*93*

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSAB 440-584992/87 Instrument ID: ICP8

Lab File ID: 191210-2b.csv ICS Source: ME ICP IFB_02371

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**601**	**653**	**109**
Boron	**0.500**	**0.516**	**103**
Calcium	**603**	**613**	**102**
Iron	**601**	**573**	**95**
Lithium	**0.500**	**0.503**	**101**
Magnesium	**603**	**584**	**97**
Phosphorus	**0.500**	**0.479**	**96**
Potassium	**5.00**	**4.87**	**97**
Sodium	**5.00**	**4.56**	**91**
Strontium	**0.500**	**0.494**	**99**
Tin	**0.500**	**0.451**	**90**
Titanium	**0.500**	**0.522**	**104**
Antimony	*0.500*	*0.526*	*105*
Arsenic	*0.500*	*0.479*	*96*
Barium	*0.500*	*0.468*	*94*
Beryllium	*0.500*	*0.518*	*104*
Cadmium	*0.500*	*0.454*	*91*
Chromium	*0.500*	*0.490*	*98*
Cobalt	*0.500*	*0.454*	*91*
Copper	*0.500*	*0.561*	*112*
Lead	*0.500*	*0.461*	*92*
Manganese	*0.500*	*0.477*	*95*
Molybdenum	*0.500*	*0.496*	*99*
Nickel	*0.500*	*0.452*	*90*
Selenium	*0.500*	*0.455*	*91*
Silicon	*2.50*	*2.60*	*104*
Silver	*0.250*	*0.264*	*106*
Thallium	*0.500*	*0.446*	*89*
Tungsten	*0.500*	*0.433*	*87*
Vanadium	*0.500*	*0.509*	*102*
Zinc	*0.500*	*0.430*	*86*
Zirconium	*0.500*	*0.465*	*93*

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSA 440-584881/14 | Instrument ID: ICPMS5

Lab File ID: 014ICSA.d | ICS Source: MEICPMS ICSA_00323

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.314**	
Arsenic		**0.0420**	
Barium		**0.163**	
Beryllium		**0.0000**	
Cadmium		**0.215**	
Chromium		**0.261**	
Cobalt		**0.288**	
Copper		**0.426**	
Lead		**0.0700**	
Manganese		**0.411**	
Molybdenum	**2000**	**2081**	**104**
Nickel		**0.305**	
Selenium		**0.0320**	
Silver		**0.0190**	
Thallium		**0.0060**	
Vanadium		**-0.0700**	
Zinc		**0.460**	
Aluminum	*100000*	*86208*	*86*
Cerium		*0.0120*	
Cesium		*0.0160*	
Iron	*100000*	*86740*	*87*
Strontium		*0.818*	
Tin		*0.404*	
Total Heavy Metals		*0.0000*	
Uranium		*0.0060*	

Interference not evaluated for ICP-MS

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSAB 440-584881/15 | Instrument ID: ICPMS5

Lab File ID: 015ICSB.d | ICS Source: MEICPMS ICSAB_00247

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	20.0	21.6	108
Arsenic	20.0	20.1	101
Barium	20.0	20.9	105
Beryllium	20.0	20.2	101
Cadmium	20.0	19.4	97
Chromium	20.0	19.6	98
Cobalt	20.0	19.5	97
Copper	20.0	18.8	94
Lead	20.0	18.0	90
Manganese	20.0	19.7	98
Molybdenum	2020	2123	105
Nickel	20.0	19.0	95
Selenium	20.0	19.6	98
Silver	20.0	19.1	95
Thallium	20.0	17.5	87
Vanadium	20.0	19.8	99
Zinc	20.0	18.9	95
Aluminum	*100000*	*91969*	*92*
Cerium	*20.0*	*19.6*	*98*
Cesium	*20.0*	*20.4*	*102*
Iron	*100000*	*93969*	*94*
Rubidium	*20.0*	*22.0*	*110*
Strontium	*20.0*	*21.9*	*109*
Thorium	*20.0*	*18.1*	*90*
Tin	*20.0*	*20.8*	*104*
Total Heavy Metals	*120*	*114*	*95*
Uranium	*20.0*	*18.9*	*94*

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSA 440-584881/43 | Instrument ID: ICPMS5

Lab File ID: 099ICSA.d | ICS Source: MEICPMS ICSA_00323

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		0.298	
Arsenic		0.0350	
Barium		0.196	
Beryllium		0.0000	
Cadmium		0.183	
Chromium		0.254	
Cobalt		0.272	
Copper		0.501	
Lead		0.0760	
Manganese		0.428	
Molybdenum	2000	1990	99
Nickel		0.327	
Selenium		0.454	
Silver		0.0250	
Thallium		0.0080	
Vanadium		-0.0990	
Zinc		0.452	
Aluminum	*100000*	*85795*	*86*
Cerium		*0.0160*	
Cesium		*0.0160*	
Iron	*100000*	*87139*	*87*
Strontium		*0.870*	
Thorium		*1.80*	
Tin		*0.366*	
Total Heavy Metals		*0.501*	
Uranium		*0.0080*	

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSAB 440-584881/44 | Instrument ID: ICPMS5

Lab File ID: 100ICSB.d | ICS Source: MEICPMS ICSAB 00247

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**20.0**	**21.0**	**105**
Arsenic	**20.0**	**19.6**	**98**
Barium	**20.0**	**20.7**	**103**
Beryllium	**20.0**	**17.9**	**90**
Cadmium	**20.0**	**18.7**	**93**
Chromium	**20.0**	**19.4**	**97**
Cobalt	**20.0**	**19.1**	**95**
Copper	**20.0**	**18.4**	**92**
Lead	**20.0**	**17.7**	**89**
Manganese	**20.0**	**19.3**	**96**
Molybdenum	**2020**	**2029**	**100**
Nickel	**20.0**	**18.3**	**92**
Selenium	**20.0**	**19.1**	**96**
Silver	**20.0**	**18.6**	**93**
Thallium	**20.0**	**17.1**	**86**
Vanadium	**20.0**	**19.4**	**97**
Zinc	**20.0**	**18.0**	**90**
Aluminum	*100000*	*89049*	*89*
Cerium	*20.0*	*18.9*	*94*
Cesium	*20.0*	*20.1*	*100*
Iron	*100000*	*89785*	*90*
Rubidium	*20.0*	*22.5*	*113*
Strontium	*20.0*	*21.6*	*108*
Thorium	*20.0*	*17.8*	*89*
Tin	*20.0*	*20.3*	*101*
Total Heavy Metals	*120*	*111*	*92*
Uranium	*20.0*	*18.2*	*91*

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSA 440-584960/14 | Instrument ID: ICPMS5

Lab File ID: 014ICSA.d | ICS Source: MEICPMS ICSA_00324

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		0.308	
Arsenic		0.0450	
Barium		0.185	
Beryllium		0.0000	
Cadmium		0.164	
Chromium		0.283	
Cobalt		0.278	
Copper		0.200	
Lead		0.0690	
Manganese		0.418	
Molybdenum	2000	2054	103
Nickel		0.259	
Selenium		0.0850	
Silver		0.0170	
Thallium		0.0050	
Vanadium		0.0150	
Zinc		0.458	
Aluminum	*100000*	*86425*	*86*
Cerium		*0.0120*	
Cesium		*0.0180*	
Iron	*100000*	*86637*	*87*
Strontium		*0.834*	
Thorium		*-0.229*	
Tin		*0.359*	
Total Heavy Metals		*0.0000*	
Uranium		*0.0030*	

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSAB 440-584960/15 | Instrument ID: ICPMS5

Lab File ID: 015ICSB.d | ICS Source: MEICPMS ICSAB_00248

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**20.0**	**21.4**	**107**
Arsenic	**20.0**	**19.5**	**97**
Barium	**20.0**	**20.5**	**103**
Beryllium	**20.0**	**19.4**	**97**
Cadmium	**20.0**	**19.6**	**98**
Chromium	**20.0**	**19.0**	**95**
Cobalt	**20.0**	**18.7**	**93**
Copper	**20.0**	**17.8**	**89**
Lead	**20.0**	**17.6**	**88**
Manganese	**20.0**	**19.8**	**99**
Molybdenum	**2020**	**2087**	**103**
Nickel	**20.0**	**18.4**	**92**
Selenium	**20.0**	**19.8**	**99**
Silver	**20.0**	**18.6**	**93**
Thallium	**20.0**	**16.9**	**85**
Vanadium	**20.0**	**19.4**	**97**
Zinc	**20.0**	**18.6**	**93**
Aluminum	*100000*	*92694*	*93*
Cerium	*20.0*	*19.1*	*96*
Cesium	*20.0*	*20.5*	*103*
Iron	*100000*	*91757*	*92*
Rubidium	*20.0*	*22.0*	*110*
Strontium	*20.0*	*21.7*	*108*
Tin	*20.0*	*20.5*	*102*
Total Heavy Metals	*120*	*111*	*93*
Uranium	*20.0*	*18.4*	*92*

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSA 440-584960/38 | Instrument ID: ICPMS5

Lab File ID: 038ICSA.d | ICS Source: MEICPMS ICSA 00324

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		0.389	
Arsenic		0.0340	
Barium		0.163	
Beryllium		0.110	
Cadmium		0.217	
Chromium		0.291	
Cobalt		0.287	
Copper		0.227	
Lead		0.0700	
Manganese		0.452	
Molybdenum	2000	2116	106
Nickel		0.317	
Selenium		0.0320	
Silver		0.0240	
Thallium		0.0050	
Vanadium		0.0350	
Zinc		0.500	
Aluminum	*100000*	*87117*	*87*
Cerium		*0.0150*	
Cesium		*0.0130*	
Iron	*100000*	*88796*	*89*
Strontium		*0.821*	
Thorium		*-0.286*	
Tin		*0.400*	
Total Heavy Metals		*0.0000*	
Uranium		*0.0070*	

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSAB 440-584960/39 | Instrument ID: ICPMS5

Lab File ID: 039ICSB.d | ICS Source: MEICPMS ICSAB_00248

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	20.0	22.3	111
Arsenic	20.0	20.4	102
Barium	20.0	21.3	106
Beryllium	20.0	20.2	101
Cadmium	20.0	20.1	100
Chromium	20.0	19.8	99
Cobalt	20.0	19.8	99
Copper	20.0	18.3	91
Lead	20.0	18.3	91
Manganese	20.0	20.1	100
Molybdenum	2020	2161	107
Nickel	20.0	19.2	96
Selenium	20.0	20.3	101
Silver	20.0	19.3	97
Thallium	20.0	17.7	88
Vanadium	20.0	20.5	102
Zinc	20.0	18.6	93
Aluminum	*100000*	*93396*	*93*
Cerium	*20.0*	*19.6*	*98*
Cesium	*20.0*	*20.4*	*102*
Iron	*100000*	*94517*	*94*
Rubidium	*20.0*	*22.1*	*111*
Strontium	*20.0*	*21.8*	*109*
Tin	*20.0*	*21.1*	*105*
Total Heavy Metals	*120*	*114*	*95*
Uranium	*20.0*	*19.2*	*96*

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSA 440-584875/14 | Instrument ID: ICPMS6

Lab File ID: 014ICSA.d | ICS Source: MEICPMS ICSA_00323

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		0.213	
Arsenic		0.0590	
Barium		0.169	
Beryllium		0.0070	
Cadmium		0.177	
Chromium		0.270	
Cobalt		0.276	
Copper		0.359	
Lead		0.0710	
Manganese		0.437	
Molybdenum	2000	2030	101
Nickel		0.307	
Selenium		0.169	
Silver		0.0180	
Thallium		0.0030	
Vanadium		-0.0060	
Zinc		0.392	
Aluminum	*100000*	*94852*	*95*
Cerium		*0.0080*	
Cesium		*0.0160*	
Iron	*100000*	*92664*	*93*
Strontium		*0.816*	
Thorium		*0.265*	
Tin		*0.309*	
Total Heavy Metals		*0.0000*	
Uranium		*0.0010*	

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSAB 440-584875/15 | Instrument ID: ICPMS6

Lab File ID: 015ICSB.d | ICS Source: MEICPMS ICSAB_00247

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**20.0**	**20.8**	**104**
Arsenic	**20.0**	**19.7**	**99**
Barium	**20.0**	**20.1**	**101**
Beryllium	**20.0**	**17.8**	**89**
Cadmium	**20.0**	**19.0**	**95**
Chromium	**20.0**	**19.0**	**95**
Cobalt	**20.0**	**18.5**	**92**
Copper	**20.0**	**18.0**	**90**
Lead	**20.0**	**18.3**	**91**
Manganese	**20.0**	**19.4**	**97**
Molybdenum	**2020**	**2077**	**103**
Nickel	**20.0**	**18.0**	**90**
Selenium	**20.0**	**18.4**	**92**
Silver	**20.0**	**18.9**	**95**
Thallium	**20.0**	**17.6**	**88**
Vanadium	**20.0**	**18.8**	**94**
Zinc	**20.0**	**18.5**	**92**
Aluminum	*100000*	*95457*	*95*
Cerium	*20.0*	*19.1*	*95*
Cesium	*20.0*	*20.0*	*100*
Iron	*100000*	*92369*	*92*
Rubidium	*20.0*	*22.4*	*112*
Strontium	*20.0*	*21.9*	*109*
Tin	*20.0*	*19.9*	*100*
Total Heavy Metals	*120*	*111*	*92*
Uranium	*20.0*	*18.1*	*91*

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSA 440-584875/59 | Instrument ID: ICPMS6

Lab File ID: 059ICSA.d | ICS Source: MEICPMS ICSA_00323

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		0.209	
Arsenic		0.0580	
Barium		0.183	
Beryllium		0.0110	
Cadmium		0.170	
Chromium		0.266	
Cobalt		0.298	
Copper		0.366	
Lead		0.0820	
Manganese		0.421	
Molybdenum	2000	2023	101
Nickel		0.312	
Selenium		0.230	
Silver		0.0170	
Thallium		0.0050	
Vanadium		0.0020	
Zinc		0.375	
Aluminum	*100000*	*94122*	*94*
Cerium		*0.0080*	
Cesium		*0.0170*	
Iron	*100000*	*91879*	*92*
Strontium		*0.838*	
Thorium		*0.197*	
Tin		*0.289*	
Total Heavy Metals		*0.0000*	
Uranium		*0.0080*	

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSAB 440-584875/60 | Instrument ID: ICPMS6

Lab File ID: 060ICSB.d | ICS Source: MEICPMS ICSAB_00247

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**20.0**	**20.7**	**103**
Arsenic	**20.0**	**19.8**	**99**
Barium	**20.0**	**19.9**	**100**
Beryllium	**20.0**	**17.9**	**90**
Cadmium	**20.0**	**18.8**	**94**
Chromium	**20.0**	**18.9**	**94**
Cobalt	**20.0**	**18.5**	**93**
Copper	**20.0**	**18.0**	**90**
Lead	**20.0**	**18.1**	**91**
Manganese	**20.0**	**19.3**	**97**
Molybdenum	**2020**	**2078**	**103**
Nickel	**20.0**	**18.1**	**91**
Selenium	**20.0**	**19.1**	**95**
Silver	**20.0**	**19.0**	**95**
Thallium	**20.0**	**17.6**	**88**
Vanadium	**20.0**	**18.6**	**93**
Zinc	**20.0**	**18.1**	**90**
Aluminum	*100000*	*94836*	*95*
Cerium	*20.0*	*19.1*	*95*
Cesium	*20.0*	*19.9*	*100*
Iron	*100000*	*91766*	*92*
Rubidium	*20.0*	*22.4*	*112*
Strontium	*20.0*	*22.1*	*110*
Tin	*20.0*	*20.0*	*100*
Total Heavy Metals	*120*	*110*	*92*
Uranium	*20.0*	*17.9*	*90*

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSA 440-584938/14 | Instrument ID: ICPMS6

Lab File ID: 014ICSA.d | ICS Source: MEICPMS ICSA_00324

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		0.223	
Arsenic		0.0570	
Barium		0.177	
Beryllium		0.0180	
Cadmium		0.162	
Chromium		0.288	
Cobalt		0.289	
Copper		0.335	
Lead		0.0790	
Manganese		0.445	
Molybdenum	2000	2102	105
Nickel		0.305	
Selenium		0.0880	
Silver		0.0240	
Thallium		0.0040	
Vanadium		0.0010	
Zinc		0.474	
Aluminum	*100000*	*98656*	*99*
Cerium		*0.0110*	
Cesium		*0.0180*	
Iron	*100000*	*97965*	*98*
Strontium		*0.829*	
Thorium		*0.813*	
Tin		*0.333*	
Total Heavy Metals		*0.0000*	
Uranium		*0.0040*	

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSAB 440-584938/15 | Instrument ID: ICPMS6

Lab File ID: 015ICSB.d | ICS Source: MEICPMS ICSAB_00248

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**20.0**	**21.7**	**109**
Arsenic	**20.0**	**20.6**	**103**
Barium	**20.0**	**21.0**	**105**
Beryllium	**20.0**	**20.4**	**102**
Cadmium	**20.0**	**20.1**	**100**
Chromium	**20.0**	**20.0**	**100**
Cobalt	**20.0**	**19.8**	**99**
Copper	**20.0**	**19.3**	**96**
Lead	**20.0**	**18.7**	**94**
Manganese	**20.0**	**19.9**	**100**
Molybdenum	**2020**	**2171**	**107**
Nickel	**20.0**	**19.2**	**96**
Selenium	**20.0**	**18.8**	**94**
Silver	**20.0**	**20.1**	**101**
Thallium	**20.0**	**18.3**	**92**
Vanadium	**20.0**	**20.1**	**101**
Zinc	**20.0**	**19.3**	**97**
Aluminum	*100000*	*99100*	*99*
Cerium	*20.0*	*20.4*	*102*
Cesium	*20.0*	*20.7*	*104*
Iron	*100000*	*98076*	*98*
Rubidium	*20.0*	*22.3*	*112*
Strontium	*20.0*	*22.1*	*110*
Tin	*20.0*	*20.9*	*105*
Total Heavy Metals	*120*	*117*	*97*
Uranium	*20.0*	*19.1*	*95*

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSA 440-584938/42 | Instrument ID: ICPMS6

Lab File ID: 042ICSA.d | ICS Source: MEICPMS ICSA_00324

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.248**	
Arsenic		**0.0590**	
Barium		**0.180**	
Beryllium		**0.0150**	
Cadmium		**0.169**	
Chromium		**0.305**	
Cobalt		**0.322**	
Copper		**0.595**	
Lead		**0.0810**	
Manganese		**0.453**	
Molybdenum	**2000**	**2151**	**108**
Nickel		**0.372**	
Selenium		**-0.144**	
Silver		**0.0240**	
Thallium		**0.0100**	
Vanadium		**0.0190**	
Zinc		**0.481**	
Aluminum	*100000*	*99517*	*100*
Cerium		*0.0190*	
Cesium		*0.0260*	
Iron	*100000*	*99762*	*100*
Strontium		*0.851*	
Thorium		*0.413*	
Tin		*0.385*	
Total Heavy Metals		*0.595*	
Uranium		*0.0060*	

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.: 440-255674-1

SDG No.:

Lab Sample ID: ICSAB 440-584938/43 | Instrument ID: ICPMS6

Lab File ID: 043ICSB.d | ICS Source: MEICPMS ICSAB_00248

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**20.0**	**21.7**	**108**
Arsenic	**20.0**	**20.7**	**104**
Barium	**20.0**	**21.1**	**105**
Beryllium	**20.0**	**21.1**	**106**
Cadmium	**20.0**	**20.1**	**101**
Chromium	**20.0**	**20.4**	**102**
Cobalt	**20.0**	**20.2**	**101**
Copper	**20.0**	**19.9**	**99**
Lead	**20.0**	**18.9**	**94**
Manganese	**20.0**	**20.4**	**102**
Molybdenum	**2020**	**2186**	**108**
Nickel	**20.0**	**19.7**	**98**
Selenium	**20.0**	**18.9**	**94**
Silver	**20.0**	**20.3**	**102**
Thallium	**20.0**	**18.4**	**92**
Vanadium	**20.0**	**20.4**	**102**
Zinc	**20.0**	**19.8**	**99**
Aluminum	*100000*	*101565*	*102*
Cerium	*20.0*	*20.5*	*103*
Cesium	*20.0*	*20.6*	*103*
Iron	*100000*	*100383*	*100*
Rubidium	*20.0*	*22.1*	*111*
Strontium	*20.0*	*21.8*	*109*
Tin	*20.0*	*20.9*	*105*
Total Heavy Metals	*120*	*119*	*99*
Uranium	*20.0*	*19.2*	*96*

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: STSB29_0.5-3 MS

Lab ID: 440-255674-12 MS

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG No.:

Matrix: Solid

Concentration Units: mg/Kg

% Solids: 94.3

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	7250		5900		53.8	2500	75-125	4	6010B
Boron	44.6		ND		53.8	83	75-125		6010B
Calcium	3700		3600		269	47	75-125	4	6010B
Iron	11600		13000		53.8	-3210	75-125	4	6010B
Lithium	49.1		3.6	J	53.8	85	75-125		6010B
Magnesium	5810		5000		269	290	75-125	4	6010B
Phosphorus	610		640		53.8	-64	75-125	4	6010B
Potassium ↓	1350		1200		538	36	75-125	F1	6010B
Sodium	501		37	J	538	86	75-125		6010B
Strontium	101		42		53.8	110	75-125		6010B
Tin	47.9		ND		53.8	89	75-125		6010B
Titanium	440		330		53.8	214	75-125	4	6010B
Antimony ↓	36.3		2.2		53.1	64	75-125	F1	6020
Arsenic	51.5		3.2		53.1	91	75-125		6020
Barium	80.4		33		53.1	88	75-125		6020
Beryllium	43.0		0.20	J	53.1	81	75-125		6020
Cadmium	46.1		ND		53.1	87	75-125		6020
Chromium	50.9		5.6		53.1	85	75-125		6020
Cobalt	47.4		2.3		53.1	85	75-125		6020
Copper	897		810		53.1	159	75-125	4	6020
Lead	47.2		1.6		53.1	86	75-125		6020
Manganese	75.7		36		53.1	75	75-125		6020
Molybdenum	48.6		1.8		53.1	88	75-125		6020
Nickel	50.9		5.9		53.1	85	75-125		6020
Selenium	47.8		2.5		53.1	85	75-125		6020
Silver	23.9		0.11	J	26.6	90	75-125		6020
Thallium	45.2		ND		53.1	85	75-125		6020
Vanadium	64.7		18		53.1	89	75-125		6020
Zinc	50.2		8.1	J	53.1	79	75-125		6020
Mercury ↑	0.796		0.20		0.416	143	75-125	F1	7471A

SSR = Spiked Sample Result

1-22 K↓, Sb↓, Hg↑

4 = SR > 4x SA ∴ No qual.

1.97g

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 SAMPLE RECOVERY
METALS

Client ID: STSB29_0.5-3 MS

Lab ID: 440-255674-12 MS

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG No.:

Matrix: Solid

Concentration Units: mg/Kg

% Solids: 94.3

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	7250		5900		53.8	2500	75-125	4	6010B
Boron	44.6		ND		53.8	83	75-125		6010B
Calcium	3700		3600		269	47	75-125	4	6010B
Iron	11600		13000		53.8	-3210	75-125	4	6010B
Lithium	49.1		3.6	J	53.8	85	75-125		6010B
Magnesium	5810		5000		269	290	75-125	4	6010B
Phosphorus	610		640		53.8	-64	75-125	4	6010B
Potassium	1350		1200		538	36	75-125	F1	6010B
Sodium	501		37	J	538	86	75-125		6010B
Strontium	101		42		53.8	110	75-125		6010B
Tin	47.9		ND		53.8	89	75-125		6010B
Titanium	440		330		53.8	214	75-125	4	6010B
Antimony	36.8		2.2		53.8	64	75-125	F1	6020
Arsenic	52.2		3.3		53.8	91	75-125		6020
Barium	81.4		34		53.8	88	75-125		6020
Beryllium	43.5		0.20	J	53.8	81	75-125		6020
Cadmium	46.7		ND		53.8	87	75-125		6020
Chromium	51.6		5.6		53.8	85	75-125		6020
Cobalt	48.0		2.3		53.8	85	75-125		6020
Copper	908		820		53.8	160	75-125	4	6020
Lead	47.8		1.6		53.8	86	75-125		6020
Manganese	76.6		36		53.8	75	75-125		6020
Molybdenum	49.2		1.8		53.8	88	75-125		6020
Nickel	51.5		5.9		53.8	85	75-125		6020
Selenium	48.4		2.5		53.8	85	75-125		6020
Silver	24.2		0.11	J	26.9	90	75-125		6020
Thallium	45.8		ND		53.8	85	75-125		6020
Vanadium	65.5		18		53.8	89	75-125		6020
Zinc	50.9		8.2	J	53.8	79	75-125		6020
Mercury	0.796		0.20		0.416	143	75-125	F1	7471A

SSR = Spiked Sample Result

Rev

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: STSB29_0.5-3 MSD

Lab ID: 440-255674-12 MSD

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG No.:

Matrix: Solid

Concentration Units: mg/Kg

% Solids: 94.3

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit 35%	Q	Method
Aluminum	7540		52.5	3124	75-125	4	20	4	6010B
Boron	45.2		52.5	86	75-125	1	20		6010B
Calcium	3880		262	116	75-125	5	20	4	6010B
Iron	11600		52.5	-3271	75-125	0	20	4	6010B
Lithium	49.8		52.5	88	75-125	1	20		6010B
Magnesium	5930		262	343	75-125	2	20	4	6010B
Phosphorus	632		52.5	-25	75-125	3	20	4	6010B
Potassium	1390		525	44	75-125	3	20	F1	6010B
Sodium	511		525	90	75-125	2	20		6010B
Strontium	104		52.5	119	75-125	3	20		6010B
Tin	47.5		52.5	91	75-125	1	20		6010B
Titanium	460		52.5	255	75-125	4	20	4	6010B
Antimony	37.5		51.8	68	75-125	3	20	F1	6020
Arsenic	52.0		51.8	94	75-125	1	20		6020
Barium	82.0		51.8	94	75-125	2	20		6020
Beryllium	42.7		51.8	82	75-125	1	20		6020
Cadmium	46.1		51.8	89	75-125	0	20		6020
Chromium	51.9		51.8	89	75-125	2	20		6020
Cobalt	48.0		51.8	88	75-125	1	20		6020
Copper	876		51.8	124	75-125	2	20	4	6020
Lead	47.6		51.8	89	75-125	1	20		6020
Manganese	78.8		51.8	83	75-125	4	20		6020
Molybdenum	49.6		51.8	92	75-125	2	20		6020
Nickel	51.7		51.8	88	75-125	1	20		6020
Selenium	47.3		51.8	87	75-125	1	20		6020
Silver	24.0		25.9	93	75-125	1	20		6020
Thallium	45.5		51.8	88	75-125	1	20		6020
Vanadium	65.5		51.8	92	75-125	1	20		6020
Zinc	51.6		51.8	84	75-125	3	20		6020
Mercury	0.752		0.416	132	75-125	6	20	F1	7471A

SDR = Sample Duplicate Result

1-22 K ↓, Sb ↓, Hg ↑

2.02 g

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

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: STSB29_0.5-3 MSD

Lab ID: 440-255674-12 MSD

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG No.:

Matrix: Solid

Concentration Units: mg/Kg

% Solids: 94.3

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	7540	52.5	3124	75-125	4	20	4	6010B
Boron	45.2	52.5	86	75-125	1	20		6010B
Calcium	3880	262	116	75-125	5	20	4	6010B
Iron	11600	52.5	-3271	75-125	0	20	4	6010B
Lithium	49.8	52.5	88	75-125	1	20		6010B
Magnesium	5930	262	343	75-125	2	20	4	6010B
Phosphorus	632	52.5	-25	75-125	3	20	4	6010B
Potassium	1390	525	44	75-125	3	20	F1	6010B
Sodium	511	525	90	75-125	2	20		6010B
Strontium	104	52.5	119	75-125	3	20		6010B
Tin	47.5	52.5	91	75-125	1	20		6010B
Titanium	460	52.5	255	75-125	4	20	4	6010B
Antimony	38.0	52.5	68	75-125	3	20	F1	6020
Arsenic	52.7	52.5	94	75-125	1	20		6020
Barium	83.0	52.5	94	75-125	2	20		6020
Beryllium	43.2	52.5	82	75-125	1	20		6020
Cadmium	46.6	52.5	89	75-125	0	20		6020
Chromium	52.5	52.5	89	75-125	2	20		6020
Cobalt	48.6	52.5	88	75-125	1	20		6020
Copper	887	52.5	125	75-125	2	20	4	6020
Lead	48.2	52.5	89	75-125	1	20		6020
Manganese	79.8	52.5	83	75-125	4	20		6020
Molybdenum	50.2	52.5	92	75-125	2	20		6020
Nickel	52.3	52.5	88	75-125	1	20		6020
Selenium	47.9	52.5	87	75-125	1	20		6020
Silver	24.3	26.2	93	75-125	1	20		6020
Thallium	46.1	52.5	88	75-125	1	20		6020
Vanadium	66.3	52.5	92	75-125	1	20		6020
Zinc	52.2	52.5	84	75-125	3	20		6020
Mercury	0.752	0.416	132	75-125	6	20	F1	7471A

SDR = Sample Duplicate Result

Rev

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: STSB29_0.5-3 PDS | Lab ID: 440-255674-12 PDS

Lab Name: Eurofins Irvine | Job No.: 440-255674-1

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	6100		5900		53.2	NC	80-120		6010B
Boron	52.8		ND		53.2	99	80-120		6010B
Calcium	3900		3600		266	NC	80-120		6010B
Iron	13600		13000		53.2	NC	80-120		6010B
Lithium	55.7		3.6	J	53.2	98	80-120		6010B
Magnesium	5360		5000		266	NC	80-120		6010B
Phosphorus	696		640		53.2	NC	80-120		6010B
Potassium	1710		1200		532	102	80-120		6010B
Sodium	560		37	J	532	98	80-120		6010B
Strontium	95.4		42		53.2	100	80-120		6010B
Tin	52.7		ND		53.2	99	80-120		6010B
Titanium	386		330		53.2	113	80-120		6010B
Antimony	53.8		2.2		52.6	98	75-125		6020
Arsenic	53.1		3.2		52.6	95	75-125		6020
Barium	84.7		33		52.6	98	75-125		6020
Beryllium	46.4		0.20	J	52.6	88	75-125		6020
Cadmium	50.3		ND		52.6	96	75-125		6020
Chromium	56.2		5.6		52.6	96	75-125		6020
Cobalt	52.7		2.3		52.6	96	75-125		6020
Copper	866		810		52.6	NC	75-125		6020
Lead	51.2		1.6		52.6	94	75-125		6020
Manganese	86.2		36		52.6	96	75-125		6020
Molybdenum	53.4		1.8		52.6	98	75-125		6020
Nickel	55.4		5.9		52.6	94	75-125		6020
Selenium	52.2		2.5		52.6	95	75-125		6020
Silver	50.8		0.11	J	52.6	97	75-125		6020
Thallium	49.3		ND		52.6	94	75-125		6020
Vanadium	68.7		18		52.6	97	75-125		6020
Zinc	55.8		8.1	J	52.6	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

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: STSB29_0.5-3 PDS

Lab ID: 440-255674-12 PDS

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

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	6100	5900		53.2	NC	80-120		6010B
Boron	52.8	ND		53.2	99	80-120		6010B
Calcium	3900	3600		266	NC	80-120		6010B
Iron	13600	13000		53.2	NC	80-120		6010B
Lithium	55.7	3.6	J	53.2	98	80-120		6010B
Magnesium	5360	5000		266	NC	80-120		6010B
Phosphorus	696	640		53.2	NC	80-120		6010B
Potassium	1710	1200		532	102	80-120		6010B
Sodium	560	37	J	532	98	80-120		6010B
Strontium	95.4	42		53.2	100	80-120		6010B
Tin	52.7	ND		53.2	99	80-120		6010B
Titanium	386	330		53.2	113	80-120		6010B
Antimony	54.4	2.2		53.2	98	75-125		6020
Arsenic	53.7	3.3		53.2	95	75-125		6020
Barium	85.7	34		53.2	98	75-125		6020
Beryllium	46.9	0.20	J	53.2	88	75-125		6020
Cadmium	50.9	ND		53.2	96	75-125		6020
Chromium	56.8	5.6		53.2	96	75-125		6020
Cobalt	53.3	2.3		53.2	96	75-125		6020
Copper	877	820		53.2	NC	75-125		6020
Lead	51.8	1.6		53.2	94	75-125		6020
Manganese	87.2	36		53.2	96	75-125		6020
Molybdenum	54.0	1.8		53.2	98	75-125		6020
Nickel	56.0	5.9		53.2	94	75-125		6020
Selenium	52.8	2.5		53.2	95	75-125		6020
Silver	51.4	0.11	J	53.2	97	75-125		6020
Thallium	49.9	ND		53.2	94	75-125		6020
Vanadium	69.5	18		53.2	97	75-125		6020
Zinc	56.5	8.2	J	53.2	91	75-125		6020

SSR = Spiked Sample Result

Rev

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

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

Lab ID: 440-255674-12

SDG No:

Lab Name: Eurofins Irvine

Job No: 440-255674-1

Matrix: Solid

Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	5900		5580		5.5		6010B
Boron	ND		ND		NC		6010B
Calcium	3600		3540		1.0		6010B
Iron	13000		13300		0.20		6010B
Lithium	3.6	J	ND		NC		6010B
Magnesium	5000		5030		0.13		6010B
Phosphorus	640		644		0.07		6010B
Potassium	1200		1230		NC		6010B
Sodium	37	J	ND		NC		6010B
Strontium	42		42.0		NC		6010B
Tin	ND		ND		NC		6010B
Titanium	330		319		1.9		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: 440-255674-12

SDG No:

Lab Name: Eurofins Irvine | Job No: 440-255674-1

Matrix: Solid | Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	2.2		2.84	J	NC		6020
Arsenic	3.2		3.19		NC		6020
Barium	33		33.6		0.78		6020
Beryllium	0.20	J	ND		NC		6020
Cadmium	ND		ND		NC		6020
Chromium	5.6		5.75		NC		6020
Cobalt	2.3		2.45	J	NC		6020
Copper	810		863		6.3		6020
Lead	1.6		1.64	J	NC		6020
Manganese	36		36.8		2.8		6020
Molybdenum	1.8		ND		NC		6020
Nickel	5.9		6.06		NC		6020
Selenium	2.5		2.94	J	NC		6020
Silver	0.11	J	ND		NC		6020
Thallium	ND		ND		NC		6020
Vanadium	18		18.0		NC		6020
Zinc	8.1	J	ND		NC		6020

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: 440-255674-12

SDG No:

Lab Name: Eurofins Irvine

Job No: 440-255674-1

Matrix: Solid

Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	2.2		2.87	J	NC		6020
Arsenic	3.3		3.23		NC		6020
Barium	34		34.0		0.78		6020
Beryllium	0.20	J	ND		NC		6020
Cadmium	ND		ND		NC		6020
Chromium	5.6		5.82		NC		6020
Cobalt	2.3		2.48	J	NC		6020
Copper	820		873		6.3		6020
Lead	1.6		1.65	J	NC		6020
Manganese	36		37.2		2.8		6020
Molybdenum	1.8		ND		NC		6020
Nickel	5.9		6.13		NC		6020
Selenium	2.5		2.98	J	NC		6020
Silver	0.11	J	ND		NC		6020
Thallium	ND		ND		NC		6020
Vanadium	18		18.2		NC		6020
Zinc	8.2	J	ND		NC		6020

Rev

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

FORM VIII-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: STSB31_3-6 MS | Lab ID: 440-255674-23 MS

Lab Name: Eurofins Irvine | Job No.: 440-255674-1

SDG No.:

Matrix: Solid | Concentration Units: mg/Kg

% Solids: 94.0

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	9160		7000		54.0	4084	75-125	4	6010B
Boron	42.9		ND		54.0	79	75-125		6010B
Calcium	2990		2700		270	109	75-125	4	6010B
Iron	14800		15000		54.0	141	75-125	4	6010B
Lithium	51.4		4.8	J	54.0	86	75-125		6010B
Magnesium	5150		5100		270	14	75-125	4	6010B
Phosphorus	363		350		54.0	27	75-125	4	6010B
Potassium	1690		1100		540	105	75-125		6010B
Sodium	523		49	J	540	88	75-125		6010B
Strontium	93.8		40		54.0	101	75-125		6010B
Tin	46.5		ND		54.0	86	75-125		6010B
Titanium ↑	326		200		54.0	241	75-125	F1	6010B
Antimony ↓	32.0		0.63	J	54.7	57	75-125	F1	6020
Arsenic	55.2		6.9		54.7	88	75-125		6020
Barium	102		47		54.7	99	75-125		6020
Beryllium	43.5		ND		54.7	80	75-125		6020
Cadmium	47.1		ND		54.7	86	75-125		6020
Chromium	62.8		5.4		54.7	105	75-125		6020
Cobalt	49.0		3.3		54.7	83	75-125		6020
Copper	1160		1100		54.7	110	75-125	4	6020
Lead	49.9		3.0		54.7	86	75-125		6020
Manganese	98.6		51		54.7	86	75-125		6020
Molybdenum	56.2		4.6		54.7	94	75-125		6020
Nickel	52.5		6.1		54.7	85	75-125		6020
Selenium	52.3		3.6		54.7	89	75-125		6020
Silver	24.5		ND		27.4	90	75-125		6020
Thallium	46.3		ND		54.7	85	75-125		6020
Vanadium	64.6		17		54.7	86	75-125		6020
Zinc	61.1		16		54.7	82	75-125		6020
Mercury	0.632		0.25		0.434	89	75-125		7471A

SSR = Spiked Sample Result

23-24
Ti ↑ Sb ↓

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

1.97g

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: STSB31_3-6 MS

Lab ID: 440-255674-23 MS

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG No.:

Matrix: Solid

Concentration Units: mg/Kg

% Solids: 94.0

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	9160		7000		54.0	4084	75-125	4	6010B
Boron	42.9		ND		54.0	79	75-125		6010B
Calcium	2990		2700		270	109	75-125	4	6010B
Iron	14800		15000		54.0	141	75-125	4	6010B
Lithium	51.4		4.8	J	54.0	86	75-125		6010B
Magnesium	5150		5100		270	14	75-125	4	6010B
Phosphorus	363		350		54.0	27	75-125	4	6010B
Potassium	1690		1100		540	105	75-125		6010B
Sodium	523		49	J	540	88	75-125		6010B
Strontium	93.8		40		54.0	101	75-125		6010B
Tin	46.5		ND		54.0	86	75-125		6010B
Titanium	326		200		54.0	241	75-125	F1	6010B
Antimony	31.5		0.63	J	54.0	57	75-125	F1	6020
Arsenic	54.4		6.8		54.0	88	75-125		6020
Barium	100		47		54.0	99	75-125		6020
Beryllium	43.0		ND		54.0	80	75-125		6020
Cadmium	46.5		ND		54.0	86	75-125		6020
Chromium	62.0		5.4		54.0	105	75-125		6020
Cobalt	48.4		3.3		54.0	83	75-125		6020
Copper	1150		1100		54.0	110	75-125	4	6020
Lead	49.2		3.0		54.0	86	75-125		6020
Manganese	97.3		51		54.0	86	75-125		6020
Molybdenum	55.4		4.6		54.0	94	75-125		6020
Nickel	51.8		6.0		54.0	85	75-125		6020
Selenium	51.6		3.5		54.0	89	75-125		6020
Silver	24.2		ND		27.0	90	75-125		6020
Thallium	45.7		ND		54.0	85	75-125		6020
Vanadium	63.7		17		54.0	86	75-125		6020
Zinc	60.2		16		54.0	82	75-125		6020
Mercury	0.632		0.25		0.434	89	75-125		7471A

SSR = Spiked Sample Result

Rev

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: STSB31_3-6 MSD

Lab ID: 440-255674-23 MSD

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG No.:

Matrix: Solid

Concentration Units: mg/Kg

% Solids: 94.0

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit 35%	Q	Method
Aluminum	8360	53.2	2653	75-125	9	20	4	6010B
Boron	43.7	53.2	82	75-125	2	20		6010B
Calcium	2700	266	0.6	75-125	10	20	4	6010B
Iron	15600	53.2	1651	75-125	5	20	4	6010B
Lithium	51.5	53.2	88	75-125	0	20		6010B
Magnesium	4820	266	-110	75-125	7	20	4	6010B
Phosphorus	419	53.2	133	75-125	14	20	4	6010B
Potassium	1730	532	115	75-125	3	20		6010B
Sodium	520	532	89	75-125	1	20		6010B
Strontium	88.2	53.2	92	75-125	6	20		6010B
Tin	46.8	53.2	88	75-125	1	20		6010B
Titanium ↑	348	53.2	285	75-125	6	20	F1	6010B
Antimony ↓	33.8	53.9	62	75-125	5	20	F1	6020
Arsenic	56.2	53.9	92	75-125	2	20		6020
Barium	97.7	53.9	93	75-125	4	20		6020
Beryllium	43.1	53.9	80	75-125	1	20		6020
Cadmium	46.9	53.9	87	75-125	0	20		6020
Chromium	50.6	53.9	84	75-125	22	20	F2	6020
Cobalt	48.6	53.9	84	75-125	1	20		6020
Copper	1120	53.9	39	75-125	3	20	4	6020
Lead	49.6	53.9	86	75-125	1	20		6020
Manganese ↓	90.3	53.9	72	75-125	9	20	F1	6020
Molybdenum	52.1	53.9	88	75-125	8	20		6020
Nickel	51.5	53.9	84	75-125	2	20		6020
Selenium	49.9	53.9	86	75-125	5	20		6020
Silver	24.4	26.9	91	75-125	0	20		6020
Thallium	46.4	53.9	86	75-125	0	20		6020
Vanadium	64.7	53.9	88	75-125	0	20		6020
Zinc	61.6	53.9	85	75-125	1	20		6020
Mercury	0.691	0.425	104	75-125	9	20		7471A

SDR = Sample Duplicate Result

23-24

T: ↑ Sb ↓ Mn ↓

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

2.00 J

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: STSB31_3-6 MSD

Lab ID: 440-255674-23 MSD

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

SDG No.:

Matrix: Solid

Concentration Units: mg/Kg

% Solids: 94.0

Analyte	(SDR) C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	8360	53.2	2653	75-125	9	20	4	6010B
Boron	43.7	53.2	82	75-125	2	20		6010B
Calcium	2700	266	0.6	75-125	10	20	4	6010B
Iron	15600	53.2	1651	75-125	5	20	4	6010B
Lithium	51.5	53.2	88	75-125	0	20		6010B
Magnesium	4820	266	-110	75-125	7	20	4	6010B
Phosphorus	419	53.2	133	75-125	14	20	4	6010B
Potassium	1730	532	115	75-125	3	20		6010B
Sodium	520	532	89	75-125	1	20		6010B
Strontium	88.2	53.2	92	75-125	6	20		6010B
Tin	46.8	53.2	88	75-125	1	20		6010B
Titanium	348	53.2	285	75-125	6	20	F1	6010B
Antimony	33.3	53.2	62	75-125	5	20	F1	6020
Arsenic	55.5	53.2	92	75-125	2	20		6020
Barium	96.4	53.2	93	75-125	4	20		6020
Beryllium	42.6	53.2	80	75-125	1	20		6020
Cadmium	46.3	53.2	87	75-125	0	20		6020
Chromium	49.9	53.2	84	75-125	22	20	F2	6020
Cobalt	48.0	53.2	84	75-125	1	20		6020
Copper	1110	53.2	39	75-125	3	20	4	6020
Lead	48.9	53.2	86	75-125	1	20		6020
Manganese	89.1	53.2	72	75-125	9	20	F1	6020
Molybdenum	51.4	53.2	88	75-125	8	20		6020
Nickel	50.8	53.2	84	75-125	2	20		6020
Selenium	49.2	53.2	86	75-125	5	20		6020
Silver	24.1	26.6	91	75-125	0	20		6020
Thallium	45.8	53.2	86	75-125	0	20		6020
Vanadium	63.8	53.2	88	75-125	0	20		6020
Zinc	60.8	53.2	85	75-125	1	20		6020
Mercury	0.691	0.425	104	75-125	9	20		7471A

SDR = Sample Duplicate Result

Rev

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: STSB31_3-6 PDS

Lab ID: 440-255674-23 PDS

Lab Name: Eurofins Irvine

Job No.: 440-255674-1

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	7010		7000		52.7	NC	80-120		6010B
Boron	51.6		ND		52.7	98	80-120		6010B
Calcium	2940		2700		263	NC	80-120		6010B
Iron	14600		15000		52.7	NC	80-120		6010B
Lithium	55.7		4.8	J	52.7	97	80-120		6010B
Magnesium	5350		5100		263	NC	80-120		6010B
Phosphorus	399		350		52.7	95	80-120		6010B
Potassium	1630		1100		527	97	80-120		6010B
Sodium	560		49	J	527	97	80-120		6010B
Strontium	90.3		40		52.7	97	80-120		6010B
Tin	51.2		ND		52.7	97	80-120		6010B
Titanium	247		200		52.7	97	80-120		6010B
Antimony	52.6		0.63	J	53.4	97	75-125		6020
Arsenic	58.1		6.9		53.4	96	75-125		6020
Barium	99.4		47		53.4	97	75-125		6020
Beryllium	47.3		ND		53.4	89	75-125		6020
Cadmium	50.2		ND		53.4	94	75-125		6020
Chromium	55.4		5.4		53.4	94	75-125		6020
Cobalt	52.7		3.3		53.4	93	75-125		6020
Copper	1140		1100		53.4	NC	75-125		6020
Lead	53.7		3.0		53.4	95	75-125		6020
Manganese	102		51		53.4	94	75-125		6020
Molybdenum	56.6		4.6		53.4	97	75-125		6020
Nickel	55.3		6.1		53.4	92	75-125		6020
Selenium	54.0		3.6		53.4	95	75-125		6020
Silver	51.5		ND		53.4	96	75-125		6020
Thallium	50.2		ND		53.4	94	75-125		6020
Vanadium	66.4		17		53.4	92	75-125		6020
Zinc	64.7		16		53.4	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

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: STSB31_3-6 PDS | Lab ID: 440-255674-23 PDS

Lab Name: Eurofins Irvine | Job No.: 440-255674-1

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	7010		7000		52.7	NC	80-120		6010B
Boron	51.6		ND		52.7	98	80-120		6010B
Calcium	2940		2700		263	NC	80-120		6010B
Iron	14600		15000		52.7	NC	80-120		6010B
Lithium	55.7		4.8	J	52.7	97	80-120		6010B
Magnesium	5350		5100		263	NC	80-120		6010B
Phosphorus	399		350		52.7	95	80-120		6010B
Potassium	1630		1100		527	97	80-120		6010B
Sodium	560		49	J	527	97	80-120		6010B
Strontium	90.3		40		52.7	97	80-120		6010B
Tin	51.2		ND		52.7	97	80-120		6010B
Titanium	247		200		52.7	97	80-120		6010B
Antimony	51.9		0.63	J	52.7	97	75-125		6020
Arsenic	57.3		6.8		52.7	96	75-125		6020
Barium	98.0		47		52.7	97	75-125		6020
Beryllium	46.6		ND		52.7	89	75-125		6020
Cadmium	49.5		ND		52.7	94	75-125		6020
Chromium	54.7		5.4		52.7	94	75-125		6020
Cobalt	52.0		3.3		52.7	93	75-125		6020
Copper	1130		1100		52.7	NC	75-125		6020
Lead	53.0		3.0		52.7	95	75-125		6020
Manganese	100		51		52.7	94	75-125		6020
Molybdenum	55.9		4.6		52.7	97	75-125		6020
Nickel	54.6		6.0		52.7	92	75-125		6020
Selenium	53.3		3.5		52.7	95	75-125		6020
Silver	50.8		ND		52.7	96	75-125		6020
Thallium	49.5		ND		52.7	94	75-125		6020
Vanadium	65.5		17		52.7	92	75-125		6020
Zinc	63.8		16		52.7	91	75-125		6020

SSR = Spiked Sample Result

Rev

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

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

Lab ID: 440-255674-23

SDG No:

Lab Name: Eurofins Irvine

Job No: 440-255674-1

Matrix: Solid

Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	7000		6230		10		6010B
Boron	ND		ND		NC		6010B
Calcium	2700		2510		6.9		6010B
Iron	15000		13900		5.6		6010B
Lithium	4.8	J	ND		NC		6010B
Magnesium	5100		4890		4.5		6010B
Phosphorus	350		333		4.3		6010B
Potassium	1100		1050		NC		6010B
Sodium	49	J	ND		NC		6010B
Strontium	40		37.3		NC		6010B
Tin	ND		ND		NC		6010B
Titanium	200		182		6.9		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: 440-255674-23

SDG No:

Lab Name: Eurofins Irvine | Job No: 440-255674-1

Matrix: Solid | Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.63	J	ND		NC		6020
Arsenic	6.9		7.09		NC		6020
Barium	47		47.0		0.78		6020
Beryllium	ND		ND		NC		6020
Cadmium	ND		ND		NC		6020
Chromium	5.4		5.42		NC		6020
Cobalt	3.3		3.50		NC		6020
Copper	1100		1110		0.66		6020
Lead	3.0		3.18		NC		6020
Manganese	51		52.2		1.4		6020
Molybdenum	4.6		4.84	J	NC		6020
Nickel	6.1		6.47		NC		6020
Selenium	3.6		4.02	J	NC		6020
Silver	ND		ND		NC		6020
Thallium	ND		ND		NC		6020
Vanadium	17		17.5		NC		6020
Zinc	16		ND		NC		6020

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: 440-255674-23

SDG No:

Lab Name: Eurofins Irvine | Job No: 440-255674-1

Matrix: Solid | Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Antimony	0.63	J	ND		NC		6020
Arsenic	6.8		6.99		NC		6020
Barium	47		46.3		0.78		6020
Beryllium	ND		ND		NC		6020
Cadmium	ND		ND		NC		6020
Chromium	5.4		5.35		NC		6020
Cobalt	3.3		3.45		NC		6020
Copper	1100		1100		0.66		6020
Lead	3.0		3.14		NC		6020
Manganese	51		51.5		1.4		6020
Molybdenum	4.6		4.78	J	NC		6020
Nickel	6.0		6.38		NC		6020
Selenium	3.5		3.97	J	NC		6020
Silver	ND		ND		NC		6020
Thallium	ND		ND		NC		6020
Vanadium	17		17.3		NC		6020
Zinc	16		ND		NC		6020

Rev

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

FORM VIII-IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 440-584711/2-A ^5

Lab Name: Eurofins Irvine Job No.: 440-255674-1

Sample Matrix: Solid LCS Source: ICP STD A_00003

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	50.0	44.7		89	80	120		6010B
Boron	50.0	44.0		88	80	120		6010B
Calcium	250	227		91	80	120		6010B
Iron	50.0	48.3		97	80	120		6010B
Lithium	50.0	45.5		91	80	120		6010B
Magnesium	250	227		91	80	120		6010B
Phosphorus	50.0	45.4		91	80	120		6010B
Potassium	500	445		89	80	120		6010B
Sodium	500	454		91	80	120		6010B
Strontium	50.0	45.7		91	80	120		6010B
Tin	50.0	46.2		92	80	120		6010B
Titanium	50.0	45.3		91	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 440-584717/2-A ^5

Lab Name: Eurofins Irvine Job No.: 440-255674-1

Sample Matrix: Solid LCS Source: ICP STD A_00003

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Aluminum	50.0	45.6		91	80	120		6010B
Boron	50.0	44.7		89	80	120		6010B
Calcium	250	231		93	80	120		6010B
Iron	50.0	52.8		106	80	120		6010B
Lithium	50.0	45.8		92	80	120		6010B
Magnesium	250	231		92	80	120		6010B
Phosphorus	50.0	46.4		93	80	120		6010B
Potassium	500	483		97	80	120		6010B
Sodium	500	455		91	80	120		6010B
Strontium	50.0	45.6		91	80	120		6010B
Tin	50.0	47.0		94	80	120		6010B
Titanium	50.0	46.4		93	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 440-584711/2-A ^20

Lab Name: Eurofins Irvine Job No.: 440-255674-1

Sample Matrix: Solid LCS Source: ICP STD B_00003

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Antimony	50.0	46.1		92	80	120		6020
Arsenic	50.0	45.2		90	80	120		6020
Barium	50.0	45.4		91	80	120		6020
Beryllium	50.0	42.5		85	80	120		6020
Cadmium	50.0	44.6		89	80	120		6020
Chromium	50.0	44.3		89	80	120		6020
Cobalt	50.0	44.0		88	80	120		6020
Copper	50.0	44.6		89	80	120		6020
Lead	50.0	44.6		89	80	120		6020
Manganese	50.0	44.4		89	80	120		6020
Molybdenum	50.0	44.6		89	80	120		6020
Nickel	50.0	44.5		89	80	120		6020
Selenium	50.0	44.5		89	80	120		6020
Silver	25.0	23.4		94	80	120		6020
Thallium	50.0	44.8		90	80	120		6020
Vanadium	50.0	42.9		86	80	120		6020
Zinc	50.0	44.5		89	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 440-584717/2-A ^20

Lab Name: Eurofins Irvine Job No.: 440-255674-1

Sample Matrix: Solid LCS Source: ICP STD B_00003

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Antimony	50.0	46.5		93	80	120		6020
Arsenic	50.0	46.5		93	80	120		6020
Barium	50.0	47.4		95	80	120		6020
Beryllium	50.0	43.8		88	80	120		6020
Cadmium	50.0	45.9		92	80	120		6020
Chromium	50.0	46.4		93	80	120		6020
Cobalt	50.0	46.9		94	80	120		6020
Copper	50.0	46.7		93	80	120		6020
Lead	50.0	46.3		93	80	120		6020
Manganese	50.0	45.5		91	80	120		6020
Molybdenum	50.0	45.8		92	80	120		6020
Nickel	50.0	46.8		94	80	120		6020
Selenium	50.0	45.0		90	80	120		6020
Silver	25.0	23.9		95	80	120		6020
Thallium	50.0	45.3		91	80	120		6020
Vanadium	50.0	45.8		92	80	120		6020
Zinc	50.0	46.3		93	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 440-584679/2-A

Lab Name: Eurofins Irvine Job No.: 440-255674-1

Sample Matrix: Solid LCS Source: ME 1 PPM HG1_00406

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.400	0.382		95	80	120		7471A

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 440-584680/2-A

Lab Name: Eurofins Irvine Job No.: 440-255674-1

Sample Matrix: Solid LCS Source: ME 1 PPM HG1_00406

Analyte	Solid(mg/Kg)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.400	0.393		98	80	120		7471A

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

FORM VIIA - IN

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Irvine
Job Number: 440-255674-1
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: 440-255674-1

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: 440-255674-1

SDG Number:

Matrix: Solid | Instrument ID: ICPMS5

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: 440-255674-1

SDG Number:

Matrix: Solid | 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
Vanadium	51	2	1
Zinc	66	20	2.5

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins Irvine

Job Number: 440-255674-1

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: 440-255674-1

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: 440-255674-1

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: 440-255674-1

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: 440-255674-1

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 12/09/2019

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	-0.00004	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	-0.00009	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	0.000347	-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	0.00128	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	-0.000171	-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	0.00000	-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	0.000057	0.000044	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: 440-255674-1

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 12/09/2019

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	-0.00003	0	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	-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: 440-255674-1

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 12/09/2019

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: 440-255674-1

SDG No.:

ICP-AES Instrument ID: ICP8

Date: 12/09/2019

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: 440-255674-1

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: 440-255674-1

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
Vanadium		2700	6020
Zinc		4500	6020

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Irvine Job No: 440-255674-1

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

FORM XI - IN

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Irvine Job No: 440-255674-1

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.: 440-255674-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 440-584711/1-A ^5	12/09/2019 12:48	584711	1.98		50
LCS 440-584711/2-A ^5	12/09/2019 12:48	584711	2.00		50
440-255674-23	12/09/2019 12:48	584711	2.02		50
440-255674-23 MS	12/09/2019 12:48	584711	1.97		50
440-255674-23 MSD	12/09/2019 12:48	584711	2.00		50
440-255674-24	12/09/2019 12:48	584711	2.01		50

<6 MO.

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 440-584717/1-A ^5	12/09/2019 13:03	584717	2.01		50
LCS 440-584717/2-A ^5	12/09/2019 13:03	584717	2.00		50
440-255674-12	12/09/2019 13:03	584717	2.00		50
440-255674-12 MS	12/09/2019 13:03	584717	1.97		50
440-255674-12 MSD	12/09/2019 13:03	584717	2.02		50
440-255674-1	12/09/2019 13:03	584717	2.01		50
440-255674-2	12/09/2019 13:03	584717	1.99		50
440-255674-3	12/09/2019 13:03	584717	2.01		50
440-255674-5	12/09/2019 13:03	584717	2.02		50
440-255674-6	12/09/2019 13:03	584717	2.00		50
440-255674-7	12/09/2019 13:03	584717	1.98		50
440-255674-8	12/09/2019 13:03	584717	2.01		50
440-255674-9	12/09/2019 13:03	584717	2.04		50
440-255674-10	12/09/2019 13:03	584717	1.98		50
440-255674-11	12/09/2019 13:03	584717	1.99		50
440-255674-13	12/09/2019 13:03	584717	2.03		50
440-255674-14	12/09/2019 13:03	584717	2.04		50
440-255674-15	12/09/2019 13:03	584717	1.98		50
440-255674-16	12/09/2019 13:03	584717	2.01		50
440-255674-17	12/09/2019 13:03	584717	2.00		50
440-255674-18	12/09/2019 13:03	584717	2.02		50
440-255674-20	12/09/2019 13:03	584717	1.99		50
440-255674-21	12/09/2019 13:03	584717	1.98		50
440-255674-22	12/09/2019 13:03	584717	1.97		50

< 6 mo.

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 440-584711/1-A ^20	12/09/2019 12:48	584711	1.98		50
LCS 440-584711/2-A ^20	12/09/2019 12:48	584711	2.00		50
440-255674-23	12/09/2019 12:48	584711	2.02		50
440-255674-23 MS	12/09/2019 12:48	584711	1.97		50
440-255674-23 MSD	12/09/2019 12:48	584711	2.00		50
440-255674-24	12/09/2019 12:48	584711	2.01		50

< 6 mo.

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

Prep Method: 3050B

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 440-584717/1-A ^20	12/09/2019 13:03	584717	2.01		50
LCS 440-584717/2-A ^20	12/09/2019 13:03	584717	2.00		50
440-255674-12	12/09/2019 13:03	584717	2.00		50
440-255674-12 MS	12/09/2019 13:03	584717	1.97		50
440-255674-12 MSD	12/09/2019 13:03	584717	2.02		50
440-255674-1	12/09/2019 13:03	584717	2.01		50
440-255674-2	12/09/2019 13:03	584717	1.99		50
440-255674-3	12/09/2019 13:03	584717	2.01		50
440-255674-5	12/09/2019 13:03	584717	2.02		50
440-255674-6	12/09/2019 13:03	584717	2.00		50
440-255674-7	12/09/2019 13:03	584717	1.98		50
440-255674-8	12/09/2019 13:03	584717	2.01		50
440-255674-9	12/09/2019 13:03	584717	2.04		50
440-255674-10	12/09/2019 13:03	584717	1.98		50
440-255674-11	12/09/2019 13:03	584717	1.99		50
440-255674-13	12/09/2019 13:03	584717	2.03		50
440-255674-14	12/09/2019 13:03	584717	2.04		50
440-255674-15	12/09/2019 13:03	584717	1.98		50
440-255674-16	12/09/2019 13:03	584717	2.01		50
440-255674-17	12/09/2019 13:03	584717	2.00		50
440-255674-18	12/09/2019 13:03	584717	2.02		50
440-255674-20	12/09/2019 13:03	584717	1.99		50
440-255674-21	12/09/2019 13:03	584717	1.98		50
440-255674-22	12/09/2019 13:03	584717	1.97		50

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

Prep Method: 7471A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 440-584679/1-A	12/09/2019 11:21	584679	0.50		50
LCS 440-584679/2-A	12/09/2019 11:21	584679	0.50		50
440-255674-12	12/09/2019 11:21	584679	0.50		50
440-255674-12 MS	12/09/2019 11:21	584679	0.51		50
440-255674-12 MSD	12/09/2019 11:21	584679	0.51		50
440-255674-1	12/09/2019 11:21	584679	0.50		50
440-255674-2	12/09/2019 11:21	584679	0.49		50
440-255674-3	12/09/2019 11:21	584679	0.50		50
440-255674-5	12/09/2019 11:21	584679	0.51		50
440-255674-6	12/09/2019 11:21	584679	0.50		50
440-255674-7	12/09/2019 11:21	584679	0.51		50
440-255674-8	12/09/2019 11:21	584679	0.51		50
440-255674-9	12/09/2019 11:21	584679	0.50		50
440-255674-10	12/09/2019 11:21	584679	0.50		50
440-255674-11	12/09/2019 11:21	584679	0.50		50
440-255674-13	12/09/2019 11:21	584679	0.49		50
440-255674-14	12/09/2019 11:21	584679	0.50		50
440-255674-15	12/09/2019 11:21	584679	0.50		50
440-255674-16	12/09/2019 11:21	584679	0.49		50
440-255674-17	12/09/2019 11:21	584679	0.49		50
440-255674-18	12/09/2019 11:21	584679	0.51		50
440-255674-20	12/09/2019 11:21	584679	0.50		50
440-255674-21	12/09/2019 11:21	584679	0.51		50
440-255674-22	12/09/2019 11:21	584679	0.49		50

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FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

Prep Method: 7471A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight (g)	Initial Volume	Final Volume (mL)
MB 440-584680/1-A	12/09/2019 11:23	584680	0.50		50
LCS 440-584680/2-A	12/09/2019 11:23	584680	0.50		50
440-255674-23	12/09/2019 11:23	584680	0.50		50
440-255674-23 MS	12/09/2019 11:23	584680	0.49		50
440-255674-23 MSD	12/09/2019 11:23	584680	0.50		50
440-255674-24	12/09/2019 11:23	584680	0.51		50

FORM XII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

Instrument ID: ICP8 Analysis Method: 6010B

Start Date: 12/10/2019 09:09 End Date: 12/10/2019 13:50

Lab Sample Id	D/F	Type	Time	Al	B	Ca	Fe	K	Li	Mg	Na	P	Sn	Sr	Ti
STD0 440-584991/1 IC			09:09	X	X	X	X	X	X	X	X	X	X	X	X
ICIS 440-584991/2	1		09:11	X	X	X	X	X	X	X	X	X	X	X	X
STD2 440-584991/3 IC			09:14	X	X	X	X	X	X	X	X	X	X	X	X
STD3 440-584991/4 IC			09:16	X	X	X	X	X	X	X	X	X	X	X	X
ICV 440-584991/5	1		09:21	X	X	X	X	X	X	X		X	X	X	X
ZZZZZZ			09:31												
ZZZZZZ			09:33												
ICV 440-584991/8	1		09:39								X				
ZZZZZZ			09:42												
ICB 440-584991/10	1		09:44	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-584991/11	1		09:46	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-584991/12	1		09:49	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			09:51												
ZZZZZZ			09:53												
ZZZZZZ			09:56												
CRI 440-584991/16	1		09:58	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			10:05												
MB 440-584711/1-A ^5	5	T	10:10	X	X	X	X	X	X	X	X	X	X	X	X
LCS 440-584711/2-A ^5	5	T	10:12	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-23 SD	25	T	10:14	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-23	5	T	10:16	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-23 MS	5	T	10:19	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-23 MSD	5	T	10:21	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-23 PDS	5	T	10:23	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-24	5	T	10:26	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			10:28												
ZZZZZZ			10:30												
CCV 440-584991/28	1		10:33	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-584991/29	1		10:35	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			10:39												
ZZZZZZ			10:41												
ZZZZZZ			10:44												
ZZZZZZ			10:46												
CCV 440-584991/34			10:56												
CCB 440-584991/35			11:06												
CCV 440-584991/36			13:41												
CCB 440-584991/37			13:45												
CRI 440-584991/38	1		13:47	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-584991/39	1		13:48	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-584991/40	1		13:50	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.: 440-255674-1

SDG No.:

Instrument ID: ICP8 Analysis Method: 6010B

Start Date: 12/10/2019 09:09 End Date: 12/10/2019 13:50

Lab Sample Id	D/F	Type	Time	Analytes											
				Al	B	Ca	Fe	K	Li	Mg	Na	P	Sn	Sr	Ti
ICIS 440-584992/1	1		09:09	X	X	X	X	X	X	X	X	X	X	X	X
STD1 440-584992/2 IC			09:11	X	X	X	X	X	X	X	X	X	X	X	X
STD2 440-584992/3 IC			09:14	X	X	X	X	X	X	X	X	X	X	X	X
STD3 440-584992/4 IC			09:16	X	X	X	X	X	X	X	X	X	X	X	X
ICV 440-584992/5	1		09:21	X	X	X	X	X	X	X		X	X	X	X
ZZZZZZ			09:31												
ZZZZZZ			09:33												
ICV 440-584992/8	1		09:39								X				
ZZZZZZ			09:42												
ICB 440-584992/10	1		09:44	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-584992/11	1		09:46	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-584992/12	1		09:49	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			09:51												
ZZZZZZ			09:53												
ZZZZZZ			09:56												
CRI 440-584992/16	1		09:58	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			10:05												
CCV 440-584992/18			10:33												
CCB 440-584992/19			10:35												
ZZZZZZ			10:48												
CCV 440-584992/21			10:56												
CCB 440-584992/22			11:06												
ZZZZZZ			11:14												
ZZZZZZ			11:15												
ZZZZZZ			11:17												
ZZZZZZ			11:19												
ZZZZZZ			11:21												
ZZZZZZ			11:23												
ZZZZZZ			11:25												
CCV 440-584992/30			11:32												
CCB 440-584992/31			11:36												
ZZZZZZ			11:38												
ZZZZZZ			11:40												
ZZZZZZ			11:42												
ZZZZZZ			11:44												
ZZZZZZ			11:45												
ZZZZZZ			11:47												
ZZZZZZ			11:49												
ZZZZZZ			11:51												
ZZZZZZ			11:53												
CCV 440-584992/41			12:00												
CCB 440-584992/42			12:05												

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine | Job No.: 440-255674-1

SDG No.:

Instrument ID: ICP8 | Analysis Method: 6010B

Start Date: 12/10/2019 09:09 | End Date: 12/10/2019 13:50

Lab Sample Id	D/F	Type	Time	Analytes											
				Al	B	Ca	Fe	K	Li	Mg	Na	P	Sn	Sr	Ti
ZZZZZZ			12:07												
ZZZZZZ			12:09												
ZZZZZZ			12:11												
ZZZZZZ			12:12												
ZZZZZZ			12:14												
ZZZZZZ			12:16												
ZZZZZZ			12:18												
ZZZZZZ			12:20												
CCV 440-584992/51	1		12:26	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-584992/52	1		12:30	X	X	X	X	X	X	X	X	X	X	X	X
MB 440-584717/1-A ^5	5	T	12:32	X	X	X	X	X	X	X	X	X	X	X	X
LCS 440-584717/2-A ^5	5	T	12:34	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-12 SD	25	T	12:36	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-12	5	T	12:37	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-12 MS	5	T	12:39	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-12 MSD	5	T	12:41	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-12 PDS	5	T	12:43	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-1	5	T	12:45	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-2	5	T	12:47	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-3	5	T	12:48	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-584992/63	1		12:53	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-584992/64	1		12:58	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-5	5	T	13:00	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-6	5	T	13:01	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-7	5	T	13:03	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-8	5	T	13:05	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-9	5	T	13:07	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-10	5	T	13:09	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-11	5	T	13:11	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-13	5	T	13:12	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-14	5	T	13:14	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-15	5	T	13:16	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-584992/75	1		13:21	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-584992/76	1		13:25	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-16	5	T	13:27	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-17	5	T	13:28	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-18	5	T	13:30	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-20	5	T	13:32	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-21	5	T	13:34	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-22	5	T	13:36	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-584992/83	1		13:41	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-584992/84	1		13:45	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.: 440-255674-1

SDG No.:

Instrument ID: ICP8 Analysis Method: 6010B

Start Date: 12/10/2019 09:09 End Date: 12/10/2019 13:50

Lab Sample Id	D/F	Type	Time	Analytes											
				Al	B	Ca	Fe	K	Li	Mg	Na	P	Sn	Sr	Ti
CRI 440-584992/85	1		13:47	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-584992/86	1		13:48	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-584992/87	1		13:50	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.: 440-255674-1

SDG No.:

Instrument ID: ICPMS5 | Analysis Method: 6020

Start Date: 12/09/2019 19:03 | End Date: 12/10/2019 00:09

Lab Sample Id	D/F	Type	Time	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn
RINSE 440-584881/1			19:03																	
ZZZZZZ			19:06																	
STD0 440-584881/3 IC	1		19:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD1 440-584881/4 IC	1		19:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD2 440-584881/5 IC	1		19:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD3 440-584881/6 IC	1		19:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD4 440-584881/7 IC	1		19:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICV 440-584881/8	1		19:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			19:32																	
ICB 440-584881/10	1		19:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			19:36																	
CRI 440-584881/12	1		19:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 440-584881/13	1		19:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-584881/14	1		19:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-584881/15	1		19:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
RINSE 440-584881/16			19:49																	
RINSE 440-584881/17			19:51																	
RINSE 440-584881/18			19:53																	
RINSE 440-584881/19			19:56																	
CCV 440-584881/20	1		22:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-584881/21	1		22:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MB 440-584717/1-A ^20	20	T	22:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCS 440-584717/2-A ^20	20	T	22:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-12	20	T	22:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-12 MS	20	T	22:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-12 MSD	20	T	22:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-12 PDS	20	T	22:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-584881/28	1		23:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-584881/29	1		23:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-12 SD	100	T	23:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-1	20	T	23:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-2	20	T	23:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-3	20	T	23:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-5	20	T	23:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			23:16																	
ZZZZZZ			23:19																	
ZZZZZZ			23:21																	
ZZZZZZ			23:23																	
ZZZZZZ			23:26																	
CCV 440-584881/40	1		23:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-584881/41	1		23:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 440-584881/42	1		00:04	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.: 440-255674-1

SDG No.:

Instrument ID: ICPMS5 Analysis Method: 6020

Start Date: 12/09/2019 19:03 End Date: 12/10/2019 00:09

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							
ICSA 440-584881/43	1		00:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X							
ICSAB 440-584881/44	1		00:09	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.: 440-255674-1

SDG No.:

Instrument ID: ICPMS5 Analysis Method: 6020

Start Date: 12/10/2019 09:53 End Date: 12/10/2019 11:55

Lab Sample Id	D/F	Type	Time	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn
RINSE 440-584960/1			09:53																	
ZZZZZZ			09:55																	
STD0 440-584960/3 IC	1		09:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD1 440-584960/4 IC	1		10:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD2 440-584960/5 IC	1		10:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD3 440-584960/6 IC	1		10:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD4 440-584960/7 IC	1		10:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICV 440-584960/8	1		10:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			10:21																	
ICB 440-584960/10	1		10:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			10:26																	
CRI 440-584960/12	1		10:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 440-584960/13	1		10:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-584960/14	1		10:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-584960/15	1		10:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
RINSE 440-584960/16			10:39																	
RINSE 440-584960/17			10:42																	
RINSE 440-584960/18			10:44																	
CCV 440-584960/19	1		10:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-584960/20	1		10:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-6	20	T	10:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-7	20	T	11:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-10	20	T	11:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-11	20	T	11:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-13	20	T	11:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-15	20	T	11:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-16	20	T	11:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-17	20	T	11:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-584960/29	1		11:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-584960/30	1		11:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-18	20	T	11:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-20	20	T	11:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-21	20	T	11:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-22	20	T	11:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-584960/35	1		11:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-584960/36	1		11:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 440-584960/37	1		11:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-584960/38	1		11:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-584960/39	1		11:55	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.: 440-255674-1

SDG No.:

Instrument ID: ICPMS6 Analysis Method: 6020

Start Date: 12/09/2019 19:14 End Date: 12/09/2019 22:13

Lab Sample Id	D/F	Type	Time	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn
RINSE 440-584875/1			19:14																	
RINSE 440-584875/2			19:16																	
STD0 440-584875/3 IC	1		19:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD1 440-584875/4 IC	1		19:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD2 440-584875/5 IC	1		19:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD3 440-584875/6 IC	1		19:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD4 440-584875/7 IC	1		19:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICV 440-584875/8	1		19:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			19:32																	
ICB 440-584875/10	1		19:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			19:41																	
CRI 440-584875/12	1		19:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 440-584875/13	1		19:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-584875/14	1		19:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-584875/15	1		19:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
RINSE 440-584875/16			19:51																	
RINSE 440-584875/17			19:53																	
RINSE 440-584875/18			19:55																	
RINSE 440-584875/19			19:57																	
CCV 440-584875/20	1		19:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-584875/21	1		20:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MB 440-584711/1-A ^20	20	T	20:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCS 440-584711/2-A ^20	20	T	20:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			20:19																	
ZZZZZZ			20:21																	
ZZZZZZ			20:23																	
ZZZZZZ			20:25																	
ZZZZZZ			20:27																	
CCV 440-584875/29	1		20:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-584875/30	1		20:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			20:33																	
ZZZZZZ			20:36																	
ZZZZZZ			20:38																	
ZZZZZZ			20:40																	
ZZZZZZ			20:42																	
ZZZZZZ			20:44																	
CCV 440-584875/37	1		20:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-584875/38	1		20:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-23	20	T	20:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-23 MS	20	T	21:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-23 MSD	20	T	21:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-23 PDS	20	T	21:04	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.: 440-255674-1

SDG No.:

Instrument ID: ICPMS6 | Analysis Method: 6020

Start Date: 12/09/2019 19:14 | End Date: 12/09/2019 22:13

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
440-255674-23 SD	100	T	21:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-24	20	T	21:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			21:14																	
ZZZZZZ			21:16																	
ZZZZZZ			21:24																	
CCV 440-584875/48	1		21:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-584875/49	1		21:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			21:41																	
ZZZZZZ			21:43																	
ZZZZZZ			21:46																	
RINSE 440-584875/53			21:48																	
RINSE 440-584875/54			21:55																	
ZZZZZZ			21:57																	
CCV 440-584875/56			22:03																	
CCB 440-584875/57			22:05																	
CRI 440-584875/58	1		22:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-584875/59	1		22:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-584875/60	1		22:13	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.: 440-255674-1

SDG No.:

Instrument ID: ICPMS6 | Analysis Method: 6020

Start Date: 12/10/2019 08:58 | End Date: 12/10/2019 10:42

Lab Sample Id	D/F	Type	Time	Ag	As	Ba	Be	Cd	Co	Cr	Cu	Mn	Mo	Ni	Pb	Sb	Se	Tl	V	Zn
RINSE 440-584938/1			08:58																	
RINSE 440-584938/2			09:00																	
STD0 440-584938/3 IC	1		09:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD1 440-584938/4 IC	1		09:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD2 440-584938/5 IC	1		09:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD3 440-584938/6 IC	1		09:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD4 440-584938/7 IC	1		09:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICV 440-584938/8	1		09:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			09:15																	
ICB 440-584938/10	1		09:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			09:19																	
CRI 440-584938/12	1		09:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 440-584938/13	1		09:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-584938/14	1		09:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-584938/15	1		09:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
RINSE 440-584938/16			09:31																	
RINSE 440-584938/17			09:33																	
RINSE 440-584938/18			09:35																	
RINSE 440-584938/19			09:37																	
CCV 440-584938/20	1		09:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-584938/21	1		09:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			09:44																	
ZZZZZZ			09:46																	
440-255674-8	20	T	09:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-9	20	T	09:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			09:52																	
ZZZZZZ			09:54																	
ZZZZZZ			09:56																	
440-255674-14	20	T	09:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-584938/30	1		10:08	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-584938/31	1		10:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			10:12																	
ZZZZZZ			10:14																	
ZZZZZZ			10:16																	
ZZZZZZ			10:18																	
ZZZZZZ			10:20																	
ZZZZZZ			10:23																	
ZZZZZZ			10:25																	
CCV 440-584938/39			10:34																	
CCB 440-584938/40			10:36																	
CRI 440-584938/41	1		10:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-584938/42	1		10:40	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.: 440-255674-1

SDG No.:

Instrument ID: ICPMS6 Analysis Method: 6020

Start Date: 12/10/2019 08:58 End Date: 12/10/2019 10:42

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								
ICSAB 440-584938/43	1		10:42	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.: 440-255674-1

SDG No.:

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

Start Date: 12/10/2019 10:50 | End Date: 12/10/2019 15:30

Lab Sample Id	D/F	Type	Time	Analytes Hg
IC 440-584674/6-A			10:50	X
IC 440-584674/7-A			10:52	X
IC 440-584674/8-A			10:54	X
IC 440-584674/9-A			10:57	X
IC 440-584674/10-A			10:59	X
IC 440-584674/11-A			11:01	X
ICV 440-584674/1-A	1		11:03	X
ICB 440-584674/2-A	1		11:06	X
CRA 440-584674/5-A	1		11:08	X
CCV 440-584674/3-A	1		11:10	X
CCB 440-584674/4-A	1		11:12	X
MB 440-584679/1-A	1	T	11:15	X
LCS 440-584679/2-A	1	T	11:17	X
440-255674-12	1	T	11:19	X
440-255674-12 MS	1	T	11:21	X
440-255674-12 MSD	1	T	11:24	X
440-255674-1	1	T	11:27	X
440-255674-2	1	T	11:30	X
440-255674-3	1	T	11:33	X
440-255674-5	1	T	11:35	X
440-255674-6	1	T	11:38	X
CCV 440-584674/3-A	1		11:40	X
CCB 440-584674/4-A	1		11:43	X
440-255674-7	1	T	11:45	X
440-255674-8	1	T	11:47	X
440-255674-9	1	T	11:50	X
440-255674-10	1	T	11:53	X
440-255674-11	1	T	11:55	X
440-255674-13	1	T	11:58	X
440-255674-14	1	T	12:01	X
440-255674-15	1	T	12:03	X
440-255674-16	1	T	12:05	X
440-255674-17	1	T	12:08	X
CCV 440-584674/3-A	1		12:10	X
CCB 440-584674/4-A	1		12:12	X
440-255674-18	1	T	12:15	X
440-255674-20	1	T	12:17	X
440-255674-21	1	T	12:19	X
440-255674-22	1	T	12:21	X
ZZZZZZ			12:24	
CRA 440-584674/5-A	1		12:26	X
CCV 440-584674/3-A	1		12:28	X

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine | Job No.: 440-255674-1

SDG No.:

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

Start Date: 12/10/2019 10:50 | End Date: 12/10/2019 15:30

Lab Sample Id	D/F	Type	Time	Analytes: Hg
CCB 440-584674/4-A	1		12:31	X
CCV 440-584674/3-A	1		12:36	X
CCB 440-584674/4-A	1		12:39	X
MB 440-584680/1-A	1	T	12:41	X
LCS 440-584680/2-A	1	T	12:43	X
440-255674-23	1	T	12:45	X
440-255674-23 MS	1	T	12:48	X
440-255674-23 MSD	1	T	12:50	X
440-255674-24	1	T	12:53	X
ZZZZZZ			12:56	
ZZZZZZ			12:59	
ZZZZZZ			13:01	
ZZZZZZ			13:05	
CCV 440-584674/3-A	1		13:08	X
CCB 440-584674/4-A	1		13:11	X
ZZZZZZ			13:14	
ZZZZZZ			13:16	
ZZZZZZ			13:19	
ZZZZZZ			13:22	
ZZZZZZ			13:24	
ZZZZZZ			13:27	
ZZZZZZ			13:30	
ZZZZZZ			13:32	
ZZZZZZ			13:35	
ZZZZZZ			13:37	
CCV 440-584674/3-A			13:40	
CCB 440-584674/4-A			13:42	
ZZZZZZ			13:44	
ZZZZZZ			13:46	
ZZZZZZ			13:49	
ZZZZZZ			13:51	
ZZZZZZ			13:53	
ZZZZZZ			13:56	
ZZZZZZ			13:58	
ZZZZZZ			14:00	
ZZZZZZ			14:04	
ZZZZZZ			14:07	
CCV 440-584674/3-A			14:10	
CCB 440-584674/4-A			14:13	
ZZZZZZ			14:15	
ZZZZZZ			14:17	
ZZZZZZ			14:20	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

Instrument ID: CV-HG4 Analysis Method: 7471A

Start Date: 12/10/2019 10:50 End Date: 12/10/2019 15:30

Lab Sample Id	D/F	Type	Time	Hg
ZZZZZZ			14:22	
ZZZZZZ			14:24	
ZZZZZZ			14:27	
ZZZZZZ			14:29	
ZZZZZZ			14:31	
ZZZZZZ			14:33	
ZZZZZZ			14:36	
CCV 440-584674/3-A			14:38	
CCB 440-584674/4-A			14:40	
ZZZZZZ			14:42	
ZZZZZZ			14:44	
ZZZZZZ			14:46	
ZZZZZZ			14:49	
ZZZZZZ			14:51	
ZZZZZZ			14:53	
ZZZZZZ			14:56	
ZZZZZZ			14:59	
ZZZZZZ			15:01	
ZZZZZZ			15:03	
CCV 440-584674/3-A			15:06	
CCB 440-584674/4-A			15:08	
ZZZZZZ			15:11	
ZZZZZZ			15:13	
ZZZZZZ			15:15	
ZZZZZZ			15:18	
ZZZZZZ			15:20	
ZZZZZZ			15:23	
CRA 440-584674/5-A	1		15:25	X
CCV 440-584674/3-A			15:28	
CCB 440-584674/4-A			15:30	

Prep Types:
T = Total/NA

FORM XIII-IN

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

ICP Instrument ID: ICP8 Start Date: 12/10/2019 End Date: 12/10/2019

Lab Sample ID	Time	Internal Standards %RI For: Element Y 371.029	Q	Element	Q	Element	Q	Element	Q	Element	Q
ICIS 440-584992/1	09:09										
ICV 440-584992/5	09:21	100									
ICV 440-584992/8	09:39	100									
ICB 440-584992/10	09:44	100									
ICSA 440-584992/11	09:46	89									
ICSAB 440-584992/12	09:49	88									
CRI 440-584992/16	09:58	101									
CCV 440-584992/51	12:26	97									
CCB 440-584992/52	12:30	96									
MB 440-584717/1-A ^5	12:32	97									
LCS 440-584717/2-A ^5	12:34	97									
440-255674-12 SD	12:36	97									
440-255674-12	12:37	96									
440-255674-12 MS	12:39	96									
440-255674-12 MSD	12:41	96									
440-255674-12 PDS	12:43	96									
440-255674-1	12:45	95									
440-255674-2	12:47	95									
440-255674-3	12:48	96									
CCV 440-584992/63	12:53	96									
CCB 440-584992/64	12:58	96									
440-255674-5	13:00	96									
440-255674-6	13:01	95									
440-255674-7	13:03	95									
440-255674-8	13:05	95									
440-255674-9	13:07	96									
440-255674-10	13:09	95									
440-255674-11	13:11	95									
440-255674-13	13:12	95									
440-255674-14	13:14	95									
440-255674-15	13:16	95									
CCV 440-584992/75	13:21	94									
CCB 440-584992/76	13:25	93									
440-255674-16	13:27	93									
440-255674-17	13:28	94									
440-255674-18	13:30	93									
440-255674-20	13:32	93									
440-255674-21	13:34	93									
440-255674-22	13:36	93									

30-120%

FORM XV - IN

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

ICP Instrument ID: ICP8 Start Date: 12/10/2019 End Date: 12/10/2019

Lab Sample ID	Time	Internal Standards %RI For: Element Y 371.029	Q	Element	Q	Element	Q	Element	Q	Element	Q
CCV 440-584992/83	13:41	93									
CCB 440-584992/84	13:45	92									
CRI 440-584992/85	13:47	92									
ICSA 440-584992/86	13:48	82									
ICSAB 440-584992/87	13:50	82									

FORM XV - IN

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

ICP Instrument ID: ICP8 Start Date: 12/10/2019 End Date: 12/10/2019

Lab Sample ID	Time	Internal Standards %RI For: Element Y 371.029	Q	Element	Q	Element	Q	Element	Q	Element	Q
ICIS 440-584991/2	09:11										
ICV 440-584991/5	09:21	100									
ICV 440-584991/8	09:39	100									
ICB 440-584991/10	09:44	100									
ICSA 440-584991/11	09:46	89									
ICSAB 440-584991/12	09:49	88									
CRI 440-584991/16	09:58	101									
MB 440-584711/1-A ^5	10:10	101									
LCS 440-584711/2-A ^5	10:12	101									
440-255674-23 SD	10:14	100									
440-255674-23	10:16	100									
440-255674-23 MS	10:19	99									
440-255674-23 MSD	10:21	99									
440-255674-23 PDS	10:23	100									
440-255674-24	10:26	99									
CCV 440-584991/28	10:33	100									
CCB 440-584991/29	10:35	100									
CRI 440-584991/38	13:47	92									
ICSA 440-584991/39	13:48	82									
ICSAB 440-584991/40	13:50	82									

FORM XV - IN

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

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

ICP-MS Instrument ID: ICPMS5 Start Date: 12/09/2019 End Date: 12/10/2019

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 440-584881/3 IC	19:08	100		100		100		100			
STD1 440-584881/4 IC	19:11	102		99		100		102			
STD2 440-584881/5 IC	19:13	103		99		100		100			
STD3 440-584881/6 IC	19:15	103		100		102		101			
STD4 440-584881/7 IC	19:18	105		101		103		101			
ICV 440-584881/8	19:20	102		100		104		101			
ICB 440-584881/10	19:34	102		98		102		101			
CRI 440-584881/12	19:39	105		100		102		102			
CRI 440-584881/13	19:41	103		100		103		102			
ICSA 440-584881/14	19:44	106		96		93		97			
ICSAB 440-584881/15	19:46	105		98		96		98			
CCV 440-584881/20	22:40	110		108		109		103			
CCB 440-584881/21	22:43	107		107		107		102			
MB 440-584717/1-A ^20	22:45	108		105		106		100			
LCS 440-584717/2-A ^20	22:48	111		106		107		101			
440-255674-12	22:50	114		110		106		102			
440-255674-12 MS	22:53	117		112		108		102			
440-255674-12 MSD	22:55	116		111		109		103			
440-255674-12 PDS	22:57	114		112		108		102			
CCV 440-584881/28	23:00	113		111		112		105			
CCB 440-584881/29	23:02	111		111		109		103			
440-255674-12 SD	23:04	114		111		110		104			
440-255674-1	23:07	120		113		109		104			
440-255674-2	23:09	120		113		109		104			
440-255674-3	23:12	119		115		110		104			
440-255674-5	23:14	119		115		111		104			
CCV 440-584881/40	23:28	119		117		116		105			
CCB 440-584881/41	23:31	117		116		113		104			
CRI 440-584881/42	00:04	119		116		114		107			
ICSA 440-584881/43	00:07	116		109		103		101			
ICSAB 440-584881/44	00:09	115		108		104		101			

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

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

ICP-MS Instrument ID: ICPMS5 Start Date: 12/10/2019 End Date: 12/10/2019

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 440-584960/3 IC	09:58	100		100		100		100			
STD1 440-584960/4 IC	10:00	100		100		100		100			
STD2 440-584960/5 IC	10:03	102		101		100		101			
STD3 440-584960/6 IC	10:05	101		101		101		101			
STD4 440-584960/7 IC	10:08	103		101		102		101			
ICV 440-584960/8	10:10	100		101		103		100			
ICB 440-584960/10	10:23	100		100		99		100			
CRI 440-584960/12	10:28	101		100		100		101			
CRI 440-584960/13	10:31	102		99		101		100			
ICSA 440-584960/14	10:35	104		95		92		96			
ICSAB 440-584960/15	10:37	99		94		92		95			
CCV 440-584960/19	10:47	96		96		98		97			
CCB 440-584960/20	10:49	94		95		97		95			
440-255674-6	10:57	100		94		92		94			
440-255674-7	11:09	98		94		91		93			
440-255674-10	11:11	99		96		93		95			
440-255674-11	11:13	97		97		93		94			
440-255674-13	11:16	99		98		94		96			
440-255674-15	11:18	100		97		94		95			
440-255674-16	11:21	100		96		94		96			
440-255674-17	11:23	101		97		94		97			
CCV 440-584960/29	11:28	98		97		97		96			
CCB 440-584960/30	11:30	92		96		95		96			
440-255674-18	11:33	101		96		92		95			
440-255674-20	11:35	99		97		93		95			
440-255674-21	11:38	101		98		95		97			
440-255674-22	11:40	102		99		96		96			
CCV 440-584960/35	11:45	96		98		96		97			
CCB 440-584960/36	11:48	92		95		94		94			
CRI 440-584960/37	11:50	94		95		95		97			
ICSA 440-584960/38	11:53	96		93		87		92			
ICSAB 440-584960/39	11:55	93		92		88		93			

FORM XV - IN

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

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

ICP-MS Instrument ID: ICPMS6 Start Date: 12/09/2019 End Date: 12/09/2019

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 440-584875/3 IC	19:18	100		100		100		100			
STD1 440-584875/4 IC	19:20	100		100		100		100			
STD2 440-584875/5 IC	19:22	101		100		101		100			
STD3 440-584875/6 IC	19:24	103		101		103		100			
STD4 440-584875/7 IC	19:26	103		103		104		102			
ICV 440-584875/8	19:28	103		103		105		102			
ICB 440-584875/10	19:39	102		102		103		101			
CRI 440-584875/12	19:43	104		103		104		102			
CRI 440-584875/13	19:45	106		104		106		103			
ICSA 440-584875/14	19:47	109		105		103		102			
ICSAB 440-584875/15	19:49	118		111		106		103			
CCV 440-584875/20	19:59	113		112		111		105			
CCB 440-584875/21	20:01	112		110		109		103			
MB 440-584711/1-A ^20	20:15	109		106		106		101			
LCS 440-584711/2-A ^20	20:17	111		108		107		101			
CCV 440-584875/29	20:29	114		114		113		105			
CCB 440-584875/30	20:31	112		110		110		103			
CCV 440-584875/37	20:46	115		113		113		105			
CCB 440-584875/38	20:48	112		112		110		103			
440-255674-23	20:58	114		111		108		103			
440-255674-23 MS	21:00	116		113		110		104			
440-255674-23 MSD	21:02	117		113		110		104			
440-255674-23 PDS	21:04	115		112		110		103			
440-255674-23 SD	21:10	116		115		112		106			
440-255674-24	21:12	115		113		109		103			
CCV 440-584875/48	21:37	114		113		113		105			
CCB 440-584875/49	21:39	113		112		110		104			
CRI 440-584875/58	22:09	112		110		110		103			
ICSA 440-584875/59	22:11	111		106		104		102			
ICSAB 440-584875/60	22:13	119		112		107		104			

FORM XV - IN

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

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

ICP-MS Instrument ID: ICPMS6 Start Date: 12/10/2019 End Date: 12/10/2019

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 440-584938/3 IC	09:02	100		100		100		100			
STD1 440-584938/4 IC	09:04	101		101		101		101			
STD2 440-584938/5 IC	09:06	100		100		101		101			
STD3 440-584938/6 IC	09:08	101		100		101		102			
STD4 440-584938/7 IC	09:10	101		101		102		103			
ICV 440-584938/8	09:12	100		100		103		103			
ICB 440-584938/10	09:17	98		99		100		101			
CRI 440-584938/12	09:21	98		98		100		102			
CRI 440-584938/13	09:23	98		98		101		102			
ICSA 440-584938/14	09:26	95		93		93		100			
ICSAB 440-584938/15	09:28	100		96		95		101			
CCV 440-584938/20	09:39	96		96		100		102			
CCB 440-584938/21	09:41	93		94		96		101			
440-255674-8	09:48	93		93		95		100			
440-255674-9	09:50	94		93		96		101			
440-255674-14	09:58	91		92		94		100			
CCV 440-584938/30	10:08	92		93		97		101			
CCB 440-584938/31	10:10	90		91		94		99			
CRI 440-584938/41	10:38	91		91		95		100			
ICSA 440-584938/42	10:40	91		89		90		99			
ICSAB 440-584938/43	10:42	96		93		93		101			

FORM XV - IN

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-255674-1

SDG No.:

Batch Number: 584711 Batch Start Date: 12/09/19 12:48 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 17:48

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP STD A 00003	ICP STD B 00003	ME 1:1 HNO3 00291	ME 30% H2O2 00108
MB 440-584711/1		3050B, 6010B		1.98 g	50 mL			5 mL	3 mL
LCS 440-584711/2		3050B, 6010B		2.00 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-23	STSB31_3-6	3050B, 6010B	T	2.02 g	50 mL			5 mL	3 mL
440-255674-B-23 MS	STSB31_3-6	3050B, 6010B	T	1.97 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-23 MSD	STSB31_3-6	3050B, 6010B	T	2.00 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-24	STSB31_6-15	3050B, 6010B	T	2.01 g	50 mL			5 mL	3 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00544	ME HNO3 00546
MB 440-584711/1		3050B, 6010B		5 mL	5 mL
LCS 440-584711/2		3050B, 6010B		5 mL	5 mL
440-255674-B-23	STSB31_3-6	3050B, 6010B	T	5 mL	5 mL
440-255674-B-23 MS	STSB31_3-6	3050B, 6010B	T	5 mL	5 mL
440-255674-B-23 MSD	STSB31_3-6	3050B, 6010B	T	5 mL	5 mL
440-255674-B-24	STSB31_6-15	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.: 440-255674-1

SDG No.:

Batch Number: 584711 Batch Start Date: 12/09/19 12:48 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 17:48

Batch Notes	
Balance ID	57
Batch Comment	Spike A&B=500 ul
Blank Soil Lot Number	25280382
Temperature - Corrected - End	96 Degrees C
Temperature - Corrected - Start	96 Degrees C
Digestion End Time	12/09/2019 17:30
Digestion Start Time	12/09/2019 14:00
Digestion Unit ID	12
Digestion Tube/Cup ID	1906257
Filter ID	19-107 Gr. 389
Hydrogen Peroxide ID	5960627
Hydrochloric Acid ID	5957716
Nitric Acid ID	5971078
Pipette/Syringe/Dispenser ID	#902
Analyst ID - Spike Analyst	NE
Thermometer ID	P-128 (Loc. # A9) CF=+1.00
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 Irvine Job No.: 440-255674-1

SDG No.:

Batch Number: 584717 Batch Start Date: 12/09/19 13:03 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 18:06

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP STD A 00003	ICP STD B 00003	ME 1:1 HNO3 00291	ME 30% H2O2 00108
MB 440-584717/1		3050B, 6010B		2.01 g	50 mL			5 mL	3 mL
LCS 440-584717/2		3050B, 6010B		2.00 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-C-12	STSB29_0.5-3	3050B, 6010B	T	2.00 g	50 mL			5 mL	3 mL
440-255674-B-12 MS	STSB29_0.5-3	3050B, 6010B	T	1.97 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-12 MSD	STSB29_0.5-3	3050B, 6010B	T	2.02 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-1	STSB27_0-0.5	3050B, 6010B	T	2.01 g	50 mL			5 mL	3 mL
440-255674-B-2	STSB27_0.5-3	3050B, 6010B	T	1.99 g	50 mL			5 mL	3 mL
440-255674-B-3	STSB27_3-6	3050B, 6010B	T	2.01 g	50 mL			5 mL	3 mL
440-255674-B-5	STSB27_6-15	3050B, 6010B	T	2.02 g	50 mL			5 mL	3 mL
440-255674-B-6	STSB28_0-0.5	3050B, 6010B	T	2.00 g	50 mL			5 mL	3 mL
440-255674-B-7	STSB28-FD_0-0.5	3050B, 6010B	T	1.98 g	50 mL			5 mL	3 mL
440-255674-B-8	STSB28_0.5-3	3050B, 6010B	T	2.01 g	50 mL			5 mL	3 mL
440-255674-B-9	STSB28_3-6	3050B, 6010B	T	2.04 g	50 mL			5 mL	3 mL
440-255674-B-10	STSB28_6-15	3050B, 6010B	T	1.98 g	50 mL			5 mL	3 mL
440-255674-B-11	STSB29_0-0.5	3050B, 6010B	T	1.99 g	50 mL			5 mL	3 mL
440-255674-B-13	STSB29_3-6	3050B, 6010B	T	2.03 g	50 mL			5 mL	3 mL
440-255674-B-14	STSB29_6-15	3050B, 6010B	T	2.04 g	50 mL			5 mL	3 mL
440-255674-B-15	STSB29-FD_6-15	3050B, 6010B	T	1.98 g	50 mL			5 mL	3 mL
440-255674-B-16	STSB30_0-0.5	3050B, 6010B	T	2.01 g	50 mL			5 mL	3 mL
440-255674-B-17	STSB30_0.5-3	3050B, 6010B	T	2.00 g	50 mL			5 mL	3 mL
440-255674-B-18	STSB30_3-6	3050B, 6010B	T	2.02 g	50 mL			5 mL	3 mL
440-255674-B-20	STSB30_6-15	3050B, 6010B	T	1.99 g	50 mL			5 mL	3 mL
440-255674-B-21	STSB31_0-0.5	3050B, 6010B	T	1.98 g	50 mL			5 mL	3 mL
440-255674-B-22	STSB31_0.5-3	3050B, 6010B	T	1.97 g	50 mL			5 mL	3 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00544	ME HNO3 00546	
MB 440-584717/1		3050B, 6010B		5 mL	5 mL	
LCS 440-584717/2		3050B, 6010B		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.: 440-255674-1

SDG No.:

Batch Number: 584717 Batch Start Date: 12/09/19 13:03 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 18:06

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00544	ME HNO3 00546
440-255674-C-12	STSB29_0.5-3	3050B, 6010B	T	5 mL	5 mL
440-255674-B-12 MS	STSB29_0.5-3	3050B, 6010B	T	5 mL	5 mL
440-255674-B-12 MSD	STSB29_0.5-3	3050B, 6010B	T	5 mL	5 mL
440-255674-B-1	STSB27_0-0.5	3050B, 6010B	T	5 mL	5 mL
440-255674-B-2	STSB27_0.5-3	3050B, 6010B	T	5 mL	5 mL
440-255674-B-3	STSB27_3-6	3050B, 6010B	T	5 mL	5 mL
440-255674-B-5	STSB27_6-15	3050B, 6010B	T	5 mL	5 mL
440-255674-B-6	STSB28_0-0.5	3050B, 6010B	T	5 mL	5 mL
440-255674-B-7	STSB28-FD_0-0.5	3050B, 6010B	T	5 mL	5 mL
440-255674-B-8	STSB28_0.5-3	3050B, 6010B	T	5 mL	5 mL
440-255674-B-9	STSB28_3-6	3050B, 6010B	T	5 mL	5 mL
440-255674-B-10	STSB28_6-15	3050B, 6010B	T	5 mL	5 mL
440-255674-B-11	STSB29_0-0.5	3050B, 6010B	T	5 mL	5 mL
440-255674-B-13	STSB29_3-6	3050B, 6010B	T	5 mL	5 mL
440-255674-B-14	STSB29_6-15	3050B, 6010B	T	5 mL	5 mL
440-255674-B-15	STSB29-FD_6-15	3050B, 6010B	T	5 mL	5 mL
440-255674-B-16	STSB30_0-0.5	3050B, 6010B	T	5 mL	5 mL
440-255674-B-17	STSB30_0.5-3	3050B, 6010B	T	5 mL	5 mL
440-255674-B-18	STSB30_3-6	3050B, 6010B	T	5 mL	5 mL
440-255674-B-20	STSB30_6-15	3050B, 6010B	T	5 mL	5 mL
440-255674-B-21	STSB31_0-0.5	3050B, 6010B	T	5 mL	5 mL
440-255674-B-22	STSB31_0.5-3	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.: 440-255674-1

SDG No.:

Batch Number: 584717 Batch Start Date: 12/09/19 13:03 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 18:06

Batch Notes	
Balance ID	57
Batch Comment	Spike A&B=500 ul
Blank Soil Lot Number	25280382
Temperature - Corrected - End	96 Degrees C
Temperature - Corrected - Start	96 Degrees C
Digestion End Time	12/09/2019 17:30
Digestion Start Time	12/09/2019 14:00
Digestion Unit ID	3
Digestion Tube/Cup ID	1906257
Filter ID	19-107 Gr. 389
Hydrogen Peroxide ID	5960627
Hydrochloric Acid ID	5957716
Nitric Acid ID	5971078
Pipette/Syringe/Dispenser ID	#902
Analyst ID - Spike Analyst	NE
Thermometer ID	P-090 (Loc. # A9) CF=-1.00
Temperature - Uncorrected - End	97 Degrees C
Temperature - Uncorrected - Start	97 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.: 440-255674-1

SDG No.:

Batch Number: 584711 Batch Start Date: 12/09/19 12:48 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 17:48

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP STD A 00003	ICP STD B 00003	ME 1:1 HNO3 00291	ME 30% H2O2 00108
MB 440-584711/1		3050B, 6020		1.98 g	50 mL			5 mL	3 mL
LCS 440-584711/2		3050B, 6020		2.00 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-23	STSB31_3-6	3050B, 6020	T	2.02 g	50 mL			5 mL	3 mL
440-255674-B-23 MS	STSB31_3-6	3050B, 6020	T	1.97 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-23 MSD	STSB31_3-6	3050B, 6020	T	2.00 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-24	STSB31_6-15	3050B, 6020	T	2.01 g	50 mL			5 mL	3 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00544	ME HNO3 00546
MB 440-584711/1		3050B, 6020		5 mL	5 mL
LCS 440-584711/2		3050B, 6020		5 mL	5 mL
440-255674-B-23	STSB31_3-6	3050B, 6020	T	5 mL	5 mL
440-255674-B-23 MS	STSB31_3-6	3050B, 6020	T	5 mL	5 mL
440-255674-B-23 MSD	STSB31_3-6	3050B, 6020	T	5 mL	5 mL
440-255674-B-24	STSB31_6-15	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.: 440-255674-1

SDG No.:

Batch Number: 584711 Batch Start Date: 12/09/19 12:48 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 17:48

Batch Notes	
Balance ID	57
Batch Comment	Spike A&B=500 ul
Blank Soil Lot Number	25280382
Temperature - Corrected - End	96 Degrees C
Temperature - Corrected - Start	96 Degrees C
Digestion End Time	12/09/2019 17:30
Digestion Start Time	12/09/2019 14:00
Digestion Unit ID	12
Digestion Tube/Cup ID	1906257
Filter ID	19-107 Gr. 389
Hydrogen Peroxide ID	5960627
Hydrochloric Acid ID	5957716
Nitric Acid ID	5971078
Pipette/Syringe/Dispenser ID	#902
Analyst ID - Spike Analyst	NE
Thermometer ID	P-128 (Loc. # A9) CF=+1.00
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 Irvine Job No.: 440-255674-1

SDG No.:

Batch Number: 584717 Batch Start Date: 12/09/19 13:03 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 18:06

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ICP STD A 00003	ICP STD B 00003	ME 1:1 HNO3 00291	ME 30% H2O2 00108
MB 440-584717/1		3050B, 6020		2.01 g	50 mL			5 mL	3 mL
LCS 440-584717/2		3050B, 6020		2.00 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-C-12	STSB29_0.5-3	3050B, 6020	T	2.00 g	50 mL			5 mL	3 mL
440-255674-B-12 MS	STSB29_0.5-3	3050B, 6020	T	1.97 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-12 MSD	STSB29_0.5-3	3050B, 6020	T	2.02 g	50 mL	0.5 mL	0.5 mL	5 mL	3 mL
440-255674-B-1	STSB27_0-0.5	3050B, 6020	T	2.01 g	50 mL			5 mL	3 mL
440-255674-B-2	STSB27_0.5-3	3050B, 6020	T	1.99 g	50 mL			5 mL	3 mL
440-255674-B-3	STSB27_3-6	3050B, 6020	T	2.01 g	50 mL			5 mL	3 mL
440-255674-B-5	STSB27_6-15	3050B, 6020	T	2.02 g	50 mL			5 mL	3 mL
440-255674-B-6	STSB28_0-0.5	3050B, 6020	T	2.00 g	50 mL			5 mL	3 mL
440-255674-B-7	STSB28-FD_0-0.5	3050B, 6020	T	1.98 g	50 mL			5 mL	3 mL
440-255674-B-8	STSB28_0.5-3	3050B, 6020	T	2.01 g	50 mL			5 mL	3 mL
440-255674-B-9	STSB28_3-6	3050B, 6020	T	2.04 g	50 mL			5 mL	3 mL
440-255674-B-10	STSB28_6-15	3050B, 6020	T	1.98 g	50 mL			5 mL	3 mL
440-255674-B-11	STSB29_0-0.5	3050B, 6020	T	1.99 g	50 mL			5 mL	3 mL
440-255674-B-13	STSB29_3-6	3050B, 6020	T	2.03 g	50 mL			5 mL	3 mL
440-255674-B-14	STSB29_6-15	3050B, 6020	T	2.04 g	50 mL			5 mL	3 mL
440-255674-B-15	STSB29-FD_6-15	3050B, 6020	T	1.98 g	50 mL			5 mL	3 mL
440-255674-B-16	STSB30_0-0.5	3050B, 6020	T	2.01 g	50 mL			5 mL	3 mL
440-255674-B-17	STSB30_0.5-3	3050B, 6020	T	2.00 g	50 mL			5 mL	3 mL
440-255674-B-18	STSB30_3-6	3050B, 6020	T	2.02 g	50 mL			5 mL	3 mL
440-255674-B-20	STSB30_6-15	3050B, 6020	T	1.99 g	50 mL			5 mL	3 mL
440-255674-B-21	STSB31_0-0.5	3050B, 6020	T	1.98 g	50 mL			5 mL	3 mL
440-255674-B-22	STSB31_0.5-3	3050B, 6020	T	1.97 g	50 mL			5 mL	3 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00544	ME HNO3 00546		
MB 440-584717/1		3050B, 6020		5 mL	5 mL		
LCS 440-584717/2		3050B, 6020		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.: 440-255674-1

SDG No.:

Batch Number: 584717 Batch Start Date: 12/09/19 13:03 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 18:06

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HCl 00544	ME HNO3 00546
440-255674-C-12	STSB29_0.5-3	3050B, 6020	T	5 mL	5 mL
440-255674-B-12 MS	STSB29_0.5-3	3050B, 6020	T	5 mL	5 mL
440-255674-B-12 MSD	STSB29_0.5-3	3050B, 6020	T	5 mL	5 mL
440-255674-B-1	STSB27_0-0.5	3050B, 6020	T	5 mL	5 mL
440-255674-B-2	STSB27_0.5-3	3050B, 6020	T	5 mL	5 mL
440-255674-B-3	STSB27_3-6	3050B, 6020	T	5 mL	5 mL
440-255674-B-5	STSB27_6-15	3050B, 6020	T	5 mL	5 mL
440-255674-B-6	STSB28_0-0.5	3050B, 6020	T	5 mL	5 mL
440-255674-B-7	STSB28-FD_0-0.5	3050B, 6020	T	5 mL	5 mL
440-255674-B-8	STSB28_0.5-3	3050B, 6020	T	5 mL	5 mL
440-255674-B-9	STSB28_3-6	3050B, 6020	T	5 mL	5 mL
440-255674-B-10	STSB28_6-15	3050B, 6020	T	5 mL	5 mL
440-255674-B-11	STSB29_0-0.5	3050B, 6020	T	5 mL	5 mL
440-255674-B-13	STSB29_3-6	3050B, 6020	T	5 mL	5 mL
440-255674-B-14	STSB29_6-15	3050B, 6020	T	5 mL	5 mL
440-255674-B-15	STSB29-FD_6-15	3050B, 6020	T	5 mL	5 mL
440-255674-B-16	STSB30_0-0.5	3050B, 6020	T	5 mL	5 mL
440-255674-B-17	STSB30_0.5-3	3050B, 6020	T	5 mL	5 mL
440-255674-B-18	STSB30_3-6	3050B, 6020	T	5 mL	5 mL
440-255674-B-20	STSB30_6-15	3050B, 6020	T	5 mL	5 mL
440-255674-B-21	STSB31_0-0.5	3050B, 6020	T	5 mL	5 mL
440-255674-B-22	STSB31_0.5-3	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.: 440-255674-1

SDG No.:

Batch Number: 584717 Batch Start Date: 12/09/19 13:03 Batch Analyst: Eidinejad, Naheed

Batch Method: 3050B Batch End Date: 12/09/19 18:06

Batch Notes	
Balance ID	57
Batch Comment	Spike A&B=500 ul
Blank Soil Lot Number	25280382
Temperature - Corrected - End	96 Degrees C
Temperature - Corrected - Start	96 Degrees C
Digestion End Time	12/09/2019 17:30
Digestion Start Time	12/09/2019 14:00
Digestion Unit ID	3
Digestion Tube/Cup ID	1906257
Filter ID	19-107 Gr. 389
Hydrogen Peroxide ID	5960627
Hydrochloric Acid ID	5957716
Nitric Acid ID	5971078
Pipette/Syringe/Dispenser ID	#902
Analyst ID - Spike Analyst	NE
Thermometer ID	P-090 (Loc. # A9) CF=-1.00
Temperature - Uncorrected - End	97 Degrees C
Temperature - Uncorrected - Start	97 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.: 440-255674-1

SDG No.:

Batch Number: 584674 Batch Start Date: 12/09/19 11:16 Batch Analyst: Mercado, Michael E

Batch Method: 7471A Batch End Date: 12/09/19 19:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ME 1 PPM HG1 00406	ME 1 PPM HG1 00407	ME Aqua Regia 00769	ME HYDROX SOL 00114
ICV 440-584674/1		7471A, 7471A		0.50 g	50 mL		200 uL	4.2 mL	5 mL
ICB 440-584674/2		7471A, 7471A		0.50 g	50 mL			4.2 mL	5 mL
CCV 440-584674/3		7471A, 7471A		0.50 g	50 mL	200 uL		4.2 mL	5 mL
CCB 440-584674/4		7471A, 7471A		0.50 g	50 mL			4.2 mL	5 mL
CRA 440-584674/5		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 00186
ICV 440-584674/1		7471A, 7471A		12.4 mL
ICB 440-584674/2		7471A, 7471A		12.4 mL
CCV 440-584674/3		7471A, 7471A		12.4 mL
CCB 440-584674/4		7471A, 7471A		12.4 mL
CRA 440-584674/5		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.: 440-255674-1

SDG No.:

Batch Number: 584674 Batch Start Date: 12/09/19 11:16 Batch Analyst: Mercado, Michael E

Batch Method: 7471A Batch End Date: 12/09/19 19:00

Batch Notes	
Balance ID	63
Batch Comment	ICB Loc: A6
Blank Matrix ID	25280382
Temperature - Corrected - End	96 Degrees C
Temperature - Corrected - Start	96 Degrees C
Digestion End Time	12/09/2019 15:04
Digestion Start Time	12/09/2019 14:34
Digestion Unit ID	8
Hydrochloric Acid ID	Lot: 0000240180
Nitric Acid ID	Lot: 0000221803
Hydroxylamine ID	5901782 @ 12/09/2019 18:45
Potassium Permanganate ID	5949091
Pipette/Syringe/Dispenser ID	801
Analyst ID - Spike Analyst	MM
Thermometer ID	P-120 CF -1 Loc: A9
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	97 Degrees C
Temperature - Uncorrected - Start	97 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.: 440-255674-1

SDG No.:

Batch Number: 584679 Batch Start Date: 12/09/19 11:21 Batch Analyst: Mercado, Michael E

Batch Method: 7471A Batch End Date: 12/09/19 19:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ME 1 PPM HG1 00406	ME Aqua Regia 00769	ME HYDROX SOL 00114	ME KMN04 00186
MB 440-584679/1		7471A, 7471A		0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
LCS 440-584679/2		7471A, 7471A		0.50 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-255674-C-12	STSB29_0.5-3	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-12 MS	STSB29_0.5-3	7471A, 7471A	T	0.51 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-255674-B-12 MSD	STSB29_0.5-3	7471A, 7471A	T	0.51 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-255674-B-1	STSB27_0-0.5	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-2	STSB27_0.5-3	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-3	STSB27_3-6	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-5	STSB27_6-15	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-6	STSB28_0-0.5	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-7	STSB28-FD_0-0.5	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-8	STSB28_0.5-3	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-9	STSB28_3-6	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-10	STSB28_6-15	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-11	STSB29_0-0.5	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-13	STSB29_3-6	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-14	STSB29_6-15	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-15	STSB29-FD_6-15	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-16	STSB30_0-0.5	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-17	STSB30_0.5-3	7471A, 7471A	T	0.49 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-18	STSB30_3-6	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-20	STSB30_6-15	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-21	STSB31_0-0.5	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-22	STSB31_0.5-3	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.: 440-255674-1

SDG No.:

Batch Number: 584679 Batch Start Date: 12/09/19 11:21 Batch Analyst: Mercado, Michael E

Batch Method: 7471A Batch End Date: 12/09/19 19:45

Batch Notes	
Balance ID	63
Batch Comment	MB Loc: A6
Blank Matrix ID	25280382
Temperature - Corrected - End	93 Degrees C
Temperature - Corrected - Start	94 Degrees C
Digestion End Time	12/09/2019 15:04
Digestion Start Time	12/09/2019 14:34
Digestion Unit ID	2
Hydrochloric Acid ID	Lot: 0000240180
Nitric Acid ID	Lot: 0000221803
Hydroxylamine ID	5901782 @ 12/09/2019 18:45
Potassium Permanganate ID	5949091
Pipette/Syringe/Dispenser ID	801
Analyst ID - Spike Analyst	MM
Thermometer ID	P-144 CF 0 Loc: A9
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	93 Degrees C
Temperature - Uncorrected - Start	94 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.: 440-255674-1

SDG No.:

Batch Number: 584680 Batch Start Date: 12/09/19 11:23 Batch Analyst: Mercado, Michael E

Batch Method: 7471A Batch End Date: 12/09/19 19:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ME 1 PPM HG1 00406	ME Aqua Regia 00769	ME HYDROX SOL 00114	ME KMN04 00186
MB 440-584680/1		7471A, 7471A		0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
LCS 440-584680/2		7471A, 7471A		0.50 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-255674-B-23	STSB31_3-6	7471A, 7471A	T	0.50 g	50 mL		4.2 mL	5 mL	12.4 mL
440-255674-B-23 MS	STSB31_3-6	7471A, 7471A	T	0.49 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-255674-B-23 MSD	STSB31_3-6	7471A, 7471A	T	0.50 g	50 mL	200 uL	4.2 mL	5 mL	12.4 mL
440-255674-B-24	STSB31_6-15	7471A, 7471A	T	0.51 g	50 mL		4.2 mL	5 mL	12.4 mL

Batch Notes	
Balance ID	63
Batch Comment	MB Loc: B11
Blank Matrix ID	25280382
Temperature - Corrected - End	93 Degrees C
Temperature - Corrected - Start	94 Degrees C
Digestion End Time	12/09/2019 15:04
Digestion Start Time	12/09/2019 14:34
Digestion Unit ID	2
Hydrochloric Acid ID	Lot: 0000240180
Nitric Acid ID	Lot: 0000221803
Hydroxylamine ID	5901782 @ 12/09/2019 18:45
Potassium Permanganate ID	5949091
Pipette/Syringe/Dispenser ID	801
Analyst ID - Spike Analyst	MM
Thermometer ID	P-144 CF 0 Loc: A9
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	93 Degrees C
Temperature - Uncorrected - Start	94 Degrees C

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.: 440-255674-1

SDG No.:

Batch Number: 584680 Batch Start Date: 12/09/19 11:23 Batch Analyst: Mercado, Michael E

Batch Method: 7471A Batch End Date: 12/09/19 19:45

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.

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

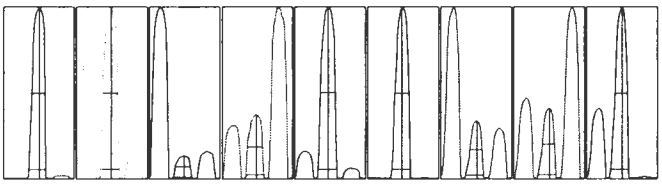
[No Gas]

Mass	Count (Actual)
9	34531
24	124022
25	16917
26	19996
59	229057
115	439647
206	101591
207	88366
208	214859

Mass	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	0.46	5.00	
24	0.32	5.00	
25	0.46	5.00	
26	0.85	5.00	
59	0.38	5.00	
115	0.45	5.00	
206	0.09	5.00	
207	0.32	5.00	
208	0.23	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	34654	34662	34622	34338	34382
24	124316	123385	124369	124021	124021
25	16823	16949	17029	16898	16885
26	20068	20005	19746	20210	19951
59	229557	229671	229854	228169	228034
115	442670	439071	440256	438819	437419
206	101564	101611	101526	101519	101733
207	88420	88412	88147	88783	88066
208	215632	215063	214420	214460	214719

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	5772	9.05	8.9 - 9.1		0.737	0.900	
24	20018	24.00	23.9 - 24.1		0.785	0.900	
25	2697	25.00	24.9 - 25.1		0.787	0.900	
26	3187	26.00	25.9 - 26.1		0.786	0.900	
59	36765	58.95	58.9 - 59.1		0.820	0.900	
115	73537	114.95	114.9 - 115.1		0.807	0.900	
206	18493	206.05	205.9 - 206.1		0.770	0.900	
207	16030	207.05	206.9 - 207.1		0.778	0.900	
208	38876	208.05	207.9 - 208.1		0.789	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	7.2 V
Extract 2	-135.0 V	Cell Entrance	-45 V
Omega Bias	-60 V	Cell Exit	-60 V
Deflect	15.6 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					

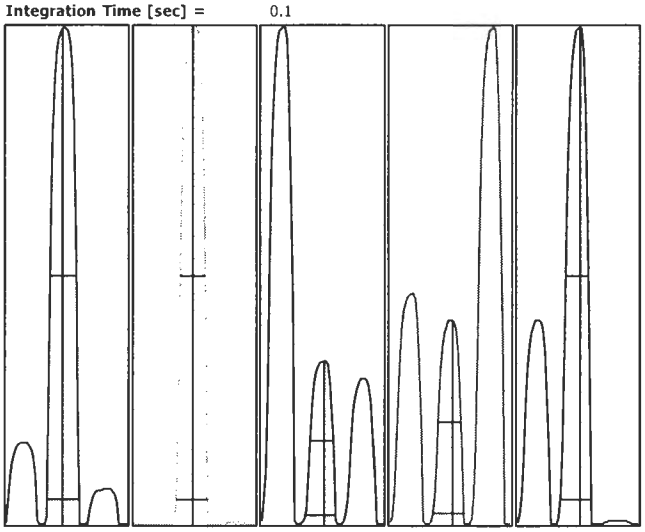
[He]

Mass	Count (Actual)
59	63663
115	91961
206	61979
207	54326
208	132386

Mass	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
59	0.42	5.00	
115	0.77	5.00	
206	0.76	5.00	
207	0.50	5.00	
208	0.33	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	63422	63636	64098	63475	63682
115	91552	91792	91375	91908	93177
206	61570	61631	62402	61723	62566
207	54584	53883	54279	54435	54449
208	131741	132566	132135	132771	132716

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	W-X% (Flag)
59	10535	58.950	58.9 - 59.1		0.781	0.900	
115	15936	115.000	114.9 - 115.1		0.766	0.900	
206	11617	206.050	205.9 - 206.1		0.727	0.900	
207	10332	207.050	206.9 - 207.1		0.748	0.900	
208	25082	208.050	207.9 - 208.1		0.745	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	7.2 V
Extract 2	-135.0 V	Cell Entrance	-32 V
Omega Bias	-60 V	Cell Exit	-70 V
Deflect	2.6 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		

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

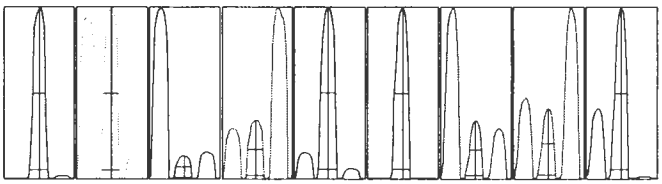
[No Gas]

Mass	Count (Actual)
9	36130
24	133977
25	18175
26	21443
59	226167
115	424485
206	98880
207	85814
208	208173

Mass	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	1.17	5.00	
24	1.20	5.00	
25	0.43	5.00	
26	1.30	5.00	
59	0.33	5.00	
115	0.43	5.00	
206	0.59	5.00	
207	0.59	5.00	
208	0.15	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	36230	35735	35663	36645	36378
24	131325	135051	134621	133628	135259
25	18037	18224	18215	18193	18208
26	21139	21654	21438	21200	21782
59	225077	226350	226038	226231	227140
115	424802	426540	424815	424744	421522
206	98474	99556	99467	98307	98594
207	86653	85788	85406	85792	85433
208	208417	208200	207965	207748	208534

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	6054	9.05	8.9 - 9.1		0.775	0.900	
24	21253	24.00	23.9 - 24.1		0.783	0.900	
25	2852	25.00	24.9 - 25.1		0.784	0.900	
26	3347	25.95	25.9 - 26.1		0.787	0.900	
59	36211	58.95	58.9 - 59.1		0.810	0.900	
115	71144	115.00	114.9 - 115.1		0.786	0.900	
206	18135	206.00	205.9 - 206.1		0.773	0.900	
207	15835	207.00	206.9 - 207.1		0.781	0.900	
208	38113	208.00	207.9 - 208.1		0.778	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	6.9 V
Extract 2	-135.0 V	Cell Entrance	-45 V
Omega Bias	-55 V	Cell Exit	-60 V
Deflect	14.8 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					

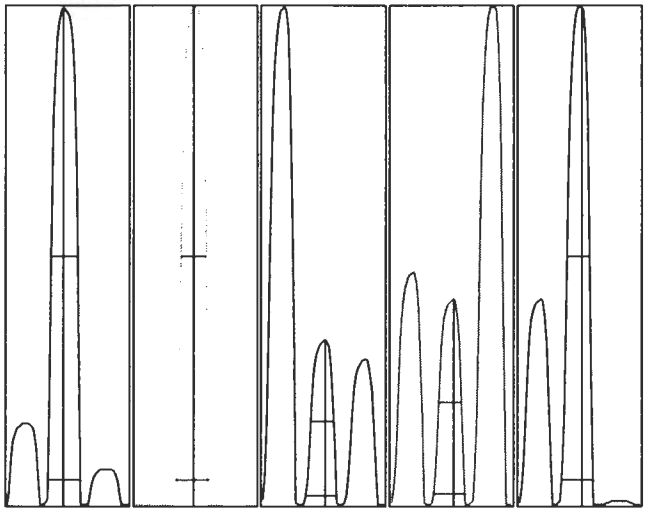
[He]

Mass	Count (Actual)
59	59735
115	77520
206	54628
207	47284
208	115754

Mass	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
59	0.71	5.00	
115	0.64	5.00	
206	0.68	5.00	
207	0.50	5.00	
208	0.43	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	59232	59364	59790	60119	60169
115	76697	77456	77822	77951	77674
206	54727	54617	54050	54656	55090
207	47042	47098	47376	47280	47627
208	115544	115561	116107	116404	115154

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	W-X% (Flag)
59	9826	58.950	58.9 - 59.1		0.783	0.900	
115	13305	115.000	114.9 - 115.1		0.773	0.900	
206	10300	206.050	205.9 - 206.1		0.747	0.900	
207	9083	207.050	206.9 - 207.1		0.747	0.900	
208	21971	208.050	207.9 - 208.1		0.759	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	6.9 V
Extract 2	-135.0 V	Cell Entrance	-32 V
Omega Bias	-55 V	Cell Exit	-70 V
Deflect	2.6 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		

US EPA Tune Check Sample Report

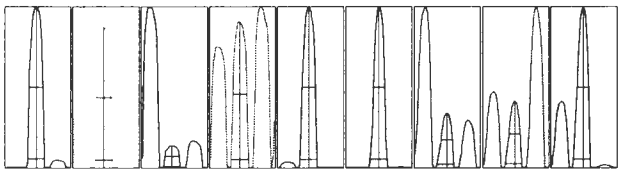
Batch Folder D:\Agilent\ICPMH\1\DATA\6_6020_template_170802_rev1C_3.b
Report Comment
Instrument Name G8403A JP16211410

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	2940	1.42	5.00	
24	16909	0.97	5.00	
25	2315	1.43	5.00	
26	2761	0.83	5.00	
59	34578	0.46	5.00	
115	56932	0.64	5.00	
206	12776	1.84	5.00	
207	11021	1.34	5.00	
208	26713	0.78	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	2912	2986	2985	2900	2920
24	16724	16851	16842	17158	16970
25	2271	2342	2308	2353	2300
26	2728	2781	2767	2780	2747
59	34390	34501	34658	34808	34534
115	57157	57417	56896	56523	56666
206	12996	13067	12582	12602	12632
207	11140	11205	10897	10871	10990
208	26834	26799	26936	26428	26568

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	4810	8.95	8.9 - 9.1		0.785	0.900	
24	26711	23.90	23.9 - 24.1		0.824	0.900	
25	3648	24.90	24.9 - 25.1		0.760	0.900	
26	4421	25.90	25.9 - 26.1		0.821	0.900	
59	58086	58.95	58.9 - 59.1		0.784	0.900	
115	106416	115.00	114.9 - 115.1		0.761	0.900	
206	23632	206.00	205.9 - 206.1		0.785	0.900	
207	20720	207.00	206.9 - 207.1		0.782	0.900	
208	49879	208.00	207.9 - 208.1		0.798	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	8.7	V	Deflect	16.6	V
Extract 2	-245.0	V	Cell Entrance	-38	V	Plate Bias	-50	V
Omega Bias	-105	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			

US EPA Tune Check Sample Report

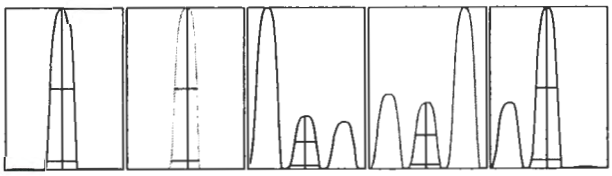
Batch Folder D:\Agilent\ICPMH\1\DATA\6_6020_template_170802_rev1C_3.b
Report Comment
Instrument Name G8403A JP16211410

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
59	6762	0.37	5.00	
115	6587	1.38	5.00	
206	4638	0.45	5.00	
207	4054	0.48	5.00	
208	9881	0.94	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	6785	6727	6743	6781	6771
115	6450	6538	6636	6666	6643
206	4660	4643	4653	4626	4608
207	4080	4033	4054	4066	4038
208	10011	9821	9894	9914	9766

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
59	11495	59.00	58.9 - 59.1		0.777	0.900	
115	12317	115.05	114.9 - 115.1		0.703	0.900	
206	8759	206.00	205.9 - 206.1		0.749	0.900	
207	7747	207.00	206.9 - 207.1		0.765	0.900	
208	18956	208.00	207.9 - 208.1		0.763	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	8.7	V	Deflect	4.4	V
Extract 2	-245.0	V	Cell Entrance	-32	V	Plate Bias	-60	V
Omega Bias	-105	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			

US EPA Tune Check Sample Report

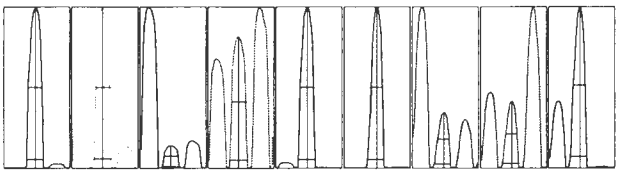
Batch Folder D:\Agilent\ICPMH\1\DATA\6_6020_template_170802_rev1C_3.b
Report Comment
Instrument Name G8403A JP16211410

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	2470	0.50	5 00	
24	15444	0.62	5 00	
25	2130	0 67	5 00	
26	2579	0 54	5 00	
59	35284	0 52	5 00	
115	60338	0 42	5 00	
206	13359	1 19	5 00	
207	11707	0.62	5 00	
208	28355	0.62	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	2464	2460	2475	2489	2461
24	15449	15595	15402	15444	15332
25	2119	2134	2150	2132	2114
26	2576	2592	2595	2568	2564
59	35412	35317	35331	35398	34963
115	60585	60208	60579	60334	59983
206	13596	13380	13289	13373	13159
207	11755	11752	11740	11706	11581
208	28577	28445	28268	28373	28111

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	4115	8.95	8.9 - 9.1		0.784	0.900	
24	24469	23.90	23.9 - 24.1		0.824	0.900	
25	3403	24.90	24.9 - 25.1		0.792	0.900	
26	4105	25.90	25.9 - 26.1		0.824	0.900	
59	59935	58.95	58.9 - 59.1		0.781	0.900	
115	113188	115.00	114.9 - 115.1		0.736	0.900	
206	25225	205.95	205.9 - 206.1		0.768	0.900	
207	22194	206.95	206.9 - 207.1		0.771	0.900	
208	53523	207.95	207.9 - 208.1		0.777	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	10.3	V	Deflect	17.0	V
Extract 2	-245.0	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			

US EPA Tune Check Sample Report

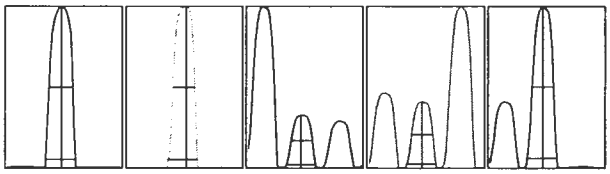
Batch Folder D:\Agilent\ICPMH\1\DATA\6_6020_template_170802_rev1C_3.b
Report Comment
Instrument Name G8403A JP16211410

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
59	6992	0 61	5 00	
115	6958	1 30	5.00	
206	5052	0 60	5 00	
207	4448	0 46	5 00	
208	10896	0 28	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	6940	6967	7002	6999	7054
115	6832	6923	6962	7000	7075
206	5062	5043	5073	5003	5077
207	4473	4467	4433	4439	4429
208	10852	10938	10904	10893	10892

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
59	11997	59.00	58.9 - 59.1		0.779	0.900	
115	12949	115.05	114.9 - 115.1		0.724	0.900	
206	9668	205.95	205.9 - 206.1		0.736	0.900	
207	8504	206.95	206.9 - 207.1		0.757	0.900	
208	20735	207.95	207.9 - 208.1		0.760	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

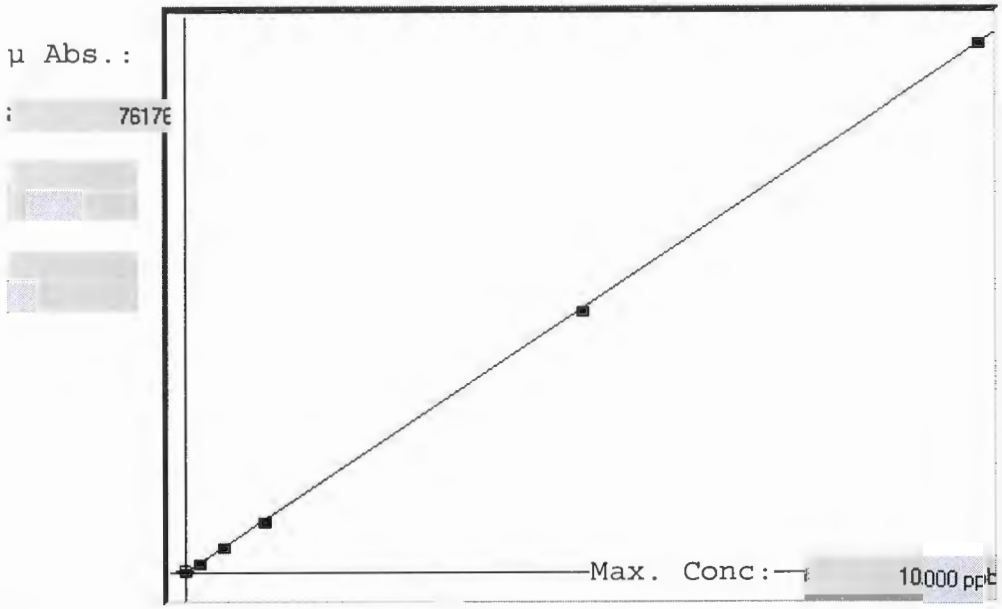
ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	1.3	V	Omega Lens	10.3	V	Deflect	4.6	V
Extract 2	-245.0	V	Cell Entrance	-36	V	Plate Bias	-60	V
Omega Bias	-110	V	Cell Exit	-70	V			

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			

SOIL

Linear



A= 0.0000e+000

B= 1.3154e-004

C= 1.1275e-003

Rho= 0.9999735

Accept= Accepted

Accepted Date=

12/10/19 11:03

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
IC 440-584674/6-A	0.000	0.038	0.038	281	24.000	257	305			
IC 440-584674/7-A	0.200	0.206	0.006	1555	0.8 %	1543	1568			
IC 440-584674/8-A	0.500	0.501	0.001	3802	2.2 %	3717	3888			
IC 440-584674/9-A	1.000	0.972	-0.028	7380	2.0 %	7233	7528			
IC 440-584674/10-A	5.000	4.961	-0.039	37708	2.0 %	36969	38447			
IC 440-584674/11-A	10.000	10.022	0.022	76176	1.8 %	74794	77558			

Sample Summary

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

Job ID: 440-255674-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-255674-1	STSB27_0-0.5	Solid	11/21/19 09:15	11/26/19 10:50	
440-255674-2	STSB27_0.5-3	Solid	11/21/19 09:25	11/26/19 10:50	
440-255674-3	STSB27_3-6	Solid	11/21/19 09:31	11/26/19 10:50	
440-255674-5	STSB27_6-15	Solid	11/21/19 09:55	11/26/19 10:50	
440-255674-6	STSB28_0-0.5	Solid	11/21/19 11:45	11/26/19 10:50	
440-255674-7	STSB28-FD_0-0.5	Solid	11/21/19 11:50	11/26/19 10:50	
440-255674-8	STSB28_0.5-3	Solid	11/21/19 11:55	11/26/19 10:50	
440-255674-9	STSB28_3-6	Solid	11/21/19 12:15	11/26/19 10:50	
440-255674-10	STSB28_6-15	Solid	11/21/19 12:25	11/26/19 10:50	
440-255674-11	STSB29_0-0.5	Solid	11/21/19 15:00	11/26/19 10:50	
440-255674-12	STSB29_0.5-3	Solid	11/21/19 15:10	11/26/19 10:50	
440-255674-13	STSB29_3-6	Solid	11/21/19 15:30	11/26/19 10:50	
440-255674-14	STSB29_6-15	Solid	11/21/19 15:45	11/26/19 10:50	
440-255674-15	STSB29-FD_6-15	Solid	11/21/19 15:50	11/26/19 10:50	
440-255674-16	STSB30_0-0.5	Solid	11/22/19 08:55	11/26/19 10:50	
440-255674-17	STSB30_0.5-3	Solid	11/22/19 09:02	11/26/19 10:50	
440-255674-18	STSB30_3-6	Solid	11/22/19 09:10	11/26/19 10:50	
440-255674-20	STSB30_6-15	Solid	11/22/19 09:25	11/26/19 10:50	
440-255674-21	STSB31_0-0.5	Solid	11/22/19 11:56	11/26/19 10:50	
440-255674-22	STSB31_0.5-3	Solid	11/22/19 12:03	11/26/19 10:50	
440-255674-23	STSB31_3-6	Solid	11/22/19 12:10	11/26/19 10:50	
440-255674-24	STSB31_6-15	Solid	11/22/19 12:20	11/26/19 10:50	

Job ID: 440-255674-1

Laboratory: Eurofins Calscience Irvine

Narrative

Job Narrative
440-255674-1

Comments
No additional comments.

Receipt
The samples were received on 11/26/2019 10:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.0° C.

Metals
Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries of Potassium and Titanium for preparation batch 440-583612 and analytical batch 440-584155 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 continuing calibration blank (CCB) for 440-584155 contained Titanium above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method 6010B: The method blank for preparation batch 440-583612 and analytical batch 440-584378 contained Iron above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries of Titanium for preparation batch 440-584711 and analytical batch 440-584991 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries of Potassium for preparation batch 440-584717 and analytical batch 440-584992 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 method blank for preparation batch 440-584717 and analytical batch 440-584992 contained Iron above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 440-583612 and analytical batch 440-584031 were outside control limits for Manganese and Antimony. Sample matrix interference is 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 for preparation batch 440-584711 and analytical batch 440-584875 were outside control limits for Chromium, Manganese and Antimony. Sample matrix interference and/or non-homogeneity are suspected. The associated laboratory control sample (LCS) was within acceptance limits.

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 440-584717 and analytical batch 440-584881 were outside control limits for Antimony. Sample matrix interference is suspected. The associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6020: The method blank for preparation batch 440-584717 and analytical batch 440-584881 contained Copper above the method detection limit (MDL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6020: The continuing calibration verification (CCV) associated with batch 440-584938 recovered above the upper control limit for Beryllium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: STSB28_0.5-3 (440-255674-8), STSB28_3-6 (440-255674-9) and STSB29_6-15 (440-255674-14).

Job ID: 440-255674-1 (Continued)

Laboratory: Eurofins Calscience Irvine (Continued)

Method 6020: The method blank for preparation batch 440-584717 and analytical batch 440-584938 contained Copper above the method detection limit (MDL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6020: The method blank for preparation batch 440-584717 and analytical batch 440-584960 contained Copper above the method detection limit (MDL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 7471A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 440-584679 and analytical batch 440-585046 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.

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.

Revised

Job Narrative
440-255674-1

Comments
Revised to correct percent moisture value used for 6020 calculation.

Receipt
The samples were received on 11/26/2019 10:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.0° C.

Metals
Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries of Potassium and Titanium for preparation batch 440-583612 and analytical batch 440-584155 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 continuing calibration blank (CCB) for 440-584155 contained Titanium above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method 6010B: The method blank for preparation batch 440-583612 and analytical batch 440-584378 contained Iron above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries of Titanium for preparation batch 440-584711 and analytical batch 440-584991 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries of Potassium for preparation batch 440-584717 and analytical batch 440-584992 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 method blank for preparation batch 440-584717 and analytical batch 440-584992 contained Iron above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 440-583612 and analytical batch 440-584031 were outside control limits for Manganese and Antimony. Sample matrix interference is 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 for preparation batch 440-584711 and analytical batch 440-584875 were outside control limits for Chromium, Manganese and Antimony. Sample matrix interference and/or non-homogeneity are suspected. The associated laboratory control sample (LCS) was within acceptance limits.

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 440-584717 and analytical batch 440-584881 were outside control limits for Antimony. Sample matrix interference is suspected. The associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 6020: The method blank for preparation batch 440-584717 and analytical batch 440-584881 contained Copper above the method detection limit (MDL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6020: The continuing calibration verification (CCV) associated with batch 440-584938 recovered above the upper control limit for Beryllium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: STSB28_0.5-3 (440-255674-8), STSB28_3-6 (440-255674-9) and STSB29_6-15 (440-255674-14).

Method 6020: The method blank for preparation batch 440-584717 and analytical batch 440-584938 contained Copper above the method detection limit (MDL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6020: The method blank for preparation batch 440-584717 and analytical batch 440-584960 contained Copper above the method detection limit (MDL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 7471A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 440-584679 and analytical batch 440-585046 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.

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.

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
	STSB27_0-0.5	11/21/19	0915	X				1	1						X	X							[1]Metals are: Al, B, Ca, Fe, K, Li, Mg,
	STSB27_0.5-3	11/21/19	0925	X				1	1						X	X							Na, P, Sr, Sn, Ti, by 6010B;
	STSB27_3-6	11/21/19	0931	X				1	1						X	X							As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn,
	EB01	11/21/19	0936		X			1			1				X	X	X						Mo, Ni, Sb, Se, Ag, Tl, V, Zn by 6020
	STSB27_6-15	11/21/19	0955	X				1	1						X	X							
	STSB28_0-0.5	11/21/19	1145	X				1	1						X	X							
	STSB28-FD_0-0.5	11/21/19	1150	X				1	1						X	X							Report soil on dry weight basis.
	STSB28_0.5-3	11/21/19	1155	X				1	1						X	X							
	STSB28_3-6	11/21/19	1215	X				1	1						X	X							
	STSB28_6-15	11/21/19	1225	X				1	1						X	X							

440-255674 Chain of Custody

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Bryce Johnson						
Sampler's Company: Wood	[signature] / Wood	11/25/19	1030	[signature]	11/26/19	1050
Shipment Method: Fed Ex Ship Date: 11/25/19						
Shipment Tracking No: 8137 9414 1751						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 5.3/5 °F/C | Trip Blank: Yes (No) | MS/MSD Sample Submitted: (Yes) / No

IR-93

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

LB 11/26/19

1/16/2020

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
	STSB29_0-0.5	11/21/19	1500	X				1	1						X	X									[1]Metals are. Al, B, Ca, Fe, K, Li, Mg,
	STSB29_0.5-3	11/21/19	1510	X				2	2						X	X								X	Na, P, Sr, Sn, Ti, by 6010B;
	STSB29_3-6	11/21/19	1530	X				1	1						X	X									As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn,
	STSB29_6-15	11/21/19	1545	X				1	1						X	X									Mo, Ni, Sb, Se, Ag, Tl, V, Zn by 6020
	STSB29-FD_6-15	11/21/19	1550	X				1	1						X	X									
	STSB30_0-0.5	11/22/19	~~0900~~	X				1	1						X	X									Sample Time = 0855 BJ 11/22/19
	STSB30_0.5-3	11/22/19	0902	X				1	1						X	X									Report soil on dry weight basis.
	STSB30_3-6	11/22/19	0910	X				1	1						X	X									
	FB01	11/22/19	0915	X				1			1				X	X	X								
	STSB30_6-15	11/22/19	0925	X				1	1						X	X									

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Bryce Johnson						
Sampler's Company: Wood	[signature] / Wood	11/25/19	1030	[signature]	11/26/19	1050
Shipment Method: Fed Ex Ship Date: 11/25/19						
Shipment Tracking No: 8137 9414 1751						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) No | Temp Blank: (Yes) No | Cooler Temp on Receipt: 5.3/5 °F | Trip Blank: Yes (No) | MS/MSD Sample Submitted: (Yes) No

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
	STSB31_0-0.5	11/22/19	1156	X			1	1				X	X			[1]Metals are: Al, B, Ca, Fe, K, Li, Mg,
	STSB31_0.5-3	11/22/19	1203	X			1	1				X	X			Na, P, Sr, Sn, Ti, by 6010B;
	STSB31_3-6	11/22/19	1210	X			1	1				X	X			As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn,
	STSB31_6-15	11/22/19	1220	X			1	1				X	X			Mo, Ni, Sb, Se, Ag, Tl, V, Zn by 6020
								BJ		11/25/19						Report soil on dry weight basis.

Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Bryce Johnson						
Sampler's Company: Wood	/Wood	11/25/19	1030		11/26/19	1050
Shipment Method: Fed Ex Ship Date: 11/25/19						
Shipment Tracking No: 8137 9414 1751						

Special Instructions:

THIS LINE - LAB USE ONLY. Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 5.3 / 5 °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: 440-255674-1

Login Number: 255674
List Number: 1
Creator: Bonta, Lucia F

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.	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").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

B. SDG 440-255674-2

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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 228

Laboratory Job ID: 440-255674-2
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:
1/29/2020 4:44:15 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.

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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
1/29/2020 4:44:15 PM

Definitions/Glossary

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

Job ID: 440-255674-2

Qualifiers

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
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.
B	Compound was found in the blank and sample.
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)

Job ID: 440-255674-2

Laboratory: Eurofins Calscience Irvine

Narrative

Job Narrative
440-255674-2

Comments
No additional comments.

Receipt
The samples were received on 11/26/2019 10:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.0° C.

Metals
Method 6020: The method blank for preparation batch 440-583233 and analytical batch 440-583321 contained Zinc above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 6020: The continuing calibration verification (CCV) associated with batch 440-583321 recovered above the upper control limit for Beryllium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: EB01 (440-255674-4) and FB01 (440-255674-19).

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 440-583233 and analytical batch 440-583321 were outside control limits for Zinc. Sample matrix interference and/or non-homogeneity are suspected. The associated laboratory control sample (LCS) was within acceptance limits.

Method 6010B: The continuing calibration blank (CCB) for 440-583568 contained Titanium above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries of Aluminum and Iron for preparation batch 440-583098 and analytical batch 440-583568 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 440-583568 was outside of control limits.

Method 6010B: The continuing calibration blank (CCB) for 440-583795 contained Titanium above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method 6010B: The continuing calibration blank (CCB) for 440-583795 contained Magnesium above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method 6010B: The serial dilution performed for the following sample associated with batch 440-583568 was outside control limits for Calcium and Magnesium: (440-255901-B-8-D SD ^5).

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

Detection Summary

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

Job ID: 440-255674-2

Client Sample ID: EB01 — Lab Sample ID: 440-255674-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	0.012	J	0.020	0.010	mg/L	1		6010B	Total Recoverable
Potassium	0.30	J	0.50	0.25	mg/L	1		6010B	Total Recoverable
Copper	1.1	J	2.0	0.50	ug/L	1		6020	Total Recoverable
Zinc	16	J B	20	2.5	ug/L	1		6020	Total Recoverable

Client Sample ID: FB01 — Lab Sample ID: 440-255674-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Copper	1.5	J	2.0	0.50	ug/L	1		6020	Total Recoverable
Zinc	11	J B	20	2.5	ug/L	1		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

Client Sample ID: EB01

Lab Sample ID: 440-255674-4

Date Collected: 11/21/19 09:36
Date Received: 11/26/19 10:50

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		11/30/19 11:17	12/04/19 15:03	1
Boron	ND		50	25	ug/L		11/30/19 11:17	12/04/19 15:03	1
Calcium	ND		0.10	0.050	mg/L		11/30/19 11:17	12/04/19 15:03	1
Iron	ND		0.10	0.050	mg/L		11/30/19 11:17	12/04/19 15:03	1
Lithium	ND		500	25	ug/L		11/30/19 11:17	12/04/19 15:03	1
Magnesium	**0.012**	**J**	0.020	0.010	mg/L		11/30/19 11:17	12/04/19 15:03	1
Phosphorus	ND		0.20	0.10	mg/L		11/30/19 11:17	12/04/19 15:03	1
Potassium	**0.30**	**J**	0.50	0.25	mg/L		11/30/19 11:17	12/04/19 15:03	1
Sodium	ND		0.50	0.26	mg/L		11/30/19 11:17	12/04/19 15:03	1
Strontium	ND		0.020	0.010	mg/L		11/30/19 11:17	12/04/19 15:03	1
Tin	ND		0.10	0.050	mg/L		11/30/19 11:17	12/04/19 15:03	1
Titanium	ND		0.0050	0.0025	mg/L		11/30/19 11:17	12/04/19 15:03	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		01/24/20 14:18	01/28/20 17:30	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		12/02/19 08:49	12/02/19 14:50	1
Arsenic	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:50	1
Barium	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:50	1
Beryllium	ND	^	0.50	0.25	ug/L		12/02/19 08:49	12/02/19 14:50	1
Cadmium	ND		1.0	0.25	ug/L		12/02/19 08:49	12/02/19 14:50	1
Chromium	ND		2.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:50	1
Cobalt	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:50	1
Copper	**1.1**	**J**	2.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:50	1
Lead	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:50	1
Manganese	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:50	1
Molybdenum	ND		2.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:50	1
Nickel	ND		2.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:50	1
Selenium	ND		2.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:50	1
Silver	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:50	1
Thallium	ND		1.0	0.20	ug/L		12/02/19 08:49	12/02/19 14:50	1
Uranium	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:50	1
Vanadium	ND		2.0	1.0	ug/L		12/02/19 08:49	12/02/19 14:50	1
Zinc	**16**	**J B**	20	2.5	ug/L		12/02/19 08:49	12/02/19 14:50	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		12/04/19 11:02	12/04/19 21:53	1

Client Sample ID: FB01

Lab Sample ID: 440-255674-19

Date Collected: 11/22/19 09:15
Date Received: 11/26/19 10:50

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		11/30/19 11:17	12/04/19 12:22	1
Boron	ND		50	25	ug/L		11/30/19 11:17	12/04/19 12:22	1
Calcium	ND		0.10	0.050	mg/L		11/30/19 11:17	12/04/19 12:22	1

Client Sample Results

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

Job ID: 440-255674-2

Client Sample ID: FB01

Date Collected: 11/22/19 09:15
Date Received: 11/26/19 10:50

Lab Sample ID: 440-255674-19

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		11/30/19 11:17	12/04/19 12:22	1
Lithium	ND		500	25	ug/L		11/30/19 11:17	12/04/19 12:22	1
Magnesium	ND		0.020	0.010	mg/L		11/30/19 11:17	12/04/19 12:22	1
Phosphorus	ND		0.20	0.10	mg/L		11/30/19 11:17	12/04/19 12:22	1
Potassium	ND		0.50	0.25	mg/L		11/30/19 11:17	12/04/19 12:22	1
Sodium	ND		0.50	0.26	mg/L		11/30/19 11:17	12/04/19 12:22	1
Strontium	ND		0.020	0.010	mg/L		11/30/19 11:17	12/04/19 12:22	1
Tin	ND		0.10	0.050	mg/L		11/30/19 11:17	12/04/19 12:22	1
Titanium	ND		0.0050	0.0025	mg/L		11/30/19 11:17	12/04/19 12:22	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		01/24/20 14:18	01/28/20 17:37	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		12/02/19 08:49	12/02/19 14:52	1
Arsenic	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:52	1
Barium	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:52	1
Beryllium	ND	^	0.50	0.25	ug/L		12/02/19 08:49	12/02/19 14:52	1
Cadmium	ND		1.0	0.25	ug/L		12/02/19 08:49	12/02/19 14:52	1
Chromium	ND		2.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:52	1
Cobalt	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:52	1
Copper	**1.5**	**J**	2.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:52	1
Lead	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:52	1
Manganese	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:52	1
Molybdenum	ND		2.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:52	1
Nickel	ND		2.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:52	1
Selenium	ND		2.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:52	1
Silver	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:52	1
Thallium	ND		1.0	0.20	ug/L		12/02/19 08:49	12/02/19 14:52	1
Uranium	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:52	1
Vanadium	ND		2.0	1.0	ug/L		12/02/19 08:49	12/02/19 14:52	1
Zinc	**11**	**J B**	20	2.5	ug/L		12/02/19 08:49	12/02/19 14:52	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00010	mg/L		12/04/19 11:02	12/04/19 21:55	1

QC Sample Results

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

Job ID: 440-255674-2

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 440-583098/1-A
Matrix: Water
Analysis Batch: 583568

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 583098

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.10	0.050	mg/L		11/30/19 11:17	12/03/19 12:58	1
Boron	ND		50	25	ug/L		11/30/19 11:17	12/03/19 12:58	1
Calcium	ND		0.10	0.050	mg/L		11/30/19 11:17	12/03/19 12:58	1
Iron	ND		0.10	0.050	mg/L		11/30/19 11:17	12/03/19 12:58	1
Lithium	ND		500	25	ug/L		11/30/19 11:17	12/03/19 12:58	1
Magnesium	ND		0.020	0.010	mg/L		11/30/19 11:17	12/03/19 12:58	1
Phosphorus	ND		0.20	0.10	mg/L		11/30/19 11:17	12/03/19 12:58	1
Potassium	ND		0.50	0.25	mg/L		11/30/19 11:17	12/03/19 12:58	1
Sodium	ND		0.50	0.26	mg/L		11/30/19 11:17	12/03/19 12:58	1
Strontium	ND		0.020	0.010	mg/L		11/30/19 11:17	12/03/19 12:58	1
Tin	ND		0.10	0.050	mg/L		11/30/19 11:17	12/03/19 12:58	1
Titanium	ND		0.0050	0.0025	mg/L		11/30/19 11:17	12/03/19 12:58	1

Lab Sample ID: LCS 440-583098/2-A
Matrix: Water
Analysis Batch: 583568

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 583098

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1.00	1.02		mg/L		102	80 - 120
Boron	1000	987		ug/L		99	80 - 120
Calcium	5.00	4.89		mg/L		98	80 - 120
Iron	1.00	1.01		mg/L		101	80 - 120
Lithium	1000	968		ug/L		97	80 - 120
Magnesium	5.00	4.90		mg/L		98	80 - 120
Phosphorus	1.00	0.964		mg/L		96	80 - 120
Potassium	10.0	9.80		mg/L		98	80 - 120
Sodium	10.0	9.68		mg/L		97	80 - 120
Strontium	1.00	0.980		mg/L		98	80 - 120
Tin	1.00	0.983		mg/L		98	80 - 120
Titanium	1.00	0.997		mg/L		100	80 - 120

Lab Sample ID: 440-255901-B-8-E MS
Matrix: Water
Analysis Batch: 583568

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 583098

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	2.0	F1	1.00	5.46	F1	mg/L		344	75 - 125
Boron	150		1000	1160		ug/L		101	75 - 125
Calcium	22		5.00	26.9	4	mg/L		106	75 - 125
Iron	2.9	F1	1.00	5.49	F1	mg/L		262	75 - 125
Lithium	ND		1000	1020		ug/L		102	75 - 125
Magnesium	2.4		5.00	7.83		mg/L		108	75 - 125
Phosphorus	0.81		1.00	1.84		mg/L		103	75 - 125
Potassium	4.9		10.0	15.5		mg/L		106	75 - 125
Sodium	15		10.0	25.0		mg/L		103	75 - 125
Strontium	0.44		1.00	1.45		mg/L		102	75 - 125
Tin	ND		1.00	1.02		mg/L		102	75 - 125
Titanium	0.083		1.00	1.20		mg/L		112	75 - 125

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

Lab Sample ID: 440-255901-B-8-F MSD
Matrix: Water
Analysis Batch: 583568

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 583098

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	2.0	F1	1.00	5.66	F1	mg/L		364	75 - 125	4	20
Boron	150		1000	1180		ug/L		104	75 - 125	2	20
Calcium	22		5.00	27.3	4	mg/L		116	75 - 125	2	20
Iron	2.9	F1	1.00	5.69	F1	mg/L		282	75 - 125	4	20
Lithium	ND		1000	1040		ug/L		104	75 - 125	1	20
Magnesium	2.4		5.00	7.96		mg/L		111	75 - 125	2	20
Phosphorus	0.81		1.00	1.88		mg/L		107	75 - 125	2	20
Potassium	4.9		10.0	15.7		mg/L		108	75 - 125	1	20
Sodium	15		10.0	25.4		mg/L		107	75 - 125	2	20
Strontium	0.44		1.00	1.47		mg/L		103	75 - 125	1	20
Tin	ND		1.00	1.03		mg/L		103	75 - 125	2	20
Titanium	0.083		1.00	1.24		mg/L		116	75 - 125	3	20

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 440-583233/1-A
Matrix: Water
Analysis Batch: 583321

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 583233

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:35	1
Arsenic	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:35	1
Barium	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:35	1
Beryllium	ND	^	0.50	0.25	ug/L		12/02/19 08:49	12/02/19 14:35	1
Cadmium	ND		1.0	0.25	ug/L		12/02/19 08:49	12/02/19 14:35	1
Chromium	ND		2.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:35	1
Cobalt	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:35	1
Copper	ND		2.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:35	1
Lead	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:35	1
Manganese	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:35	1
Molybdenum	ND		2.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:35	1
Nickel	ND		2.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:35	1
Selenium	ND		2.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:35	1
Silver	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:35	1
Thallium	ND		1.0	0.20	ug/L		12/02/19 08:49	12/02/19 14:35	1
Uranium	ND		1.0	0.50	ug/L		12/02/19 08:49	12/02/19 14:35	1
Vanadium	ND		2.0	1.0	ug/L		12/02/19 08:49	12/02/19 14:35	1
Zinc	11.2	J	20	2.5	ug/L		12/02/19 08:49	12/02/19 14:35	1

Lab Sample ID: LCS 440-583233/2-A
Matrix: Water
Analysis Batch: 583321

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 583233

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	80.0	85.3		ug/L		107	80 - 120
Arsenic	80.0	76.8		ug/L		96	80 - 120
Barium	80.0	77.4		ug/L		97	80 - 120
Beryllium	80.0	88.5	^	ug/L		111	80 - 120
Cadmium	80.0	78.8		ug/L		99	80 - 120

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

Lab Sample ID: LCS 440-583233/2-A
Matrix: Water
Analysis Batch: 583321

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 583233

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	80.0	77.2		ug/L		96	80 - 120
Cobalt	80.0	77.3		ug/L		97	80 - 120
Copper	80.0	79.5		ug/L		99	80 - 120
Lead	80.0	75.8		ug/L		95	80 - 120
Manganese	80.0	78.0		ug/L		98	80 - 120
Molybdenum	80.0	80.5		ug/L		101	80 - 120
Nickel	80.0	78.1		ug/L		98	80 - 120
Selenium	80.0	78.6		ug/L		98	80 - 120
Silver	80.0	81.4		ug/L		102	80 - 120
Thallium	80.0	78.2		ug/L		98	80 - 120
Uranium	80.0	77.8		ug/L		97	80 - 120
Vanadium	80.0	77.2		ug/L		96	80 - 120
Zinc	80.0	86.6		ug/L		108	80 - 120

Lab Sample ID: 440-255863-G-1-B MS
Matrix: Water
Analysis Batch: 583321

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 583233

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		80.0	89.1		ug/L		111	75 - 125
Arsenic	2.3		80.0	82.2		ug/L		100	75 - 125
Barium	74		80.0	154		ug/L		100	75 - 125
Beryllium	ND	^	80.0	89.3	^	ug/L		112	75 - 125
Cadmium	ND		80.0	79.0		ug/L		99	75 - 125
Chromium	ND		80.0	78.4		ug/L		98	75 - 125
Cobalt	ND		80.0	75.8		ug/L		95	75 - 125
Copper	8.5		80.0	81.6		ug/L		91	75 - 125
Lead	ND		80.0	75.4		ug/L		94	75 - 125
Manganese	240		80.0	315		ug/L		94	75 - 125
Molybdenum	1.8	J	80.0	86.5		ug/L		106	75 - 125
Nickel	1.1	J	80.0	76.1		ug/L		94	75 - 125
Selenium	ND		80.0	78.7		ug/L		98	75 - 125
Silver	ND		80.0	81.1		ug/L		101	75 - 125
Thallium	ND		80.0	77.8		ug/L		97	75 - 125
Uranium	0.54	J	80.0	81.1		ug/L		101	75 - 125
Vanadium	ND		80.0	79.7		ug/L		100	75 - 125
Zinc	37	F2 B	80.0	129		ug/L		115	75 - 125

Lab Sample ID: 440-255863-G-1-C MSD
Matrix: Water
Analysis Batch: 583321

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 583233

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		80.0	87.9		ug/L		110	75 - 125	1	20
Arsenic	2.3		80.0	81.0		ug/L		98	75 - 125	1	20
Barium	74		80.0	153		ug/L		100	75 - 125	0	20
Beryllium	ND	^	80.0	87.1	^	ug/L		109	75 - 125	2	20
Cadmium	ND		80.0	78.2		ug/L		98	75 - 125	1	20
Chromium	ND		80.0	77.1		ug/L		96	75 - 125	2	20

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

Lab Sample ID: 440-255863-G-1-C MSD
Matrix: Water
Analysis Batch: 583321

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 583233

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cobalt	ND		80.0	74.6		ug/L		93	75 - 125	2	20
Copper	8.5		80.0	76.9		ug/L		85	75 - 125	6	20
Lead	ND		80.0	74.4		ug/L		93	75 - 125	1	20
Manganese	240		80.0	312		ug/L		89	75 - 125	1	20
Molybdenum	1.8	J	80.0	85.4		ug/L		105	75 - 125	1	20
Nickel	1.1	J	80.0	74.8		ug/L		92	75 - 125	2	20
Selenium	ND		80.0	77.7		ug/L		97	75 - 125	1	20
Silver	ND		80.0	79.9		ug/L		100	75 - 125	2	20
Thallium	ND		80.0	76.5		ug/L		96	75 - 125	2	20
Uranium	0.54	J	80.0	79.5		ug/L		99	75 - 125	2	20
Vanadium	ND		80.0	79.1		ug/L		99	75 - 125	1	20
Zinc	37	F2 B	80.0	97.3	F2	ug/L		75	75 - 125	28	20

Method: 6020A - Metals (ICP/MS)

Lab Sample ID: MB 160-458034/1-A
Matrix: Water
Analysis Batch: 458483

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 458034

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thorium	ND		2.0	0.90	ug/L		01/24/20 14:18	01/28/20 17:17	2

Lab Sample ID: LCS 160-458034/2-A
Matrix: Water
Analysis Batch: 458483

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 458034

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thorium	1000	963		ug/L		96	80 - 120

Lab Sample ID: 440-256946-A-4-F MS
Matrix: Water
Analysis Batch: 458483

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 458034

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Thorium	ND		1000	955		ug/L		95	75 - 125

Lab Sample ID: 440-256946-A-4-G MSD
Matrix: Water
Analysis Batch: 458483

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 458034

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Thorium	ND		1000	968		ug/L		97	75 - 125	1	20

QC Sample Results

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

Job ID: 440-255674-2

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 440-583759/1-A
Matrix: Water
Analysis Batch: 583918

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 583759

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000180	J	0.00020	0.00010	mg/L		12/04/19 11:02	12/04/19 21:25	1

Lab Sample ID: LCS 440-583759/2-A
Matrix: Water
Analysis Batch: 583918

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 583759

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00400	0.00403		mg/L		101	80 - 120

Lab Sample ID: 720-96142-O-5-C MS
Matrix: Water
Analysis Batch: 583918

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 583759

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		0.00400	0.00391		mg/L		98	75 - 125

Lab Sample ID: 720-96142-O-5-D MSD
Matrix: Water
Analysis Batch: 583918

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 583759

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		0.00400	0.00393		mg/L		98	75 - 125	1	20

QC Association Summary

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

Job ID: 440-255674-2

Metals

Prep Batch: 458034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-4	EB01	Total/NA	Water	3010A	
440-255674-19	FB01	Total/NA	Water	3010A	
MB 160-458034/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-458034/2-A	Lab Control Sample	Total/NA	Water	3010A	
440-256946-A-4-F MS	Matrix Spike	Total/NA	Water	3010A	
440-256946-A-4-G MSD	Matrix Spike Duplicate	Total/NA	Water	3010A	

Analysis Batch: 458483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-4	EB01	Total/NA	Water	6020A	458034
440-255674-19	FB01	Total/NA	Water	6020A	458034
MB 160-458034/1-A	Method Blank	Total/NA	Water	6020A	458034
LCS 160-458034/2-A	Lab Control Sample	Total/NA	Water	6020A	458034
440-256946-A-4-F MS	Matrix Spike	Total/NA	Water	6020A	458034
440-256946-A-4-G MSD	Matrix Spike Duplicate	Total/NA	Water	6020A	458034

Prep Batch: 583098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-4	EB01	Total Recoverable	Water	3005A	
440-255674-19	FB01	Total Recoverable	Water	3005A	
MB 440-583098/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 440-583098/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
440-255901-B-8-E MS	Matrix Spike	Total Recoverable	Water	3005A	
440-255901-B-8-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 583233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-4	EB01	Total Recoverable	Water	3005A	
440-255674-19	FB01	Total Recoverable	Water	3005A	
MB 440-583233/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 440-583233/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
440-255863-G-1-B MS	Matrix Spike	Total Recoverable	Water	3005A	
440-255863-G-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 583321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-4	EB01	Total Recoverable	Water	6020	583233
440-255674-19	FB01	Total Recoverable	Water	6020	583233
MB 440-583233/1-A	Method Blank	Total Recoverable	Water	6020	583233
LCS 440-583233/2-A	Lab Control Sample	Total Recoverable	Water	6020	583233
440-255863-G-1-B MS	Matrix Spike	Total Recoverable	Water	6020	583233
440-255863-G-1-C MSD	Matrix Spike Duplicate	Total Recoverable	Water	6020	583233

Analysis Batch: 583568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 440-583098/1-A	Method Blank	Total Recoverable	Water	6010B	583098
LCS 440-583098/2-A	Lab Control Sample	Total Recoverable	Water	6010B	583098
440-255901-B-8-E MS	Matrix Spike	Total Recoverable	Water	6010B	583098
440-255901-B-8-F MSD	Matrix Spike Duplicate	Total Recoverable	Water	6010B	583098

QC Association Summary

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

Job ID: 440-255674-2

Metals

Prep Batch: 583759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-4	EB01	Total/NA	Water	7470A	
440-255674-19	FB01	Total/NA	Water	7470A	
MB 440-583759/1-A	Method Blank	Total/NA	Water	7470A	
LCS 440-583759/2-A	Lab Control Sample	Total/NA	Water	7470A	
720-96142-O-5-C MS	Matrix Spike	Total/NA	Water	7470A	
720-96142-O-5-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 583795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-19	FB01	Total Recoverable	Water	6010B	583098

Analysis Batch: 583832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-4	EB01	Total Recoverable	Water	6010B	583098

Analysis Batch: 583918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-255674-4	EB01	Total/NA	Water	7470A	583759
440-255674-19	FB01	Total/NA	Water	7470A	583759
MB 440-583759/1-A	Method Blank	Total/NA	Water	7470A	583759
LCS 440-583759/2-A	Lab Control Sample	Total/NA	Water	7470A	583759
720-96142-O-5-C MS	Matrix Spike	Total/NA	Water	7470A	583759
720-96142-O-5-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	583759

Lab Chronicle

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

Job ID: 440-255674-2

Client Sample ID: EB01

Lab Sample ID: 440-255674-4

Date Collected: 11/21/19 09:36
Date Received: 11/26/19 10:50

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			583098	11/30/19 11:17	EP	TAL IRV
Total Recoverable	Analysis	6010B		1	583832	12/04/19 15:03	KE	TAL IRV
Total Recoverable	Prep	3005A			583233	12/02/19 08:49	EP	TAL IRV
Total Recoverable	Analysis	6020		1	583321	12/02/19 14:50	B1H	TAL IRV
Total/NA	Prep	3010A			458034	01/24/20 14:18	LAM	TAL SL
Total/NA	Analysis	6020A		2	458483	01/28/20 17:30	LKP	TAL SL
Total/NA	Prep	7470A			583759	12/04/19 11:02	MEM	TAL IRV
Total/NA	Analysis	7470A		1	583918	12/04/19 21:53	DB	TAL IRV

Client Sample ID: FB01

Lab Sample ID: 440-255674-19

Date Collected: 11/22/19 09:15
Date Received: 11/26/19 10:50

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			583098	11/30/19 11:17	EP	TAL IRV
Total Recoverable	Analysis	6010B		1	583795	12/04/19 12:22	KE	TAL IRV
Total Recoverable	Prep	3005A			583233	12/02/19 08:49	EP	TAL IRV
Total Recoverable	Analysis	6020		1	583321	12/02/19 14:52	B1H	TAL IRV
Total/NA	Prep	3010A			458034	01/24/20 14:18	LAM	TAL SL
Total/NA	Analysis	6020A		2	458483	01/28/20 17:37	LKP	TAL SL
Total/NA	Prep	7470A			583759	12/04/19 11:02	MEM	TAL IRV
Total/NA	Analysis	7470A		1	583918	12/04/19 21:55	DB	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: 440-255674-2

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: 440-255674-2

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

Sample Summary

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

Job ID: 440-255674-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-255674-4	EB01	Water	11/21/19 09:36	11/26/19 10:50	
440-255674-19	FB01	Water	11/22/19 09:15	11/26/19 10:50	

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
	STSB27_0-0.5	11/21/19	0915	X			1	1				X	X			[1]Metals are: Al, B, Ca, Fe, K, Li, Mg,
	STSB27_0.5-3	11/21/19	0925	X			1	1				X	X			Na, P, Sr, Sn, Ti, by 6010B;
	STSB27_3-6	11/21/19	0931	X			1	1				X	X			As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn,
	EB01	11/21/19	0936		X		1			1		X	X	X		Mo, Ni, Sb, Se, Ag, Tl, V, Zn by 6020
	STSB27_6-15	11/21/19	0955	X			1	1				X	X			
	STSB28_0-0.5	11/21/19	1145	X			1	1				X	X			
	STSB28-FD_0-0.5	11/21/19	1150	X			1	1				X	X			Report soil on dry weight basis.
	STSB28_0.5-3	11/21/19	1155	X			1	1				X	X			
	STSB28_3-6	11/21/19	1215	X			1	1				X	X			
	STSB28_6-15	11/21/19	1225	X			1	1				X	X			

440-255674 Chain of Custody

Comments: Note If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Bryce Johnson						
Sampler's Company: Wood	[signature] / Wood	11/25/19	1030	[signature]	11/26/19	1050
Shipment Method: Fed Ex Ship Date: 11/25/19						
Shipment Tracking No: 8137 9414 1751						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 5.3/5 °F/C | Trip Blank: Yes No | MS/MSD Sample Submitted: Yes / No

IA-93

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

CB 11/26/19

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
	STSB29_0-0.5	11/21/19	1500	X			1	1				X	X			[1]Metals are. Al, B, Ca, Fe, K, Li, Mg,
	STSB29_0.5-3	11/21/19	1510	X			2	2				X	X		X	Na, P, Sr, Sn, Ti, by 6010B;
	STSB29_3-6	11/21/19	1530	X			1	1				X	X			As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn,
	STSB29_6-15	11/21/19	1545	X			1	1				X	X			Mo, Ni, Sb, Se, Ag, Tl, V, Zn by 6020
	STSB29-FD_6-15	11/21/19	1550	X			1	1				X	X			
	STSB30_0-0.5	11/22/19	~~0902~~	X			1	1				X	X			Sample Time =0855 BJ 11/22/19
	STSB30_0.5-3	11/22/19	0902	X			1	1				X	X			Report soil on dry weight basis.
	STSB30_3-6	11/22/19	0910	X			1	1				X	X			
	FB01	11/22/19	0915	X			1			1		X	X	X		
	STSB30_6-15	11/22/19	0925	X			1	1				X	X			

Sampler's Name: Bryce Johnson
Sampler's Company: Wood
Shipment Method: Fed Ex Ship Date: 11/25/19
Shipment Tracking No: 8137 9414 1751

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
[signature] / Wood	11/25/19	1030	[signature]	11/26/19	1050

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 5.3/5 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

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.)
	STSB31_0-0.5	11/22/19	1156	X				1	1						X	X									[1]Metals are: Al, B, Ca, Fe, K, Li, Mg,
	STSB31_0.5-3	11/22/19	1203	X				1	1						X	X									Na, P, Sr, Sn, Ti, by 6010B;
	STSB31_3-6	11/22/19	1210	X				1	1						X	X									As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn,
	STSB31_6-15	11/22/19	1220	X				1	1						X	X									Mo, Ni, Sb, Se, Ag, Tl, V, Zn by 6020
									BJ 11/25/19																Report soil on dry weight basis.

Sampler's Name: Bryce Johnson	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: Wood	[signature] / Wood	11/25/19	1030	[signature]	11/26/19	1050
Shipment Method: Fed Ex Ship Date: 11/25/19						
Shipment Tracking No: 8137 9414 1751						

Special Instructions:

THIS LINE - LAB USE ONLY. Custody Seals In Place: (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 5.3 / 5 °F/C | Trip Blank: Yes (No) | MS/MSD Sample Submitted: (Yes) / No

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: 440-151289.1
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 #: 440-255674-2
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/3005A Thorium	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
EB01 (440-255674-4)	11/21/19	09:36 Pacific		Water			X	1	BP Yerington requirements; immediate PM notification. J flag.
FB01 (440-255674-19)	11/22/19	09:15 Pacific		Water			X	1	BP Yerington requirements; immediate PM notification. J flag

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	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ 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	Company	Received by	Date/Time	Company
A. Kenney	1/17/2020 1700	EC-IRV	[illegible]	1/18/20 1140	ETAST

Custody Seals Intact:	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
Δ Yes Δ No		

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Wood E&I Solutions Inc

Job Number: 440-255674-2

Login Number: 255674
List Number: 1
Creator: Bonta, Lucia F

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.	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").	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: 440-255674-2

Login Number: 255674
List Number: 2
Creator: Harris, Lorin C

List Source: Eurofins TestAmerica, St. Louis
List Creation: 01/18/20 02:52 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
440-255674	1	STSB27_0-0.5	Solid	440-5969065	440-255674-A-1	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	1	STSB27_0-0.5	Solid	440-5969065	440-255674-A-1	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	1	STSB27_0-0.5	Solid	440-5969065	440-255674-A-1	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	1	STSB27_0-0.5	Solid	440-5969065	440-255674-A-1	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	1	STSB27_0-0.5	Solid	440-5969065	440-255674-A-1	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	1	STSB27_0-0.5	Solid	440-5983772	440-255674-B-1	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	1	STSB27_0-0.5	Solid	440-5983772	440-255674-B-1	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	1	STSB27_0-0.5	Solid	440-5983772	440-255674-B-1	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	1	STSB27_0-0.5	Solid	440-5983772	440-255674-B-1	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	2	STSB27_0.5-3	Solid	440-5969066	440-255674-A-2	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	2	STSB27_0.5-3	Solid	440-5969066	440-255674-A-2	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	2	STSB27_0.5-3	Solid	440-5969066	440-255674-A-2	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	2	STSB27_0.5-3	Solid	440-5969066	440-255674-A-2	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	2	STSB27_0.5-3	Solid	440-5969066	440-255674-A-2	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	2	STSB27_0.5-3	Solid	440-5983773	440-255674-B-2	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	2	STSB27_0.5-3	Solid	440-5983773	440-255674-B-2	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	2	STSB27_0.5-3	Solid	440-5983773	440-255674-B-2	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	2	STSB27_0.5-3	Solid	440-5983773	440-255674-B-2	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	3	STSB27_3-6	Solid	440-5969067	440-255674-A-3	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	3	STSB27_3-6	Solid	440-5969067	440-255674-A-3	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	3	STSB27_3-6	Solid	440-5969067	440-255674-A-3	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	3	STSB27_3-6	Solid	440-5969067	440-255674-A-3	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	3	STSB27_3-6	Solid	440-5969067	440-255674-A-3	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	3	STSB27_3-6	Solid	440-5983774	440-255674-B-3	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	3	STSB27_3-6	Solid	440-5983774	440-255674-B-3	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	3	STSB27_3-6	Solid	440-5983774	440-255674-B-3	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	3	STSB27_3-6	Solid	440-5983774	440-255674-B-3	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	4	EB01	Water	440-5969068	440-255674-A-4	Plastic 250ml - with Nitric Acid	Metals Storage Room (Rm	Mazariegos, Leonel	I	160-190549	01/27/20 13:28
440-255674	4	EB01	Water	440-5969068	440-255674-A-4	Plastic 250ml - with Nitric Acid	METALS	Mazariegos, Leonel	I	160-190441	01/24/20 14:16
440-255674	4	EB01	Water	440-5969068	440-255674-A-4	Plastic 250ml - with Nitric Acid	Metals Storage Room (Rm	Mazariegos, Leonel	I	160-190121	01/20/20 15:58
440-255674	4	EB01	Water	440-5969068	440-255674-A-4	Plastic 250ml - with Nitric Acid	METALS	Mazariegos, Leonel	I	160-190051	01/20/20 11:04
440-255674	4	EB01	Water	440-5969068	440-255674-A-4	Plastic 250ml - with Nitric Acid	METALS	Harris, Lorin C	I	160-190013	01/18/20 14:53
440-255674	4	EB01	Water	440-5969068	440-255674-A-4	Plastic 250ml - with Nitric Acid	Shared Samples In-Transi	Skinner, Alma D	O	440-151289	01/17/20 12:47
440-255674	4	EB01	Water	440-5969068	440-255674-A-4	Plastic 250ml - with Nitric Acid	_Metals Prep	Mercado, Michael E	I	440-149464	12/04/19 11:01
440-255674	4	EB01	Water	440-5969068	440-255674-A-4	Plastic 250ml - with Nitric Acid	ICOCWI3-02	Mercado, Michael E	I	440-149485	12/04/19 13:11
440-255674	4	EB01	Water	440-5969068	440-255674-A-4	Plastic 250ml - with Nitric Acid	ICOCWI3-02	Garcia, Mayra 1	I	440-149276	11/30/19 08:35
440-255674	4	EB01	Water	440-5969068	440-255674-A-4	Plastic 250ml - with Nitric Acid	_Metals Prep	Garcia, Mayra 1	I	440-149220	11/29/19 12:26
440-255674	4	EB01	Water	440-5969068	440-255674-A-4	Plastic 250ml - with Nitric Acid	ICOCWI3-02	Bonta, Lucia F	I	440-149121	11/26/19 18:30
440-255674	5	STSB27_6-15	Solid	440-5969069	440-255674-A-5	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	5	STSB27_6-15	Solid	440-5969069	440-255674-A-5	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21

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
440-255674	5	STSB27_6-15	Solid	440-5969069	440-255674-A-5	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	5	STSB27_6-15	Solid	440-5969069	440-255674-A-5	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	5	STSB27_6-15	Solid	440-5969069	440-255674-A-5	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	5	STSB27_6-15	Solid	440-5983775	440-255674-B-5	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	5	STSB27_6-15	Solid	440-5983775	440-255674-B-5	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	5	STSB27_6-15	Solid	440-5983775	440-255674-B-5	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	5	STSB27_6-15	Solid	440-5983775	440-255674-B-5	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	6	STSB28_0-0.5	Solid	440-5969070	440-255674-A-6	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	6	STSB28_0-0.5	Solid	440-5969070	440-255674-A-6	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	6	STSB28_0-0.5	Solid	440-5969070	440-255674-A-6	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	6	STSB28_0-0.5	Solid	440-5969070	440-255674-A-6	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	6	STSB28_0-0.5	Solid	440-5969070	440-255674-A-6	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	6	STSB28_0-0.5	Solid	440-5983776	440-255674-B-6	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	6	STSB28_0-0.5	Solid	440-5983776	440-255674-B-6	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	6	STSB28_0-0.5	Solid	440-5983776	440-255674-B-6	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	6	STSB28_0-0.5	Solid	440-5983776	440-255674-B-6	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	7	STSB28-FD_0-0.5	Solid	440-5969071	440-255674-A-7	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	7	STSB28-FD_0-0.5	Solid	440-5969071	440-255674-A-7	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	7	STSB28-FD_0-0.5	Solid	440-5969071	440-255674-A-7	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	7	STSB28-FD_0-0.5	Solid	440-5969071	440-255674-A-7	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	7	STSB28-FD_0-0.5	Solid	440-5969071	440-255674-A-7	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	7	STSB28-FD_0-0.5	Solid	440-5983789	440-255674-B-7	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	7	STSB28-FD_0-0.5	Solid	440-5983789	440-255674-B-7	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	7	STSB28-FD_0-0.5	Solid	440-5983789	440-255674-B-7	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	7	STSB28-FD_0-0.5	Solid	440-5983789	440-255674-B-7	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	8	STSB28_0.5-3	Solid	440-5969072	440-255674-A-8	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	8	STSB28_0.5-3	Solid	440-5969072	440-255674-A-8	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	8	STSB28_0.5-3	Solid	440-5969072	440-255674-A-8	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	8	STSB28_0.5-3	Solid	440-5969072	440-255674-A-8	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	8	STSB28_0.5-3	Solid	440-5969072	440-255674-A-8	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	8	STSB28_0.5-3	Solid	440-5983790	440-255674-B-8	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	8	STSB28_0.5-3	Solid	440-5983790	440-255674-B-8	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	8	STSB28_0.5-3	Solid	440-5983790	440-255674-B-8	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	8	STSB28_0.5-3	Solid	440-5983790	440-255674-B-8	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	9	STSB28_3-6	Solid	440-5969073	440-255674-A-9	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	9	STSB28_3-6	Solid	440-5969073	440-255674-A-9	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	9	STSB28_3-6	Solid	440-5969073	440-255674-A-9	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	9	STSB28_3-6	Solid	440-5969073	440-255674-A-9	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	9	STSB28_3-6	Solid	440-5969073	440-255674-A-9	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	9	STSB28_3-6	Solid	440-5983791	440-255674-B-9	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26

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
440-255674	9	STSB28_3-6	Solid	440-5983791	440-255674-B-9	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	9	STSB28_3-6	Solid	440-5983791	440-255674-B-9	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	9	STSB28_3-6	Solid	440-5983791	440-255674-B-9	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	10	STSB28_6-15	Solid	440-5969074	440-255674-A-10	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	10	STSB28_6-15	Solid	440-5969074	440-255674-A-10	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	10	STSB28_6-15	Solid	440-5969074	440-255674-A-10	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	10	STSB28_6-15	Solid	440-5969074	440-255674-A-10	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	10	STSB28_6-15	Solid	440-5969074	440-255674-A-10	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	10	STSB28_6-15	Solid	440-5983792	440-255674-B-10	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	10	STSB28_6-15	Solid	440-5983792	440-255674-B-10	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	10	STSB28_6-15	Solid	440-5983792	440-255674-B-10	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	10	STSB28_6-15	Solid	440-5983792	440-255674-B-10	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	11	STSB29_0-0.5	Solid	440-5969075	440-255674-A-11	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	11	STSB29_0-0.5	Solid	440-5969075	440-255674-A-11	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	11	STSB29_0-0.5	Solid	440-5969075	440-255674-A-11	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	11	STSB29_0-0.5	Solid	440-5969075	440-255674-A-11	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	11	STSB29_0-0.5	Solid	440-5969075	440-255674-A-11	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	11	STSB29_0-0.5	Solid	440-5983793	440-255674-B-11	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	11	STSB29_0-0.5	Solid	440-5983793	440-255674-B-11	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	11	STSB29_0-0.5	Solid	440-5983793	440-255674-B-11	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	11	STSB29_0-0.5	Solid	440-5983793	440-255674-B-11	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	12	STSB29_0.5-3	Solid	440-5969076	440-255674-A-12	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	12	STSB29_0.5-3	Solid	440-5969076	440-255674-A-12	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	12	STSB29_0.5-3	Solid	440-5969076	440-255674-A-12	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	12	STSB29_0.5-3	Solid	440-5969076	440-255674-A-12	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	12	STSB29_0.5-3	Solid	440-5969076	440-255674-A-12	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	12	STSB29_0.5-3	Solid	440-5969102	440-255674-A-12	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	12	STSB29_0.5-3	Solid	440-5969102	440-255674-A-12	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	12	STSB29_0.5-3	Solid	440-5969102	440-255674-A-12	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	12	STSB29_0.5-3	Solid	440-5969102	440-255674-A-12	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	12	STSB29_0.5-3	Solid	440-5969102	440-255674-A-12	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	12	STSB29_0.5-3	Solid	440-5969103	440-255674-A-12	No Container	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	12	STSB29_0.5-3	Solid	440-5969103	440-255674-A-12	No Container	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	12	STSB29_0.5-3	Solid	440-5969103	440-255674-A-12	No Container	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	12	STSB29_0.5-3	Solid	440-5969103	440-255674-A-12	No Container	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	12	STSB29_0.5-3	Solid	440-5983794	440-255674-B-12	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	12	STSB29_0.5-3	Solid	440-5983794	440-255674-B-12	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	12	STSB29_0.5-3	Solid	440-5983794	440-255674-B-12	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	12	STSB29_0.5-3	Solid	440-5983794	440-255674-B-12	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149584	12/05/19 17:01
440-255674	12	STSB29_0.5-3	Solid	440-5983796	440-255674-B-12	No Container	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26

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
440-255674	12	STSB29_0.5-3	Solid	440-5983796	440-255674-B-12	No Container	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	12	STSB29_0.5-3	Solid	440-5983809	440-255674-C-12	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	12	STSB29_0.5-3	Solid	440-5983809	440-255674-C-12	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	12	STSB29_0.5-3	Solid	440-5983809	440-255674-C-12	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	12	STSB29_0.5-3	Solid	440-5983809	440-255674-C-12	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	13	STSB29_3-6	Solid	440-5969077	440-255674-A-13	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	13	STSB29_3-6	Solid	440-5969077	440-255674-A-13	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	13	STSB29_3-6	Solid	440-5969077	440-255674-A-13	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	13	STSB29_3-6	Solid	440-5969077	440-255674-A-13	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	13	STSB29_3-6	Solid	440-5969077	440-255674-A-13	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	13	STSB29_3-6	Solid	440-5983795	440-255674-B-13	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	13	STSB29_3-6	Solid	440-5983795	440-255674-B-13	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	13	STSB29_3-6	Solid	440-5983795	440-255674-B-13	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	13	STSB29_3-6	Solid	440-5983795	440-255674-B-13	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	14	STSB29_6-15	Solid	440-5969078	440-255674-A-14	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	14	STSB29_6-15	Solid	440-5969078	440-255674-A-14	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	14	STSB29_6-15	Solid	440-5969078	440-255674-A-14	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	14	STSB29_6-15	Solid	440-5969078	440-255674-A-14	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	14	STSB29_6-15	Solid	440-5969078	440-255674-A-14	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	14	STSB29_6-15	Solid	440-5983797	440-255674-B-14	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	14	STSB29_6-15	Solid	440-5983797	440-255674-B-14	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	14	STSB29_6-15	Solid	440-5983797	440-255674-B-14	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	14	STSB29_6-15	Solid	440-5983797	440-255674-B-14	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	15	STSB29-FD_6-15	Solid	440-5969079	440-255674-A-15	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	15	STSB29-FD_6-15	Solid	440-5969079	440-255674-A-15	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	15	STSB29-FD_6-15	Solid	440-5969079	440-255674-A-15	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	15	STSB29-FD_6-15	Solid	440-5969079	440-255674-A-15	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	15	STSB29-FD_6-15	Solid	440-5969079	440-255674-A-15	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	15	STSB29-FD_6-15	Solid	440-5983798	440-255674-B-15	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	15	STSB29-FD_6-15	Solid	440-5983798	440-255674-B-15	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	15	STSB29-FD_6-15	Solid	440-5983798	440-255674-B-15	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	15	STSB29-FD_6-15	Solid	440-5983798	440-255674-B-15	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	16	STSB30_0-0.5	Solid	440-5969080	440-255674-A-16	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	16	STSB30_0-0.5	Solid	440-5969080	440-255674-A-16	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	16	STSB30_0-0.5	Solid	440-5969080	440-255674-A-16	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	16	STSB30_0-0.5	Solid	440-5969080	440-255674-A-16	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	16	STSB30_0-0.5	Solid	440-5969080	440-255674-A-16	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	16	STSB30_0-0.5	Solid	440-5983799	440-255674-B-16	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	16	STSB30_0-0.5	Solid	440-5983799	440-255674-B-16	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	16	STSB30_0-0.5	Solid	440-5983799	440-255674-B-16	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05

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
440-255674	16	STSB30_0-0.5	Solid	440-5983799	440-255674-B-16	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	17	STSB30_0.5-3	Solid	440-5969081	440-255674-A-17	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	17	STSB30_0.5-3	Solid	440-5969081	440-255674-A-17	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	17	STSB30_0.5-3	Solid	440-5969081	440-255674-A-17	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	17	STSB30_0.5-3	Solid	440-5969081	440-255674-A-17	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	17	STSB30_0.5-3	Solid	440-5969081	440-255674-A-17	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	17	STSB30_0.5-3	Solid	440-5983800	440-255674-B-17	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	17	STSB30_0.5-3	Solid	440-5983800	440-255674-B-17	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	17	STSB30_0.5-3	Solid	440-5983800	440-255674-B-17	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	17	STSB30_0.5-3	Solid	440-5983800	440-255674-B-17	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	18	STSB30_3-6	Solid	440-5969082	440-255674-A-18	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	18	STSB30_3-6	Solid	440-5969082	440-255674-A-18	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	18	STSB30_3-6	Solid	440-5969082	440-255674-A-18	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	18	STSB30_3-6	Solid	440-5969082	440-255674-A-18	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	18	STSB30_3-6	Solid	440-5969082	440-255674-A-18	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	18	STSB30_3-6	Solid	440-5983801	440-255674-B-18	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	18	STSB30_3-6	Solid	440-5983801	440-255674-B-18	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	18	STSB30_3-6	Solid	440-5983801	440-255674-B-18	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	18	STSB30_3-6	Solid	440-5983801	440-255674-B-18	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	19	FB01	Water	440-5969083	440-255674-A-19	Plastic 250ml - with Nitric Acid	Metals Storage Room (Rm	Mazariegos, Leonel	I	160-190549	01/27/20 13:28
440-255674	19	FB01	Water	440-5969083	440-255674-A-19	Plastic 250ml - with Nitric Acid	METALS	Mazariegos, Leonel	I	160-190441	01/24/20 14:16
440-255674	19	FB01	Water	440-5969083	440-255674-A-19	Plastic 250ml - with Nitric Acid	Metals Storage Room (Rm	Mazariegos, Leonel	I	160-190121	01/20/20 15:58
440-255674	19	FB01	Water	440-5969083	440-255674-A-19	Plastic 250ml - with Nitric Acid	METALS	Mazariegos, Leonel	I	160-190051	01/20/20 11:04
440-255674	19	FB01	Water	440-5969083	440-255674-A-19	Plastic 250ml - with Nitric Acid	METALS	Harris, Lorin C	I	160-190013	01/18/20 14:53
440-255674	19	FB01	Water	440-5969083	440-255674-A-19	Plastic 250ml - with Nitric Acid	Shared Samples In-Transi	Skinner, Alma D	O	440-151289	01/17/20 12:47
440-255674	19	FB01	Water	440-5969083	440-255674-A-19	Plastic 250ml - with Nitric Acid	_Metals Prep	Mercado, Michael E	I	440-149464	12/04/19 11:01
440-255674	19	FB01	Water	440-5969083	440-255674-A-19	Plastic 250ml - with Nitric Acid	ICOCWI3-02	Mercado, Michael E	I	440-149485	12/04/19 13:11
440-255674	19	FB01	Water	440-5969083	440-255674-A-19	Plastic 250ml - with Nitric Acid	ICOCWI3-02	Garcia, Mayra 1	I	440-149276	11/30/19 08:35
440-255674	19	FB01	Water	440-5969083	440-255674-A-19	Plastic 250ml - with Nitric Acid	_Metals Prep	Garcia, Mayra 1	I	440-149220	11/29/19 12:26
440-255674	19	FB01	Water	440-5969083	440-255674-A-19	Plastic 250ml - with Nitric Acid	ICOCWI3-02	Bonta, Lucia F	I	440-149121	11/26/19 18:30
440-255674	20	STSB30_6-15	Solid	440-5969084	440-255674-A-20	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	20	STSB30_6-15	Solid	440-5969084	440-255674-A-20	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	20	STSB30_6-15	Solid	440-5969084	440-255674-A-20	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	20	STSB30_6-15	Solid	440-5969084	440-255674-A-20	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	20	STSB30_6-15	Solid	440-5969084	440-255674-A-20	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	20	STSB30_6-15	Solid	440-5983802	440-255674-B-20	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	20	STSB30_6-15	Solid	440-5983802	440-255674-B-20	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	20	STSB30_6-15	Solid	440-5983802	440-255674-B-20	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	20	STSB30_6-15	Solid	440-5983802	440-255674-B-20	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	21	STSB31_0-0.5	Solid	440-5969085	440-255674-A-21	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18

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
440-255674	21	STSB31_0-0.5	Solid	440-5969085	440-255674-A-21	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	21	STSB31_0-0.5	Solid	440-5969085	440-255674-A-21	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	21	STSB31_0-0.5	Solid	440-5969085	440-255674-A-21	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	21	STSB31_0-0.5	Solid	440-5969085	440-255674-A-21	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	21	STSB31_0-0.5	Solid	440-5983803	440-255674-B-21	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	21	STSB31_0-0.5	Solid	440-5983803	440-255674-B-21	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	21	STSB31_0-0.5	Solid	440-5983803	440-255674-B-21	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	21	STSB31_0-0.5	Solid	440-5983803	440-255674-B-21	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	22	STSB31_0.5-3	Solid	440-5969086	440-255674-A-22	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	22	STSB31_0.5-3	Solid	440-5969086	440-255674-A-22	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	22	STSB31_0.5-3	Solid	440-5969086	440-255674-A-22	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	22	STSB31_0.5-3	Solid	440-5969086	440-255674-A-22	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	22	STSB31_0.5-3	Solid	440-5969086	440-255674-A-22	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	22	STSB31_0.5-3	Solid	440-5983804	440-255674-B-22	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	22	STSB31_0.5-3	Solid	440-5983804	440-255674-B-22	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	22	STSB31_0.5-3	Solid	440-5983804	440-255674-B-22	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	22	STSB31_0.5-3	Solid	440-5983804	440-255674-B-22	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	23	STSB31_3-6	Solid	440-5969087	440-255674-A-23	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	23	STSB31_3-6	Solid	440-5969087	440-255674-A-23	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	23	STSB31_3-6	Solid	440-5969087	440-255674-A-23	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	23	STSB31_3-6	Solid	440-5969087	440-255674-A-23	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	23	STSB31_3-6	Solid	440-5969087	440-255674-A-23	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	23	STSB31_3-6	Solid	440-5983805	440-255674-B-23	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	23	STSB31_3-6	Solid	440-5983805	440-255674-B-23	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	23	STSB31_3-6	Solid	440-5983805	440-255674-B-23	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	23	STSB31_3-6	Solid	440-5983805	440-255674-B-23	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57
440-255674	24	STSB31_6-15	Solid	440-5969088	440-255674-A-24	Soil jar 4oz	ICOC14R-L	Garcia, Mayra 1	I	440-149462	12/04/19 10:18
440-255674	24	STSB31_6-15	Solid	440-5969088	440-255674-A-24	Soil jar 4oz	_Metals Prep	Garcia, Mayra 1	I	440-149426	12/03/19 18:21
440-255674	24	STSB31_6-15	Solid	440-5969088	440-255674-A-24	Soil jar 4oz	_Metals Prep	Mercado, Michael E	I	440-149290	12/02/19 06:44
440-255674	24	STSB31_6-15	Solid	440-5969088	440-255674-A-24	Soil jar 4oz	ICOC14R-L	Mercado, Michael E	I	440-149341	12/02/19 13:48
440-255674	24	STSB31_6-15	Solid	440-5969088	440-255674-A-24	Soil jar 4oz	ICOCV17R-L	Bonta, Lucia F	I	440-149122	11/26/19 18:30
440-255674	24	STSB31_6-15	Solid	440-5983806	440-255674-B-24	Soil jar 8oz	ICOC14R-L	Mercado, Michael E	I	440-149749	12/09/19 12:26
440-255674	24	STSB31_6-15	Solid	440-5983806	440-255674-B-24	Soil jar 8oz	_Metals Prep	Mercado, Michael E	I	440-149737	12/09/19 11:20
440-255674	24	STSB31_6-15	Solid	440-5983806	440-255674-B-24	Soil jar 8oz	ICOC14R-L	Le, Xuan	I	440-149585	12/05/19 17:05
440-255674	24	STSB31_6-15	Solid	440-5983806	440-255674-B-24	Soil jar 8oz	_General Chemistry	Le, Xuan	I	440-149583	12/05/19 16:57

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-255674-2

SDG No.:

Batch Number: 583098 Batch Start Date: 11/30/19 11:17 Batch Analyst: Perez, Edwin

Batch Method: 3005A Batch End Date: 11/30/19 16:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	ME HCl 00532	ME HNO3 00545	ME ICP PREP S 00022
MB 440-583098/1		3005A, 6010B			25 mL	25 mL	1.25 mL	0.5 mL	
LCS 440-583098/2		3005A, 6010B			25 mL	25 mL	1.25 mL	0.5 mL	0.25 mL
440-255901-B-8		3005A, 6010B	R	<2 SU	25 mL	25 mL	1.25 mL	0.5 mL	
440-255901-B-8 MS		3005A, 6010B	R	<2 SU	25 mL	25 mL	1.25 mL	0.5 mL	0.25 mL
440-255901-B-8 MSD		3005A, 6010B	R	<2 SU	25 mL	25 mL	1.25 mL	0.5 mL	0.25 mL
440-255674-A-4	EB01	3005A, 6010B	R	<2 SU	25 mL	25 mL	1.25 mL	0.5 mL	
440-255674-A-19	FB01	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 00023
MB 440-583098/1		3005A, 6010B		
LCS 440-583098/2		3005A, 6010B		0.25 mL
440-255901-B-8		3005A, 6010B	R	
440-255901-B-8 MS		3005A, 6010B	R	0.25 mL
440-255901-B-8 MSD		3005A, 6010B	R	0.25 mL
440-255674-A-4	EB01	3005A, 6010B	R	
440-255674-A-19	FB01	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.: 440-255674-2

SDG No.:

Batch Number: 583098 Batch Start Date: 11/30/19 11:17 Batch Analyst: Perez, Edwin

Batch Method: 3005A Batch End Date: 11/30/19 16:10

	Batch Notes
Temperature - Corrected - End	90 Degrees C
Temperature - Corrected - Start	90 Degrees C
Digestion End Time	11/29/2019 16:00
Digestion Start Time	11/30/2019 12:00
Digestion Unit ID	6
Hydrochloric Acid ID	0000240180
Nitric Acid ID	0000221803
Thermometer ID	p-125, C16, CF=-2
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.: 440-255674-2

SDG No.:

Batch Number: 583233 Batch Start Date: 12/02/19 08:49 Batch Analyst: Perez, Edwin

Batch Method: 3005A Batch End Date: 12/02/19 13:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	ME HCl 00532	ME HNO3 00545	ME ICPMS ICV 00229
MB 440-583233/1		3005A, 6020			25 mL	25 mL	0.125 mL	0.25 mL	
LCS 440-583233/2		3005A, 6020			25 mL	25 mL	0.125 mL	0.25 mL	0.2 mL
440-255863-G-1 MS		3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	
440-255863-G-1 MSD		3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	0.2 mL
440-255863-G-1		3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	0.2 mL
440-255674-A-4	EB01	3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	
440-255674-A-19	FB01	3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	

	Batch Notes
Temperature - Corrected - End	93 Degrees C
Temperature - Corrected - Start	93 Degrees C
Digestion End Time	11/30/2019 13:30
Digestion Start Time	12/02/2019 09:30
Digestion Unit ID	1
Hydrochloric Acid ID	0000240180
Nitric Acid ID	0000221803
Thermometer ID	p-135, C17, CF=-2
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	95 Degrees C
Temperature - Uncorrected - Start	95 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.

6020

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-255674-2

SDG No.:

Batch Number: 583759 Batch Start Date: 12/04/19 11:02 Batch Analyst: Mercado, Michael E

Batch Method: 7470A Batch End Date: 12/04/19 14:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	ME 1 PPM HG1 00404	ME H2SO4 00094	ME HNO3 00540
MB 440-583759/1		7470A, 7470A		n/a SU	20 mL	20 mL		1 mL	0.5 mL
LCS 440-583759/2		7470A, 7470A		n/a SU	20 mL	20 mL	80 uL	1 mL	0.5 mL
720-96142-O-5		7470A, 7470A	T	<2 SU	20 mL	20 mL		1 mL	0.5 mL
720-96142-O-5 MS		7470A, 7470A	T	<2 SU	20 mL	20 mL	80 uL	1 mL	0.5 mL
720-96142-O-5 MSD		7470A, 7470A	T	<2 SU	20 mL	20 mL	80 uL	1 mL	0.5 mL
440-255674-A-4	EB01	7470A, 7470A	T	<2 SU	20 mL	20 mL		1 mL	0.5 mL
440-255674-A-19	FB01	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 00114	ME K2S2O8 00088	ME KMN04 00186
MB 440-583759/1		7470A, 7470A		2 mL	1.6 mL	3 mL
LCS 440-583759/2		7470A, 7470A		2 mL	1.6 mL	3 mL
720-96142-O-5		7470A, 7470A	T	2 mL	1.6 mL	3 mL
720-96142-O-5 MS		7470A, 7470A	T	2 mL	1.6 mL	3 mL
720-96142-O-5 MSD		7470A, 7470A	T	2 mL	1.6 mL	3 mL
440-255674-A-4	EB01	7470A, 7470A	T	2 mL	1.6 mL	3 mL
440-255674-A-19	FB01	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.: 440-255674-2

SDG No.:

Batch Number: 583759 Batch Start Date: 12/04/19 11:02 Batch Analyst: Mercado, Michael E

Batch Method: 7470A Batch End Date: 12/04/19 14:45

Batch Notes	
Batch Comment	MB Loc: A5
Temperature - Corrected - End	91 Degrees C
Temperature - Corrected - Start	92 Degrees C
Digestion End Time	12/04/2019 14:15
Digestion Start Time	12/04/2019 12:15
Digestion Unit ID	2
Sulfuric Acid ID	Lot: 0000222813
Nitric Acid ID	Lot: 0000221803
Hydroxylamine ID	5901782 @ 12/04/2019 14:30
Potassium Persulfate ID	5786723
Potassium Permanganate ID	5949091
pH Indicator ID	HC991818
Pipette/Syringe/Dispenser ID	800
Analyst ID - Spike Analyst	MM
Thermometer ID	P-144 CF 0 Loc: A6
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	91 Degrees C
Temperature - Uncorrected - Start	92 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.: 440-255674-2

SDG No.:

Batch Number: 458034 Batch Start Date: 01/27/20 11:50 Batch Analyst: Mazariegos, Leonel A

Batch Method: 3010A Batch End Date: 01/28/20 11:08

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MPREP1-A 00004	MPREP1-B 00004	MPREP2 00022	AnalysisComment
MB 160-458034/1		3010A, 6020A		50 mL	50 mL				REWORK
LCS 160-458034/2		3010A, 6020A		50 mL	50 mL	0.25 mL	0.25 mL	0.25 mL	Incorrect method
440-255674-A-4	EB01	3010A, 6020A	T	50 mL	50 mL				
440-255674-A-19	FB01	3010A, 6020A	T	50 mL	50 mL				
440-256946-A-4		3010A, 6020A	T	50 mL	50 mL				
440-256946-A-4 MS		3010A, 6020A	T	50 mL	50 mL	0.25 mL	0.25 mL	0.25 mL	
440-256946-A-4 MSD		3010A, 6020A	T	50 mL	50 mL	0.25 mL	0.25 mL	0.25 mL	

Batch Notes	
Temperature - Corrected - End	C4: 91.5 Degrees C
Temperature - Corrected - Start	B5: 91.8 Degrees C
Digestion End Time	01/28/2020 10:48
Digestion Start Time	01/27/2020 15:27
Digestion Unit ID	HOTBLOCK 1
Hydrochloric Acid ID	1864826
Nitric Acid ID	1854883
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.

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: EB01

Lab Sample ID: 440-255674-4

Lab Name: Eurofins Irvine

Job No.: 440-255674-2

SDG ID.:

Matrix: Water

Date Sampled: 11/21/2019 09:36

Reporting Basis: WET

Date Received: 11/26/2019 10:50

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	0.012	0.020	0.010	mg/L	J		1	6010B
7723-14-0	Phosphorus	ND	0.20	0.10	mg/L			1	6010B
7440-09-7	Potassium	0.30	0.50	0.25	mg/L	J		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	1.1	2.0	0.50	ug/L	J		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	16	20	2.5	ug/L	J	B	1	6020

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: EB01

Lab Sample ID: 440-255674-4

Lab Name: Eurofins Irvine

Job No.: 440-255674-2

SDG ID.:

Matrix: Water

Date Sampled: 11/21/2019 09:36

Reporting Basis: WET

Date Received: 11/26/2019 10:50

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

Client Sample ID: EB01

Lab Sample ID: 440-255674-4

Lab Name: Eurofins TestAmerica, St. Louis

Job No.: 440-255674-2

SDG ID.:

Matrix: Water

Date Sampled: 11/21/2019 09:36

Reporting Basis: WET

Date Received: 11/26/2019 10:50

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 - TOTAL RECOVERABLE

Client Sample ID: FB01
Lab Sample ID: 440-255674-19
Lab Name: Eurofins Irvine
Job No.: 440-255674-2
SDG ID.:
Matrix: Water
Date Sampled: 11/22/2019 09:15
Reporting Basis: WET
Date Received: 11/26/2019 10:50

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	1.5	2.0	0.50	ug/L	J		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	11	20	2.5	ug/L	J	B	1	6020

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: FB01

Lab Sample ID: 440-255674-19

Lab Name: Eurofins Irvine

Job No.: 440-255674-2

SDG ID.:

Matrix: Water

Date Sampled: 11/22/2019 09:15

Reporting Basis: WET

Date Received: 11/26/2019 10:50

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

Client Sample ID: FB01

Lab Sample ID: 440-255674-19

Lab Name: Eurofins TestAmerica, St. Louis

Job No.: 440-255674-2

SDG ID.:

Matrix: Water

Date Sampled: 11/22/2019 09:15

Reporting Basis: WET

Date Received: 11/26/2019 10:50

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.: 440-255674-2

SDG No.:

ICV Source: ME ICP ICV2_02346 Concentration Units: mg/L

CCV Source: ME ICP STD3_03021

	ICV 440-583568/5 12/03/2019 08:54				CCV 440-583568/17 12/03/2019 12:53				CCV 440-583568/29 12/03/2019 13:22			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	0.992		1.00	99	1.02		1.00	102	1.01		1.00	101
Boron	1.01		1.00	101	1.01		1.00	101	1.01		1.00	101
Calcium	5.04		5.00	101	5.01		5.00	100	4.99		5.00	100
Iron	1.01		1.00	101	1.01		1.00	101	1.01		1.00	101
Lithium	1.00		1.00	100	0.992		1.00	99	0.987		1.00	99
Magnesium	5.07		5.00	101	5.04		5.00	101	5.01		5.00	100
Phosphorus	2.05		2.00	102	1.00		1.00	100	1.00		1.00	100
Potassium	4.99		5.00	100	10.1		10.0	101	10.1		10.0	101
Strontium	1.00		1.00	100	1.01		1.00	101	1.01		1.00	101
Tin	1.99		2.00	99	1.01		1.00	101	1.01		1.00	101
Titanium	1.01		1.00	101	1.02		1.00	102	1.02		1.00	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 Irvine Job No.: 440-255674-2

SDG No.:

ICV Source: ICV SODIUM_00063 Concentration Units: mg/L

CCV Source: ME ICP STD3_03021

	ICV 440-583568/8 12/03/2019 09:04				CCV 440-583568/17 12/03/2019 12:53				CCV 440-583568/29 12/03/2019 13:22			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Sodium	4.97		5.00	99	9.96		10.0	100	9.89		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.: 440-255674-2

SDG No.:

ICV Source: ME ICP ICV2_02347 Concentration Units: mg/L

CCV Source: ME ICP STD3_03023

	ICV 440-583795/5 12/04/2019 09:49				CCV 440-583795/16 12/04/2019 12:15				CCV 440-583795/27 12/04/2019 12:40			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	0.972		1.00	97	1.00		1.00	100	0.999		1.00	100
Boron	0.990		1.00	99	0.995		1.00	99	0.997		1.00	100
Calcium	4.95		5.00	99	4.95		5.00	99	5.02		5.00	100
Iron	0.992		1.00	99	1.01		1.00	101	0.990		1.00	99
Lithium	0.997		1.00	100	0.993		1.00	99	0.993		1.00	99
Magnesium	4.98		5.00	100	4.97		5.00	99	5.01		5.00	100
Phosphorus	2.00		2.00	100	0.989		1.00	99	0.991		1.00	99
Potassium	5.04		5.00	101	9.89		10.0	99	9.99		10.0	100
Strontium	0.997		1.00	100	0.989		1.00	99	0.996		1.00	100
Tin	1.97		2.00	99	0.997		1.00	100	0.996		1.00	100
Titanium	1.00		1.00	100	1.01		1.00	101	1.00		1.00	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.: 440-255674-2

SDG No.:

ICV Source: ME ICP ICV2_02347 Concentration Units: mg/L

CCV Source: ME ICP STD3_03023

Analyte	ICV 440-583832/5 12/04/2019 09:49				CCV 440-583832/16 12/04/2019 14:55				CCV 440-583832/19 12/04/2019 15:24			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	0.972		1.00	97	0.995		1.00	99	0.993		1.00	99
Boron	0.990		1.00	99	0.994		1.00	99	0.990		1.00	99
Calcium	4.95		5.00	99	5.03		5.00	101	4.96		5.00	99
Iron	0.992		1.00	99	1.00		1.00	100	1.00		1.00	100
Lithium	0.997		1.00	100	0.989		1.00	99	0.993		1.00	99
Magnesium	4.98		5.00	100	5.06		5.00	101	5.01		5.00	100
Phosphorus	2.00		2.00	100	0.976		1.00	98	0.988		1.00	99
Potassium	5.04		5.00	101	10.0		10.0	100	9.95		10.0	99
Strontium	0.997		1.00	100	0.993		1.00	99	0.992		1.00	99
Tin	1.97		2.00	99	0.985		1.00	99	0.998		1.00	100
Titanium	1.00		1.00	100	0.998		1.00	100	1.00		1.00	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.: 440-255674-2

SDG No.:

ICV Source: ICV SODIUM_00064 Concentration Units: mg/L

CCV Source: ME ICP STD3_03023

Analyte	ICV 440-583795/7 12/04/2019 09:54				CCV 440-583795/16 12/04/2019 12:15				CCV 440-583795/27 12/04/2019 12:40			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Sodium	4.89		5.00	98	9.89		10.0	99	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.: 440-255674-2

SDG No.:

ICV Source: ICV SODIUM_00064 Concentration Units: mg/L

CCV Source: ME ICP STD3_03023

	ICV 440-583832/7 12/04/2019 09:54				CCV 440-583832/16 12/04/2019 14:55				CCV 440-583832/19 12/04/2019 15:24			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Sodium	4.89		5.00	98	10.1		10.0	101	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.: 440-255674-2

SDG No.:

ICV Source: MEICPMS ICV_00288 Concentration Units: ug/L

CCV Source: MEICPMS CCV_00287

	ICV 440-583321/8 12/02/2019 09:13				CCV 440-583321/20 12/02/2019 14:28				CCV 440-583321/31 12/02/2019 14:56			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Antimony	25.0		25.0	100	49.4		50.0	99	49.7		50.0	99
Arsenic	25.2		25.0	101	49.4		50.0	99	49.1		50.0	98
Barium	25.4		25.0	101	49.1		50.0	98	49.7		50.0	99
Beryllium	24.7		25.0	99	53.8		50.0	108	56.2		50.0	112
Cadmium	25.3		25.0	101	50.6		50.0	101	50.7		50.0	101
Chromium	25.7		25.0	103	49.7		50.0	99	50.3		50.0	101
Cobalt	25.6		25.0	102	49.1		50.0	98	50.1		50.0	100
Copper	25.3		25.0	101	49.5		50.0	99	50.2		50.0	100
Lead	25.4		25.0	102	48.9		50.0	98	48.8		50.0	98
Manganese	25.7		25.0	103	49.9		50.0	100	50.2		50.0	100
Molybdenum	25.6		25.0	102	50.6		50.0	101	51.6		50.0	103
Nickel	25.9		25.0	103	49.2		50.0	98	50.1		50.0	100
Selenium	26.3		25.0	105	50.8		50.0	102	49.2		50.0	98
Silver	25.9		25.0	104	51.1		50.0	102	51.3		50.0	103
Thallium	24.6		25.0	98	47.5		50.0	95	47.4		50.0	95
Uranium	24.5		25.0	98	46.6		50.0	93	46.9		50.0	94
Vanadium	25.7		25.0	103	49.5		50.0	99	50.1		50.0	100
Zinc	26.0		25.0	104	51.1		50.0	102	50.9		50.0	102

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ok

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.: 440-255674-2

SDG No.:

ICV Source: ME 1 PPM HG1_00405 Concentration Units: ug/L

CCV Source: ME 1 PPM HG1_00404

	ICV 440-583752/1-A 12/04/2019 20:25				CCV 440-583752/3-A 12/04/2019 21:21				CCV 440-583752/3-A 12/04/2019 21:45			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.05		4.00	101	3.72		4.00	93	3.88		4.00	97

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.: 440-255674-2

SDG No.:

ICV Source: ME 1 PPM HG1_00405 Concentration Units: ug/L

CCV Source: ME 1 PPM HG1_00404

	CCV 440-583752/3-A 12/04/2019 22:03											
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.04		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 TestAmerica, St. Louis Job No.: 440-255674-2

SDG No.:

ICV Source: MS A ICV_01103 Concentration Units: ug/L

CCV Source: MS A CAL1 LLC_00424

	ICV 160-458483/5 01/28/2020 16:15				CCVL 160-458483/24 01/28/2020 18:24							
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Thorium	97.0		100	97	1.92	J	2.00	96				

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.: 440-255674-2

SDG No.:

ICV Source: MS A ICV_01103 Concentration Units: ug/L

CCV Source: MS A CAL2 CCV_00382

	ICV 160-458483/5 01/28/2020 16:15				CCV 160-458483/12 01/28/2020 17:03				CCV 160-458483/25 01/28/2020 18:30			
Analyte	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Thorium	97.0		100	97	100		100	100	99.2		100	99

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.: 440-255674-2

SDG No.:

Method: 6010B | Instrument ID: ICP8

Lab Sample ID: CRI 440-583568/16 | Concentration Units: mg/L

CRQL Check Standard Source: ME ICP RL_01080

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	0.200	0.194		97	50-150
Boron	0.100	0.0970		97	50-150
Calcium	0.200	0.229		114	50-150
Iron	0.200	0.211		105	50-150
Lithium	0.100	0.0999	J	100	50-150
Magnesium	0.0400	0.0440		110	50-150
Phosphorus	0.400	0.404		101	50-150
Potassium	1.00	0.996		100	50-150
Sodium	1.00	1.01		101	50-150
Strontium	0.0400	0.0401		100	50-150
Tin	0.200	0.198		99	50-150
Titanium	0.0100	0.0105		105	50-150

Lab Sample ID: CRI 440-583568/64 | Concentration Units: mg/L

CRQL Check Standard Source: ME ICP RL_01080

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	0.200	0.193		96	50-150
Boron	0.100	0.0963		96	50-150
Calcium	0.200	0.218		109	50-150
Iron	0.200	0.211		106	50-150
Lithium	0.100	0.0905	J	91	50-150
Magnesium	0.0400	0.0419		105	50-150
Phosphorus	0.400	0.406		101	50-150
Potassium	1.00	1.06		106	50-150
Sodium	1.00	0.999		100	50-150
Strontium	0.0400	0.0399		100	50-150
Tin	0.200	0.199		99	50-150
Titanium	0.0100	0.0113		113	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.: 440-255674-2

SDG No.:

Method: 6010B | Instrument ID: ICP8

Lab Sample ID: CRI 440-583795/15 | Concentration Units: mg/L

CRQL Check Standard Source: ME ICP RL_01082

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	0.200	0.194		97	50-150
Boron	0.100	0.0963		96	50-150
Calcium	0.200	0.208		104	50-150
Iron	0.200	0.208		104	50-150
Lithium	0.100	0.0995	J	100	50-150
Magnesium	0.0400	0.0468		117	50-150
Phosphorus	0.400	0.402		101	50-150
Potassium	1.00	1.03		103	50-150
Sodium	1.00	1.01		101	50-150
Strontium	0.0400	0.0396		99	50-150
Tin	0.200	0.195		98	50-150
Titanium	0.0100	0.00990		99	50-150

Lab Sample ID: CRI 440-583832/15 | Concentration Units: mg/L

CRQL Check Standard Source: ME ICP RL_01082

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	0.200	0.194		97	50-150
Boron	0.100	0.0963		96	50-150
Calcium	0.200	0.208		104	50-150
Iron	0.200	0.208		104	50-150
Lithium	0.100	0.0995	J	100	50-150
Magnesium	0.0400	0.0468		117	50-150
Phosphorus	0.400	0.402		101	50-150
Potassium	1.00	1.03		103	50-150
Sodium	1.00	1.01		101	50-150
Strontium	0.0400	0.0396		99	50-150
Tin	0.200	0.195		98	50-150
Titanium	0.0100	0.00990		99	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.: 440-255674-2

SDG No.:

Method: 6010B | Instrument ID: ICP8

Lab Sample ID: CRI 440-583795/29 | Concentration Units: mg/L

CRQL Check Standard Source: ME ICP RL_01082

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	0.200	0.188		94	50-150
Boron	0.100	0.0991		99	50-150
Calcium	0.200	0.215		107	50-150
Iron	0.200	0.206		103	50-150
Lithium	0.100	0.0960	J	96	50-150
Magnesium	0.0400	0.0476		119	50-150
Phosphorus	0.400	0.400		100	50-150
Potassium	1.00	1.13		113	50-150
Sodium	1.00	1.04		104	50-150
Strontium	0.0400	0.0396		99	50-150
Tin	0.200	0.192		96	50-150
Titanium	0.0100	0.0119		119	50-150

Lab Sample ID: CRI 440-583832/21 | Concentration Units: mg/L

CRQL Check Standard Source: ME ICP RL_01082

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Aluminum	0.200	0.188		94	50-150
Boron	0.100	0.0972		97	50-150
Calcium	0.200	0.210		105	50-150
Iron	0.200	0.203		102	50-150
Lithium	0.100	0.0965	J	97	50-150
Magnesium	0.0400	0.0419		105	50-150
Phosphorus	0.400	0.402		101	50-150
Potassium	1.00	1.17		117	50-150
Sodium	1.00	1.12		112	50-150
Strontium	0.0400	0.0397		99	50-150
Tin	0.200	0.196		98	50-150
Titanium	0.0100	0.0110		110	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.: 440-255674-2

SDG No.:

Method: 6020 | Instrument ID: ICPMS6

Lab Sample ID: CRI 440-583321/12 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI1_00291

Analyte	CRQL Check Standard True	Found	Qualifiers	%R(1)	Limits
Antimony	1.00	1.09	J	109	50-150
Arsenic	1.00	1.03		103	50-150
Barium	1.00	1.12		112	50-150
Beryllium	0.500	0.523		105	50-150
Cadmium	1.00	1.06		106	50-150
Chromium	1.00	1.06	J	106	50-150
Cobalt	1.00	1.05		105	50-150
Copper	1.00	1.05	J	105	50-150
Lead	1.00	0.997	J	100	50-150
Manganese	1.00	1.05		105	50-150
Molybdenum	1.00	1.05	J	105	50-150
Nickel	1.00	1.08	J	108	50-150
Selenium	1.00	0.964	J	96	50-150
Silver	1.00	1.04		104	50-150
Thallium	1.00	0.978	J	98	50-150
Uranium	1.00	0.965	J	97	50-150
Vanadium	1.00	1.05	J	105	50-150
Zinc	10.0	10.5	J	105	50-150

Lab Sample ID: CRI 440-583321/13 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00288

Analyte	CRQL Check Standard True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.06		103	50-150
Arsenic	2.00	2.09		104	50-150
Barium	2.00	2.08		104	50-150
Beryllium	1.00	0.891		89	50-150
Cadmium	2.00	2.17		108	50-150
Chromium	2.00	2.07		103	50-150
Cobalt	2.00	2.07		103	50-150
Copper	2.00	2.13		107	50-150
Lead	2.00	2.01		101	50-150
Manganese	2.00	2.08		104	50-150
Molybdenum	2.00	2.12		106	50-150
Nickel	2.00	2.09		105	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.: 440-255674-2

SDG No.:

Method: 6020 | Instrument ID: ICPMS6

Lab Sample ID: CRI 440-583321/13 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00288

Analyte	CRQL Check Standard True	Found	Qualifiers	%R(1)	Limits
Selenium	2.00	2.04		102	50-150
Silver	2.00	2.10		105	50-150
Thallium	2.00	1.95		97	50-150
Uranium	2.00	1.99		100	50-150
Vanadium	2.00	2.10		105	50-150
Zinc	20.0	20.7		104	50-150

Lab Sample ID: CRI 440-583321/33 | Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00288

Analyte	CRQL Check Standard True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.09		105	50-150
Arsenic	2.00	2.05		103	50-150
Barium	2.00	2.12		106	50-150
Beryllium	1.00	1.34		134	50-150
Cadmium	2.00	2.15		108	50-150
Chromium	2.00	2.16		108	50-150
Cobalt	2.00	2.15		107	50-150
Copper	2.00	2.22		111	50-150
Lead	2.00	2.02		101	50-150
Manganese	2.00	2.14		107	50-150
Molybdenum	2.00	2.19		110	50-150
Nickel	2.00	2.12		106	50-150
Selenium	2.00	1.99	J	100	50-150
Silver	2.00	2.17		109	50-150
Thallium	2.00	1.99		99	50-150
Uranium	2.00	1.97		99	50-150
Vanadium	2.00	2.13		106	50-150
Zinc	20.0	21.9		109	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.: 440-255674-2

SDG No.:

Method: 6020 Instrument ID: ICPMS6

Lab Sample ID: CRI 440-583321/41 Concentration Units: ug/L

CRQL Check Standard Source: MEICPMS CRI2_00288

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Antimony	2.00	2.20		110	50-150
Arsenic	2.00	2.05		103	50-150
Barium	2.00	2.13		106	50-150
Beryllium	1.00	1.22		122	50-150
Cadmium	2.00	2.14		107	50-150
Chromium	2.00	2.12		106	50-150
Cobalt	2.00	2.12		106	50-150
Copper	2.00	2.26		113	50-150
Lead	2.00	2.06		103	50-150
Manganese	2.00	2.07		104	50-150
Molybdenum	2.00	2.20		110	50-150
Nickel	2.00	2.15		107	50-150
Selenium	2.00	1.81	J	91	50-150
Silver	2.00	2.21		110	50-150
Thallium	2.00	1.99		99	50-150
Uranium	2.00	1.96		98	50-150
Vanadium	2.00	2.10		105	50-150
Zinc	20.0	21.4		107	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.: 440-255674-2

SDG No.:

Method: 7470A | Instrument ID: CV-HG5

Lab Sample ID: CRA 440-583752/5-A | Concentration Units: ug/L

CRQL Check Standard Source: ME 1 PPM HG1_00404

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.241		121	70-130

Lab Sample ID: CRA 440-583752/5-A | Concentration Units: ug/L

CRQL Check Standard Source: ME 1 PPM HG1_00404

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Mercury	0.200	0.220		110	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.: 440-255674-2

SDG No.:

Method: 6020A Instrument ID: ICPMS7700

Lab Sample ID: CRI 160-458483/7 Concentration Units: ug/L

CRQL Check Standard Source: MS A CAL1 LLC_00424

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Thorium	2.00	1.81	J	91	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.: 440-255674-2

SDG No.:

Concentration Units: mg/L

		ICB 440-583568/10 12/03/2019 09:10		CCB 440-583568/18 12/03/2019 12:56		CCB 440-583568/30 12/03/2019 13:24			
Analyte	RL	Found	C	Found	C	Found	C	Found	C
Aluminum	0.10	ND		ND		ND			
Boron	0.050	ND		ND		ND			
Calcium	0.10	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		0.00400	J	0.00380	J		

No T: ⊕

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Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-2

SDG No.:

Concentration Units: mg/L

	ICB 440-583795/9 12/04/2019 10:04		CCB 440-583795/17 12/04/2019 12:17		CCB 440-583795/28 12/04/2019 12:43			
Analyte	RL	Found	C	Found	C	Found	C	Found	C
Aluminum	0.10	ND		ND		ND			
Boron	0.050	ND		ND		ND			
Calcium	0.10	ND		ND		ND			
Iron	0.10	ND		ND		ND			
Lithium	0.50	ND		ND		ND			
Magnesium	0.020	ND		ND		0.0150	J		
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		0.00530		0.00510			

Brackets -19 only

No Mg ⊕

ok

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-2

SDG No.:

Concentration Units: mg/L

	ICB 440-583832/9 12/04/2019 10:04		CCB 440-583832/17 12/04/2019 14:59		CCB 440-583832/20 12/04/2019 15:27			
Analyte	RL	Found	C	Found	C	Found	C	Found	C
Aluminum	0.10	ND		ND		ND			
Boron	0.050	ND		ND		ND			
Calcium	0.10	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		0.263	J	ND			
Sodium	0.50	ND		ND		ND			
Strontium	0.020	ND		ND		ND			
Tin	0.10	ND		ND		ND			
Titanium	0.0050	ND		ND		ND			

brackets -4
(K ⊕)

blanks do not qualify blanks
∴ reported as is.

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-2

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 440-583321/10 12/02/2019 09:17 Found	C	CCB 440-583321/21 12/02/2019 14:30 Found	C	CCB 440-583321/32 12/02/2019 14:59 Found	C	CCB 440-583321/37 12/02/2019 15:24 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	
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.: 440-255674-2

SDG No.:

Concentration Units: ug/L

		ICB 440-583752/2-A 12/04/2019 20:27		CCB 440-583752/4-A 12/04/2019 21:23		CCB 440-583752/4-A 12/04/2019 21:47		CCB 440-583752/4-A 12/04/2019 22:05	
Analyte	RL	Found	C	Found	C	Found	C	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.: 440-255674-2

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 160-458483/6 01/28/2020 16:22		CCB 160-458483/13 01/28/2020 17:10		CCB 160-458483/26 01/28/2020 18:37			
		Found	C	Found	C	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.: 440-255674-2

SDG No.:

Concentration Units: mg/L | Lab Sample ID: MB 440-583098/1-A

Instrument Code: ICP8 | Batch No.: 583568

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010B
7440-70-2	Calcium	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.: 440-255674-2

SDG No.:

Concentration Units: ug/L | Lab Sample ID: MB 440-583098/1-A

Instrument Code: ICP8 | Batch No.: 583568

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.: 440-255674-2

SDG No.:

Concentration Units: ug/L | Lab Sample ID: MB 440-583233/1-A

Instrument Code: ICPMS6 | Batch No.: 583321

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	11.2	J		6020

No blank qual.

FORM III-IN

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Irvine

Job No.: 440-255674-2

SDG No.:

Concentration Units: mg/L

Lab Sample ID: MB 440-583759/1-A

Instrument Code: CV-HG5

Batch No.: 583918

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.000180	J		7470A

No blank qual.

FORM III-IN

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-255674-2

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 160-458034/1-A

Instrument Code: ICPMS7700 Batch No.: 458483

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.: 440-255674-2

SDG No.:

Lab Sample ID: ICSA 440-583568/11 | Instrument ID: ICP8

Lab File ID: 191203-1f.csv | ICS Source: ME ICP IFA_02344

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	600	639	106
Boron		0.0037	LMDL
Calcium	600	615	103
Iron	600	561	93
Lithium		-0.0133	
Magnesium	600	573	96
Phosphorus		-0.0448	
Potassium		-0.424	
Sodium		-0.582	
Strontium		-0.0079	
Tin		-0.0228	
Titanium		0.0001	
Antimony		*0.0000*	
Arsenic		*-0.0004*	
Barium		*0.0023*	
Beryllium		*0.0024*	
Cadmium		*0.0007*	
Chromium		*-0.0034*	
Cobalt		*0.0014*	
Copper		*0.0050*	
Lead		*-0.0044*	
Manganese		*-0.0062*	
Molybdenum		*-0.0048*	
Nickel		*0.0050*	
Selenium		*0.0134*	
Silicon		*-0.0452*	
Silver		*-0.0059*	
Thallium		*-0.0048*	
Tungsten		*-0.0045*	
Vanadium		*0.0008*	
Zinc		*-0.0029*	
Zirconium		*0.173*	

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.: 440-255674-2

SDG No.:

Lab Sample ID: ICSAB 440-583568/12 | Instrument ID: ICP8

Lab File ID: 191203-1f.csv | ICS Source: ME ICP IFB_02365

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	601	635	106
Boron	0.500	0.506	101
Calcium	603	606	101
Iron	601	561	93
Lithium	0.500	0.503	101
Magnesium	603	570	95
Phosphorus	0.500	0.481	96
Potassium	5.00	4.83	97
Sodium	5.00	4.55	91
Strontium	0.500	0.490	98
Tin	0.500	0.445	89
Titanium	0.500	0.516	103
Antimony	*0.500*	*0.520*	*104*
Arsenic	*0.500*	*0.486*	*97*
Barium	*0.500*	*0.461*	*92*
Beryllium	*0.500*	*0.512*	*102*
Cadmium	*0.500*	*0.442*	*88*
Chromium	*0.500*	*0.475*	*95*
Cobalt	*0.500*	*0.442*	*88*
Copper	*0.500*	*0.558*	*112*
Lead	*0.500*	*0.454*	*91*
Manganese	*0.500*	*0.462*	*92*
Molybdenum	*0.500*	*0.483*	*97*
Nickel	*0.500*	*0.440*	*88*
Selenium	*0.500*	*0.460*	*92*
Silicon	*2.50*	*2.59*	*103*
Silver	*0.250*	*0.261*	*104*
Thallium	*0.500*	*0.423*	*85*
Tungsten	*0.500*	*0.430*	*86*
Vanadium	*0.500*	*0.498*	*100*
Zinc	*0.500*	*0.420*	*84*
Zirconium	*0.500*	*0.478*	*96*

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.: 440-255674-2

SDG No.:

Lab Sample ID: ICSA 440-583568/65 | Instrument ID: ICP8

Lab File ID: 191203-1f.csv | ICS Source: ME ICP IFA_02344

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	600	628	105
Boron		-0.0077	
Calcium	600	600	100
Iron	600	559	93
Lithium		-0.0204	
Magnesium	600	558	93
Phosphorus		-0.0071	
Potassium		-0.329	
Sodium		-0.522	
Strontium		-0.0073	
Tin		-0.0157	
Titanium		0.0004	
Antimony		-0.0142	
Arsenic		-0.0072	
Barium		0.0023	
Beryllium		0.0023	
Cadmium		0.0003	
Chromium		-0.0013	
Cobalt		-0.0021	
Copper		0.0040	
Lead		0.0026	
Manganese		-0.0064	
Molybdenum		0.0009	
Nickel		0.0042	
Selenium		0.0033	
Silicon		-0.0337	
Silver		-0.0063	
Thallium		-0.0127	
Tungsten		-0.0060	
Vanadium		0.0032	
Zinc		-0.0005	
Zirconium		0.171	

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.: 440-255674-2

SDG No.:

Lab Sample ID: ICSAB 440-583568/66 | Instrument ID: ICP8

Lab File ID: 191203-1f.csv | ICS Source: ME ICP IFB_02365

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**601**	**607**	**101**
Boron	**0.500**	**0.486**	**97**
Calcium	**603**	**591**	**98**
Iron	**601**	**553**	**92**
Lithium	**0.500**	**0.484**	**97**
Magnesium	**603**	**548**	**91**
Phosphorus	**0.500**	**0.449**	**90**
Potassium	**5.00**	**4.68**	**94**
Sodium	**5.00**	**4.42**	**88**
Strontium	**0.500**	**0.481**	**96**
Tin	**0.500**	**0.427**	**85**
Titanium	**0.500**	**0.494**	**99**
Antimony	*0.500*	*0.505*	*101*
Arsenic	*0.500*	*0.464*	*93*
Barium	*0.500*	*0.443*	*89*
Beryllium	*0.500*	*0.485*	*97*
Cadmium	*0.500*	*0.424*	*85*
Chromium	*0.500*	*0.458*	*92*
Cobalt	*0.500*	*0.432*	*86*
Copper	*0.500*	*0.529*	*106*
Lead	*0.500*	*0.424*	*85*
Manganese	*0.500*	*0.431*	*86*
Molybdenum	*0.500*	*0.471*	*94*
Nickel	*0.500*	*0.430*	*86*
Selenium	*0.500*	*0.454*	*91*
Silicon	*2.50*	*2.48*	*99*
Silver	*0.250*	*0.249*	*99*
Thallium	*0.500*	*0.417*	*83*
Tungsten	*0.500*	*0.413*	*83*
Vanadium	*0.500*	*0.479*	*96*
Zinc	*0.500*	*0.405*	*81*
Zirconium	*0.500*	*0.451*	*90*

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.: 440-255674-2

SDG No.:

Lab Sample ID: ICSA 440-583795/10 | Instrument ID: ICP8

Lab File ID: 191204-3bcsv.csv | ICS Source: ME ICP IFA_02345

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	600	640	107
Boron		0.0045	
Calcium	600	612	102
Iron	600	564	94
Lithium		-0.0158	
Magnesium	600	569	95
Phosphorus		-0.0414	
Potassium		-0.342	
Sodium		-0.571	
Strontium		-0.0077	
Tin		-0.0100	
Titanium		-0.0004	
Antimony		*-0.0082*	
Arsenic		*-0.0015*	
Barium		*0.0021*	
Beryllium		*-0.0023*	
Cadmium		*0.0008*	
Chromium		*-0.0007*	
Cobalt		*0.0006*	
Copper		*0.0060*	
Lead		*-0.0029*	
Manganese		*-0.0114*	
Molybdenum		*-0.0017*	
Nickel		*0.0050*	
Selenium		*-0.0043*	
Silicon		*-0.0468*	
Silver		*-0.0063*	
Thallium		*-0.0007*	
Tungsten		*-0.0023*	
Vanadium		*0.0007*	
Zinc		*-0.0001*	
Zirconium		*0.175*	

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.: 440-255674-2

SDG No.:

Lab Sample ID: ICSAB 440-583795/11 | Instrument ID: ICP8

Lab File ID: 191204-3bcsv.csv | ICS Source: ME ICP IFB_02366

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**601**	**637**	**106**
Boron	**0.500**	**0.510**	**102**
Calcium	**603**	**611**	**101**
Iron	**601**	**563**	**94**
Lithium	**0.500**	**0.507**	**101**
Magnesium	**603**	**565**	**94**
Phosphorus	**0.500**	**0.465**	**93**
Potassium	**5.00**	**4.81**	**96**
Sodium	**5.00**	**4.56**	**91**
Strontium	**0.500**	**0.491**	**98**
Tin	**0.500**	**0.444**	**89**
Titanium	**0.500**	**0.517**	**103**
Antimony	*0.500*	*0.483*	*97*
Arsenic	*0.500*	*0.489*	*98*
Barium	*0.500*	*0.459*	*92*
Beryllium	*0.500*	*0.513*	*103*
Cadmium	*0.500*	*0.445*	*89*
Chromium	*0.500*	*0.475*	*95*
Cobalt	*0.500*	*0.448*	*90*
Copper	*0.500*	*0.561*	*112*
Lead	*0.500*	*0.455*	*91*
Manganese	*0.500*	*0.461*	*92*
Molybdenum	*0.500*	*0.482*	*96*
Nickel	*0.500*	*0.441*	*88*
Selenium	*0.500*	*0.451*	*90*
Silicon	*2.50*	*2.58*	*103*
Silver	*0.250*	*0.263*	*105*
Thallium	*0.500*	*0.427*	*85*
Tungsten	*0.500*	*0.431*	*86*
Vanadium	*0.500*	*0.501*	*100*
Zinc	*0.500*	*0.422*	*84*
Zirconium	*0.500*	*0.471*	*94*

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.: 440-255674-2

SDG No.:

Lab Sample ID: ICSA 440-583795/30 | Instrument ID: ICP8

Lab File ID: 191204-3bcsv.csv | ICS Source: ME ICP IFA_02345

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	600	635	106
Boron		0.0135	
Calcium	600	614	102
Iron	600	560	93
Lithium		-0.0145	
Magnesium	600	567	95
Phosphorus		-0.0088	
Potassium		-0.404	
Sodium		-0.523	
Strontium		-0.0079	
Tin		-0.0162	
Titanium		0.0003	
Arsenic		*0.0070*	
Barium		*0.0021*	
Beryllium		*-0.0030*	
Cadmium		*0.0007*	
Chromium		*-0.0023*	
Cobalt		*-0.0004*	
Copper		*0.0055*	
Manganese		*-0.0084*	
Molybdenum		*-0.0030*	
Nickel		*0.0058*	
Selenium		*-0.0039*	
Silicon		*-0.0028*	
Silver		*-0.0061*	
Thallium		*0.0048*	
Tungsten		*-0.0119*	
Vanadium		*0.0006*	
Zinc		*0.0010*	
Zirconium		*0.175*	

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.: 440-255674-2

SDG No.:

Lab Sample ID: ICSAB 440-583795/31 | Instrument ID: ICP8

Lab File ID: 191204-3bcsv.csv | ICS Source: ME ICP IFB_02366

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**601**	**632**	**105**
Boron	**0.500**	**0.509**	**102**
Calcium	**603**	**601**	**100**
Iron	**601**	**558**	**93**
Lithium	**0.500**	**0.500**	**100**
Magnesium	**603**	**562**	**93**
Phosphorus	**0.500**	**0.454**	**91**
Potassium	**5.00**	**4.83**	**97**
Sodium	**5.00**	**4.55**	**91**
Strontium	**0.500**	**0.487**	**97**
Tin	**0.500**	**0.441**	**88**
Titanium	**0.500**	**0.513**	**103**
Antimony	*0.500*	*0.501*	*100*
Arsenic	*0.500*	*0.479*	*96*
Barium	*0.500*	*0.455*	*91*
Beryllium	*0.500*	*0.507*	*101*
Cadmium	*0.500*	*0.441*	*88*
Chromium	*0.500*	*0.474*	*95*
Cobalt	*0.500*	*0.444*	*89*
Copper	*0.500*	*0.556*	*111*
Lead	*0.500*	*0.458*	*92*
Manganese	*0.500*	*0.463*	*93*
Molybdenum	*0.500*	*0.474*	*95*
Nickel	*0.500*	*0.439*	*88*
Selenium	*0.500*	*0.444*	*89*
Silicon	*2.50*	*2.60*	*104*
Silver	*0.250*	*0.261*	*104*
Thallium	*0.500*	*0.420*	*84*
Tungsten	*0.500*	*0.425*	*85*
Vanadium	*0.500*	*0.497*	*99*
Zinc	*0.500*	*0.418*	*84*
Zirconium	*0.500*	*0.476*	*95*

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.: 440-255674-2

SDG No.:

Lab Sample ID: ICSA 440-583832/22 | Instrument ID: ICP8

Lab File ID: 191204-3F.csv | ICS Source: ME ICP IFA 02345

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	600	634	106
Boron		0.0086	
Calcium	600	612	102
Iron	600	562	94
Lithium		-0.0145	
Magnesium	600	570	95
Phosphorus		-0.0126	
Potassium		-0.311	
Sodium		-0.427	
Strontium		-0.0078	
Tin		-0.0126	
Titanium		0.0001	
Arsenic		*-0.0021*	
Barium		*0.0020*	
Beryllium		*-0.0025*	
Cadmium		*0.0006*	
Chromium		*-0.0048*	
Cobalt		*-0.0034*	
Copper		*0.0049*	
Lead		*0.0058*	
Manganese		*-0.0111*	
Molybdenum		*0.0000*	
Nickel		*0.0040*	
Selenium		*0.0058*	
Silicon		*-0.0032*	
Silver		*-0.0061*	
Thallium		*-0.0032*	
Tungsten		*-0.0030*	
Vanadium		*0.0012*	
Zinc		*0.0000*	
Zirconium		*0.175*	

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.: 440-255674-2

SDG No.:

Lab Sample ID: ICSAB 440-583832/23 | Instrument ID: ICP8

Lab File ID: 191204-3F.csv | ICS Source: ME ICP IFB_02366

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**601**	**629**	**105**
Boron	**0.500**	**0.507**	**101**
Calcium	**603**	**600**	**100**
Iron	**601**	**558**	**93**
Lithium	**0.500**	**0.496**	**99**
Magnesium	**603**	**561**	**93**
Phosphorus	**0.500**	**0.459**	**92**
Potassium	**5.00**	**4.81**	**96**
Sodium	**5.00**	**4.60**	**92**
Strontium	**0.500**	**0.484**	**97**
Tin	**0.500**	**0.443**	**89**
Titanium	**0.500**	**0.510**	**102**
Antimony	*0.500*	*0.516*	*103*
Arsenic	*0.500*	*0.473*	*95*
Barium	*0.500*	*0.453*	*91*
Beryllium	*0.500*	*0.507*	*101*
Cadmium	*0.500*	*0.439*	*88*
Chromium	*0.500*	*0.474*	*95*
Cobalt	*0.500*	*0.444*	*89*
Copper	*0.500*	*0.553*	*111*
Lead	*0.500*	*0.445*	*89*
Manganese	*0.500*	*0.458*	*92*
Molybdenum	*0.500*	*0.476*	*95*
Nickel	*0.500*	*0.438*	*88*
Selenium	*0.500*	*0.443*	*89*
Silicon	*2.50*	*2.58*	*103*
Silver	*0.250*	*0.259*	*104*
Thallium	*0.500*	*0.421*	*84*
Tungsten	*0.500*	*0.424*	*85*
Vanadium	*0.500*	*0.496*	*99*
Zinc	*0.500*	*0.418*	*84*
Zirconium	*0.500*	*0.463*	*93*

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.: 440-255674-2

SDG No.:

Lab Sample ID: ICSA 440-583321/14 | Instrument ID: ICPMS6

Lab File ID: 014ICSA.d | ICS Source: MEICPMS ICSA_00317

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		0.249	
Arsenic		0.0560	
Barium		0.166	
Beryllium		0.0100	
Cadmium		0.195	
Chromium		0.279	
Cobalt		0.286	
Copper		0.347	
Lead		0.0690	
Manganese		0.400	
Molybdenum	2000	2168	108
Nickel		0.322	
Selenium		-0.0070	
Silver		0.0260	
Thallium		0.0050	
Uranium		0.0020	
Vanadium		0.0090	
Zinc		0.448	
Aluminum	*100000*	*96417*	*96*
Cerium		*0.0110*	
Cesium		*0.0140*	
Iron	*100000*	*96367*	*96*
Strontium		*0.848*	
Thorium		*0.335*	
Tin		*0.345*	
Total Heavy Metals		*0.0000*	

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.: 440-255674-2

SDG No.:

Lab Sample ID: ICSAB 440-583321/15 | Instrument ID: ICPMS6

Lab File ID: 015ICSB.d | ICS Source: MEICPMS ICSAB_00241

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**20.0**	**21.6**	**108**
Arsenic	**20.0**	**20.2**	**101**
Barium	**20.0**	**20.7**	**104**
Beryllium	**20.0**	**18.4**	**92**
Cadmium	**20.0**	**19.6**	**98**
Chromium	**20.0**	**19.6**	**98**
Cobalt	**20.0**	**19.3**	**96**
Copper	**20.0**	**18.8**	**94**
Lead	**20.0**	**18.3**	**91**
Manganese	**20.0**	**20.0**	**100**
Molybdenum	**2020**	**2171**	**107**
Nickel	**20.0**	**18.8**	**94**
Selenium	**20.0**	**19.8**	**99**
Silver	**20.0**	**19.2**	**96**
Thallium	**20.0**	**17.6**	**88**
Uranium	**20.0**	**18.5**	**92**
Vanadium	**20.0**	**19.8**	**99**
Zinc	**20.0**	**19.1**	**95**
Aluminum	*100000*	*96059*	*96*
Cerium	*20.0*	*20.0*	*100*
Cesium	*20.0*	*20.6*	*103*
Iron	*100000*	*95793*	*96*
Rubidium	*20.0*	*22.4*	*112*
Strontium	*20.0*	*21.8*	*109*
Thorium	*20.0*	*21.8*	*109*
Tin	*20.0*	*20.7*	*103*
Total Heavy Metals	*120*	*114*	*95*

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.: 440-255674-2

SDG No.:

Lab Sample ID: ICSA 440-583321/34 | Instrument ID: ICPMS6

Lab File ID: 103ICSA.d | ICS Source: MEICPMS ICSA_00317

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.241**	
Arsenic		**0.0680**	
Barium		**0.173**	
Beryllium		**0.0000**	
Cadmium		**0.207**	
Chromium		**0.278**	
Cobalt		**0.291**	
Copper		**0.362**	
Lead		**0.0660**	
Manganese		**0.443**	
Molybdenum	**2000**	**2243**	**112**
Nickel		**0.312**	
Selenium		**-0.234**	
Silver		**0.0260**	
Thallium		**0.0050**	
Uranium		**0.0030**	
Vanadium		**0.0300**	
Zinc		**0.467**	
Aluminum	*100000*	*100326*	*100*
Cerium		*0.0110*	
Cesium		*0.0170*	
Iron	*100000*	*97815*	*98*
Strontium		*0.844*	
Thorium		*0.790*	
Tin		*0.336*	
Total Heavy Metals		*0.0000*	

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.: 440-255674-2

SDG No.:

Lab Sample ID: ICSAB 440-583321/35 | Instrument ID: ICPMS6

Lab File ID: 104ICSB.d | ICS Source: MEICPMS ICSAB_00241

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	20.0	21.5	108
Arsenic	20.0	20.3	102
Barium	20.0	20.6	103
Beryllium	20.0	21.1	106
Cadmium	20.0	20.0	100
Chromium	20.0	19.9	99
Cobalt	20.0	19.3	97
Copper	20.0	19.0	95
Lead	20.0	18.4	92
Manganese	20.0	20.1	101
Molybdenum	2020	2258	112
Nickel	20.0	18.9	95
Selenium	20.0	19.2	96
Silver	20.0	19.8	99
Thallium	20.0	17.9	89
Uranium	20.0	18.3	92
Vanadium	20.0	20.2	101
Zinc	20.0	19.3	96
Aluminum	*100000*	*101688*	*102*
Cerium	*20.0*	*20.3*	*102*
Cesium	*20.0*	*20.4*	*102*
Iron	*100000*	*98287*	*98*
Rubidium	*20.0*	*22.4*	*112*
Strontium	*20.0*	*22.1*	*110*
Thorium	*20.0*	*21.9*	*109*
Tin	*20.0*	*20.8*	*104*
Total Heavy Metals	*120*	*116*	*96*

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.: 440-255674-2

SDG No.:

Lab Sample ID: ICSA 160-458483/8 Instrument ID: ICPMS7700

Lab File ID: 010ICSA.D ICS Source: MS A ICSA_00333

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Thorium		**-0.0040**	
Titanium	*2000*	*2086*	*104*

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.: 440-255674-2

SDG No.:

Lab Sample ID: ICSAB 160-458483/9 Instrument ID: ICPMS7700

Lab File ID: 011ICSB.D ICS Source: MS A ICSAB_00345

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Thorium	**50.0**	**51.9**	**104**

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

FORM IVA-IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 440-583098/2-A

Lab Name: Eurofins Irvine | Job No.: 440-255674-2

Sample Matrix: Water | LCS Source: ME ICP PREP S_00023

Water(mg/L)

Analyte	True	Found	C	%R	Limits		Q	Method
Aluminum	1.00	1.02		102	80	120		6010B
Calcium	5.00	4.89		98	80	120		6010B
Iron	1.00	1.01		101	80	120		6010B
Magnesium	5.00	4.90		98	80	120		6010B
Phosphorus	1.00	0.964		96	80	120		6010B
Potassium	10.0	9.80		98	80	120		6010B
Sodium	10.0	9.68		97	80	120		6010B
Strontium	1.00	0.980		98	80	120		6010B
Tin	1.00	0.983		98	80	120		6010B
Titanium	1.00	0.997		100	80	120		6010B
Boron	1000	987		99	80	120		6010B
Lithium	1000	968		97	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 440-583233/2-A

Lab Name: Eurofins Irvine | Job No.: 440-255674-2

Sample Matrix: Water | LCS Source: ME ICPMS ICV_00229

Water(ug/L)

Analyte	True	Found	C	%R	Limits		Q	Method
Antimony	80.0	85.3		107	80	120		6020
Arsenic	80.0	76.8		96	80	120		6020
Barium	80.0	77.4		97	80	120		6020
Beryllium	80.0	88.5		111	80	120	^	6020
Cadmium	80.0	78.8		99	80	120		6020
Chromium	80.0	77.2		96	80	120		6020
Cobalt	80.0	77.3		97	80	120		6020
Copper	80.0	79.5		99	80	120		6020
Lead	80.0	75.8		95	80	120		6020
Manganese	80.0	78.0		98	80	120		6020
Molybdenum	80.0	80.5		101	80	120		6020
Nickel	80.0	78.1		98	80	120		6020
Selenium	80.0	78.6		98	80	120		6020
Silver	80.0	81.4		102	80	120		6020
Thallium	80.0	78.2		98	80	120		6020
Uranium	80.0	77.8		97	80	120		6020
Vanadium	80.0	77.2		96	80	120		6020
Zinc	80.0	86.6		108	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 440-583759/2-A

Lab Name: Eurofins Irvine | Job No.: 440-255674-2

Sample Matrix: Water | LCS Source: ME 1 PPM HG1_00404

Water(mg/L)

Analyte	True	Found	C	%R	Limits		Q	Method
Mercury	0.00400	0.00403	✓	101	✓ 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 160-458483/11

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-255674-2

Sample Matrix: Water LCS Source: MS LDR 2_00191

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Thorium	2000	1990	✓	100	✓ 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 160-458034/2-A

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-255674-2

Sample Matrix: Water LCS Source: MPREP1-A_00004

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Thorium	1000	963	✓	96	✓ 80	120		6020A

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

FORM VIIA - IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Irvine | Job Number: 440-255674-2

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: 440-255674-2

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: 440-255674-2
SDG Number:
Matrix: Water
Instrument ID: ICPMS6
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

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Irvine | Job Number: 440-255674-2

SDG Number:

Matrix: Water | 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
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: 440-255674-2

SDG Number:

Matrix: Water | Instrument ID: CV-HG5

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: 440-255674-2

SDG Number:

Matrix: Water | Instrument ID: CV-HG5

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: 440-255674-2

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: 440-255674-2

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

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins Irvine Job Number: 440-255674-2

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 12/03/2019

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	0.000043	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	-0.00009	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	-0.00012	-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	0.00128	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	-0.000171	-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	0.00000	-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	0.000057	0.000044	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: 440-255674-2

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 12/03/2019

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	-0.00003	0	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	-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: 440-255674-2

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 12/03/2019

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: 440-255674-2

SDG No.:

ICP-AES Instrument ID: ICP8

Date: 12/03/2019

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: 440-255674-2

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 01/16/2020

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	-0.000411	-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: 440-255674-2

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 01/16/2020

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: 440-255674-2

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 01/16/2020

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: 440-255674-2

SDG No.:

ICP-AES Instrument ID: ICP8 Date: 01/16/2020

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: 440-255674-2

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

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Irvine Job No: 440-255674-2

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
Uranium		5000	6020
Vanadium		5000	6020
Zinc		5000	6020

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins Irvine Job No: 440-255674-2

SDG No.:

Instrument ID: CV-HG5 Date: 01/01/2019 13:10

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: 440-255674-2

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.: 440-255674-2

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 440-583098/1-A	11/30/2019 11:17	583098		25	25
LCS 440-583098/2-A	11/30/2019 11:17	583098		25	25
440-255901-B-8-E MS	11/30/2019 11:17	583098		25	25
440-255901-B-8-F MSD	11/30/2019 11:17	583098		25	25
440-255674-4	11/30/2019 11:17	583098		25	25
440-255674-19	11/30/2019 11:17	583098		25	25

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FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-2

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 440-583233/1-A	12/02/2019 08:49	583233		25	25
LCS 440-583233/2-A	12/02/2019 08:49	583233		25	25
440-255863-G-1-B MS	12/02/2019 08:49	583233		25	25
440-255863-G-1-C MSD	12/02/2019 08:49	583233		25	25
440-255674-4	12/02/2019 08:49	583233		25	25
440-255674-19	12/02/2019 08:49	583233		25	25

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-2

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 440-583759/1-A	12/04/2019 11:02	583759		20	20
LCS 440-583759/2-A	12/04/2019 11:02	583759		20	20
720-96142-O-5-C MS	12/04/2019 11:02	583759		20	20
720-96142-O-5-D MSD	12/04/2019 11:02	583759		20	20
440-255674-4	12/04/2019 11:02	583759		20	20
440-255674-19	12/04/2019 11:02	583759		20	20

<28 days

FORM XII-IN

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-255674-2

SDG No.:

Prep Method: 3010A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 160-458034/1-A	01/24/2020 14:18	458034		50	50
LCS 160-458034/2-A	01/24/2020 14:18	458034		50	50
440-255674-4	01/24/2020 14:18	458034		50	50
440-255674-19	01/24/2020 14:18	458034		50	50
440-256946-A-4-F MS	01/24/2020 14:18	458034		50	50
440-256946-A-4-G MSD	01/24/2020 14:18	458034		50	50

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< 6 mo.

FORM XII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine | Job No.: 440-255674-2

SDG No.:

Instrument ID: ICP8 | Analysis Method: 6010B

Start Date: 12/03/2019 08:43 | End Date: 12/03/2019 16:28

Lab Sample Id	D/F	Type	Time	Al	B	Ca	Fe	K	Li	Mg	Na	P	Sn	Sr	Ti
ICIS 440-583568/1	1		08:43	X	X	X	X	X	X	X	X	X	X	X	X
STD1 440-583568/2 IC			08:46	X	X	X	X	X	X	X	X	X	X	X	X
STD2 440-583568/3 IC			08:48	X	X	X	X	X	X	X	X	X	X	X	X
STD3 440-583568/4 IC			08:50	X	X	X	X	X	X	X	X	X	X	X	X
ICV 440-583568/5	1		08:54	X	X	X	X	X	X	X		X	X	X	X
ZZZZZZ			08:58												
ZZZZZZ			09:00												
ICV 440-583568/8	1		09:04								X				
ZZZZZZ			09:06												
ICB 440-583568/10	1		09:10	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-583568/11	1		09:12	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-583568/12	1		09:14	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			09:16												
ZZZZZZ			09:19												
CRI 440-583568/15			09:22												
CRI 440-583568/16	1		09:24	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-583568/17	1		12:53	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-583568/18	1		12:56	X	X	X	X	X	X	X	X	X	X	X	X
MB 440-583098/1-A	1	R	12:58	X	X	X	X	X	X	X	X	X	X	X	X
LCS 440-583098/2-A	1	R	13:01	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			13:03												
440-255901-B-8-E MS	1	R	13:05	X	X	X	X	X	X	X	X	X	X	X	X
440-255901-B-8-F MSD	1	R	13:08	X	X	X	X	X	X	X	X	X	X	X	X
440-255901-B-8-G PDS	1	R	13:10	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			13:12												
ZZZZZZ			13:15												
ZZZZZZ			13:17												
ZZZZZZ			13:19												
CCV 440-583568/29	1		13:22	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-583568/30	1		13:24	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			13:27												
ZZZZZZ			13:29												
ZZZZZZ			13:31												
ZZZZZZ			13:34												
ZZZZZZ			13:36												
ZZZZZZ			13:38												
ZZZZZZ			13:41												
ZZZZZZ			13:43												
ZZZZZZ			13:45												
ZZZZZZ			13:48												
CCV 440-583568/41			13:50												
CCB 440-583568/42			13:59												

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-2

SDG No.:

Instrument ID: ICP8 Analysis Method: 6010B

Start Date: 12/03/2019 08:43 End Date: 12/03/2019 16:28

Lab Sample Id	D/F	Type	Time	Analytes											
				Al	B	Ca	Fe	K	Li	Mg	Na	P	Sn	Sr	Ti
ZZZZZZ			14:02												
ZZZZZZ			14:04												
ZZZZZZ			14:07												
ZZZZZZ			14:09												
ZZZZZZ			14:11												
ZZZZZZ			14:14												
CCV 440-583568/49			14:16												
CCB 440-583568/50			14:18												
ZZZZZZ			14:21												
ZZZZZZ			14:23												
ZZZZZZ			14:25												
ZZZZZZ			14:28												
ZZZZZZ			14:30												
ZZZZZZ			14:33												
ZZZZZZ			14:35												
ZZZZZZ			14:37												
ZZZZZZ			14:40												
CCV 440-583568/60			14:42												
CCB 440-583568/61			14:44												
CCV 440-583568/62			16:15												
CCB 440-583568/63			16:21												
CRI 440-583568/64		1	16:23	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-583568/65		1	16:25	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-583568/66		1	16:28	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.: 440-255674-2

SDG No.:

Instrument ID: ICP8 | Analysis Method: 6010B

Start Date: 12/04/2019 09:37 | End Date: 12/04/2019 13:18

Lab Sample Id	D/F	Type	Time	Analytes											
				Al	B	Ca	Fe	K	Li	Mg	Na	P	Sn	Sr	Ti
ICIS 440-583795/1	1		09:37	X	X	X	X	X	X	X	X	X	X	X	X
STD1 440-583795/2 IC			09:39	X	X	X	X	X	X	X	X	X	X	X	X
STD2 440-583795/3 IC			09:42	X	X	X	X	X	X	X	X	X	X	X	X
STD3 440-583795/4 IC			09:44	X	X	X	X	X	X	X	X	X	X	X	X
ICV 440-583795/5	1		09:49	X	X	X	X	X	X	X		X	X	X	X
ZZZZZZ			09:52												
ICV 440-583795/7	1		09:54								X				
ZZZZZZ			10:02												
ICB 440-583795/9	1		10:04	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-583795/10	1		10:07	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-583795/11	1		10:09	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			10:12												
ZZZZZZ			10:14												
CRI 440-583795/14			10:17												
CRI 440-583795/15	1		10:22	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-583795/16	1		12:15	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-583795/17	1		12:17	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			12:20												
440-255674-19	1	R	12:22	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			12:24												
ZZZZZZ			12:26												
ZZZZZZ			12:28												
ZZZZZZ			12:30												
ZZZZZZ			12:32												
ZZZZZZ			12:34												
ZZZZZZ			12:36												
CCV 440-583795/27	1		12:40	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-583795/28	1		12:43	X	X	X	X	X	X	X	X	X	X	X	X
CRI 440-583795/29	1		12:45	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-583795/30	1		12:47	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-583795/31	1		12:49	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			12:55												
ZZZZZZ			12:57												
ZZZZZZ			13:00												
ZZZZZZ			13:02												
ZZZZZZ			13:04												
CCV 440-583795/37			13:16												
CCB 440-583795/38			13:18												

Prep Types:
R = Total Recoverable

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine | Job No.: 440-255674-2

SDG No.:

Instrument ID: ICP8 | Analysis Method: 6010B

Start Date: 12/04/2019 09:37 | End Date: 12/04/2019 15:34

Lab Sample Id	D/F	Type	Time	Analytes											
				Al	B	Ca	Fe	K	Li	Mg	Na	P	Sn	Sr	Ti
ICIS 440-583832/1	1		09:37	X	X	X	X	X	X	X	X	X	X	X	X
STD1 440-583832/2 IC			09:39	X	X	X	X	X	X	X	X	X	X	X	X
STD2 440-583832/3 IC			09:42	X	X	X	X	X	X	X	X	X	X	X	X
STD3 440-583832/4 IC			09:44	X	X	X	X	X	X	X	X	X	X	X	X
ICV 440-583832/5	1		09:49	X	X	X	X	X	X	X		X	X	X	X
ZZZZZZ			09:52												
ICV 440-583832/7	1		09:54								X				
ZZZZZZ			10:02												
ICB 440-583832/9	1		10:04	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-583832/10	1		10:07	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-583832/11	1		10:09	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			10:12												
ZZZZZZ			10:14												
ZZZZZZ			10:17												
CRI 440-583832/15	1		10:22	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-583832/16	1		14:55	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-583832/17	1		14:59	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-4	1	R	15:03	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-583832/19	1		15:24	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-583832/20	1		15:27	X	X	X	X	X	X	X	X	X	X	X	X
CRI 440-583832/21	1		15:29	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-583832/22	1		15:31	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-583832/23	1		15:34	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.: 440-255674-2

SDG No.:

Instrument ID: ICPMS6 | Analysis Method: 6020

Start Date: 12/02/2019 08:59 | End Date: 12/02/2019 15:38

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
RINSE 440-583321/1			08:59																		
RINSE 440-583321/2			09:01																		
STD0 440-583321/3 IC	1		09:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD1 440-583321/4 IC	1		09:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD2 440-583321/5 IC	1		09:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD3 440-583321/6 IC	1		09:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
STD4 440-583321/7 IC	1		09:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICV 440-583321/8	1		09:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			09:15																		
ICB 440-583321/10	1		09:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			09:19																		
CRI 440-583321/12	1		09:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 440-583321/13	1		09:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-583321/14	1		09:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-583321/15	1		09:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
RINSE 440-583321/16			09:31																		
RINSE 440-583321/17			09:33																		
RINSE 440-583321/18			09:35																		
RINSE 440-583321/19			09:37																		
CCV 440-583321/20	1		14:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-583321/21	1		14:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MB 440-583233/1-A	1	R	14:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LCS 440-583233/2-A	1	R	14:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			14:40																		
440-255863-G-1-B MS	1	R	14:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255863-G-1-C MSD	1	R	14:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ZZZZZZ			14:46																		
440-255863-G-1-A SD ^5	5	R	14:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-4	1	R	14:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255674-19	1	R	14:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-583321/31	1		14:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-583321/32	1		14:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 440-583321/33	1		15:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-583321/34	1		15:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSAB 440-583321/35	1		15:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-583321/36	1		15:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-583321/37	1		15:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
440-255863-G-1--D PDS	1	R	15:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCV 440-583321/39	1		15:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CCB 440-583321/40	1		15:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CRI 440-583321/41	1		15:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ICSA 440-583321/42	1		15:36	X	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.: 440-255674-2

SDG No.:

Instrument ID: CV-HG5 | Analysis Method: 7470A

Start Date: 12/04/2019 20:13 | End Date: 12/04/2019 22:28

Lab Sample Id	D/F	Type	Time	Hg
IC 440-583752/6-A			20:13	X
IC 440-583752/7-A			20:15	X
IC 440-583752/8-A			20:17	X
IC 440-583752/9-A			20:19	X
IC 440-583752/10-A			20:21	X
IC 440-583752/11-A			20:23	X
ICV 440-583752/1-A	1		20:25	X
ICB 440-583752/2-A	1		20:27	X
CRA 440-583752/5-A	1		20:30	X
CCV 440-583752/3-A			20:32	
CCB 440-583752/4-A			20:34	
ZZZZZZ			20:36	
ZZZZZZ			20:38	
ZZZZZZ			20:40	
ZZZZZZ			20:42	
ZZZZZZ			20:44	
ZZZZZZ			20:46	
ZZZZZZ			20:48	
ZZZZZZ			20:50	
ZZZZZZ			20:52	
ZZZZZZ			20:54	
CCV 440-583752/3-A			20:56	
CCB 440-583752/4-A			20:58	
ZZZZZZ			21:01	
ZZZZZZ			21:03	
ZZZZZZ			21:05	
ZZZZZZ			21:07	
ZZZZZZ			21:09	
ZZZZZZ			21:11	
ZZZZZZ			21:13	
ZZZZZZ			21:15	
ZZZZZZ			21:17	
ZZZZZZ			21:19	
CCV 440-583752/3-A	1		21:21	X
CCB 440-583752/4-A	1		21:23	X
MB 440-583759/1-A	1	T	21:25	X
LCS 440-583759/2-A	1	T	21:27	X
ZZZZZZ			21:29	
720-96142-O-5-C MS	1	T	21:31	X
720-96142-O-5-D MSD	1	T	21:33	X
ZZZZZZ			21:35	
ZZZZZZ			21:37	

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins Irvine | Job No.: 440-255674-2

SDG No.:

Instrument ID: CV-HG5 | Analysis Method: 7470A

Start Date: 12/04/2019 20:13 | End Date: 12/04/2019 22:28

Lab Sample Id	D/F	Type	Time	Analytes: Hg
ZZZZZZ			21:39	
ZZZZZZ			21:41	
ZZZZZZ			21:43	
CCV 440-583752/3-A	1		21:45	X
CCB 440-583752/4-A	1		21:47	X
ZZZZZZ			21:49	
ZZZZZZ			21:51	
440-255674-4	1	T	21:53	X
440-255674-19	1	T	21:55	X
ZZZZZZ			21:57	
ZZZZZZ			21:59	
CRA 440-583752/5-A	1		22:01	X
CCV 440-583752/3-A	1		22:03	X
CCB 440-583752/4-A	1		22:05	X
CCV 440-583752/3-A			22:18	
CCB 440-583752/4-A			22:20	
ZZZZZZ			22:22	
CRA 440-583752/5-A			22:24	
CCV 440-583752/3-A			22:26	
CCB 440-583752/4-A			22:28	

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-255674-2

SDG No.:

Instrument ID: ICPMS7700 Analysis Method: 6020A

Start Date: 01/28/2020 15:49 End Date: 01/28/2020 23:00

Lab Sample Id	D/F	Type	Time	Th	Analytes
ICIS 160-458483/1			15:49	X	
IC 160-458483/2	1		15:55	X	
IC 160-458483/3	1		16:02	X	
IC 160-458483/4	1		16:09	X	
ICV 160-458483/5	1		16:15	X	
ICB 160-458483/6	1		16:22	X	
CRI 160-458483/7	1		16:29	X	
ICSA 160-458483/8	1		16:36	X	
ICSAB 160-458483/9	1		16:43	X	
LRC 160-458483/10			16:49		
LRC 160-458483/11	1		16:56	X	
CCV 160-458483/12	1		17:03	X	
CCB 160-458483/13	1		17:10	X	
MB 160-458034/1-A	2	T	17:17	X	
LCS 160-458034/2-A	2	T	17:23	X	
440-255674-4	2	T	17:30	X	
440-255674-19	2	T	17:37	X	
ZZZZZZ			17:43		
ZZZZZZ			17:50		
440-256946-A-4-E SD	10	T	17:57	X	
440-256946-A-4-F MS	2	T	18:03	X	
440-256946-A-4-G MSD	2	T	18:10	X	
ZZZZZZ			18:17		
CCVL 160-458483/24	1		18:24	X	
CCV 160-458483/25	1		18:30	X	
CCB 160-458483/26	1		18:37	X	
ZZZZZZ			18:44		
ZZZZZZ			18:51		
ZZZZZZ			18:57		
ZZZZZZ			19:04		
ZZZZZZ			19:11		
ZZZZZZ			19:17		
ZZZZZZ			19:24		
ZZZZZZ			19:31		
ZZZZZZ			19:38		
ZZZZZZ			19:44		
CCVL 160-458483/37			19:51		
CCV 160-458483/38			19:58		
CCB 160-458483/39			20:05		
ZZZZZZ			20:11		
ZZZZZZ			20:18		
ZZZZZZ			20:25		

FORM XIII-IN

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-2

SDG No.:

ICP Instrument ID: ICP8 Start Date: 12/03/2019 End Date: 12/03/2019

Lab Sample ID	Time	Internal Standards %RI For: Element Y 371.029	Q	Element	Q	Element	Q	Element	Q	Element	Q
ICIS 440-583568/1	08:43										
ICV 440-583568/5	08:54	100									
ICV 440-583568/8	09:04	100									
ICB 440-583568/10	09:10	101									
ICSA 440-583568/11	09:12	89									
ICSAB 440-583568/12	09:14	89									
CRI 440-583568/16	09:24	101									
CCV 440-583568/17	12:53	102									
CCB 440-583568/18	12:56	103									
MB 440-583098/1-A	12:58	102									
LCS 440-583098/2-A	13:01	102									
440-255901-B-8-E MS	13:05	102									
440-255901-B-8-F MSD	13:08	102									
440-255901-B-8-G PDS	13:10	102									
CCV 440-583568/29	13:22	102									
CCB 440-583568/30	13:24	102									
CRI 440-583568/64	16:23	103									
ICSA 440-583568/65	16:25	91									
ICSAB 440-583568/66	16:28	93									

FORM XV - IN

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-2

SDG No.:

ICP Instrument ID: ICP8 Start Date: 12/04/2019 End Date: 12/04/2019

Lab Sample ID	Time	Internal Standards %RI For:									
		Element Y 371.029	Q	Element	Q	Element	Q	Element	Q	Element	Q
ICIS 440-583795/1	09:37										
ICV 440-583795/5	09:49	100									
ICV 440-583795/7	09:54	100									
ICB 440-583795/9	10:04	100									
ICSA 440-583795/10	10:07	88									
ICSAB 440-583795/11	10:09	88									
CRI 440-583795/15	10:22	101									
CCV 440-583795/16	12:15	100									
CCB 440-583795/17	12:17	101									
440-255674-19	12:22	100									
CCV 440-583795/27	12:40	100									
CCB 440-583795/28	12:43	100									
CRI 440-583795/29	12:45	101									
ICSA 440-583795/30	12:47	89									
ICSAB 440-583795/31	12:49	89									

FORM XV - IN

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins Irvine Job No.: 440-255674-2

SDG No.:

ICP Instrument ID: ICP8 Start Date: 12/04/2019 End Date: 12/04/2019

Lab Sample ID	Time	Internal Standards %RI For: Element Y 371.029	Q	Element	Q	Element	Q	Element	Q	Element	Q
ICIS 440-583832/1	09:37										
ICV 440-583832/5	09:49	100									
ICV 440-583832/7	09:54	100									
ICB 440-583832/9	10:04	100									
ICSA 440-583832/10	10:07	88									
ICSAB 440-583832/11	10:09	88									
CRI 440-583832/15	10:22	101									
CCV 440-583832/16	14:55	101									
CCB 440-583832/17	14:59	101									
440-255674-4	15:03	100									
CCV 440-583832/19	15:24	100									
CCB 440-583832/20	15:27	101									
CRI 440-583832/21	15:29	101									
ICSA 440-583832/22	15:31	88									
ICSAB 440-583832/23	15:34	89									

FORM XV - IN

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

Lab Name: Eurofins Irvine Job No.: 440-255674-2

SDG No.:

ICP-MS Instrument ID: ICPMS6 Start Date: 12/02/2019 End Date: 12/02/2019

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
STD0 440-583321/3 IC	09:03	100		100		100		100			
STD1 440-583321/4 IC	09:05	100		99		100		101			
STD2 440-583321/5 IC	09:07	100		99		100		100			
STD3 440-583321/6 IC	09:09	101		101		102		101			
STD4 440-583321/7 IC	09:11	102		101		102		101			
ICV 440-583321/8	09:13	101		101		103		100			
ICB 440-583321/10	09:17	100		99		99		99			
CRI 440-583321/12	09:21	101		99		101		100			
CRI 440-583321/13	09:24	100		99		101		100			
ICSA 440-583321/14	09:26	98		95		93		97			
ICSAB 440-583321/15	09:28	103		98		97		99			
CCV 440-583321/20	14:28	98		95		94		93			
CCB 440-583321/21	14:30	94		92		91		91			
MB 440-583233/1-A	14:35	92		90		89		91			
LCS 440-583233/2-A	14:38	94		92		91		92			
440-255863-G-1-B MS	14:42	94		91		89		91			
440-255863-G-1-C MSD	14:44	96		92		90		92			
440-255863-G-1-A SD ^5	14:48	95		94		92		93			
440-255674-4	14:50	93		91		90		92			
440-255674-19	14:52	92		90		89		91			
CCV 440-583321/31	14:56	93		91		91		92			
CCB 440-583321/32	14:59	92		90		89		91			
CRI 440-583321/33	15:02	91		90		90		91			
ICSA 440-583321/34	15:04	93		88		85		90			
ICSAB 440-583321/35	15:06	95		90		87		91			
CCV 440-583321/36	15:22	93		92		91		93			
CCB 440-583321/37	15:24	91		90		89		91			
440-255863-G-1-D PDS	15:26	94		91		89		92			
CCV 440-583321/39	15:29	94		92		91		91			
CCB 440-583321/40	15:32	92		90		89		90			
CRI 440-583321/41	15:34	92		90		89		90			
ICSA 440-583321/42	15:36	92		88		84		89			
ICSAB 440-583321/43	15:38	95		91		87		91			

FORM XV - IN

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

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-255674-2

SDG No.:

ICP-MS Instrument ID: ICPMS7700 Start Date: 01/28/2020 End Date: 01/28/2020

Internal Standards %RI For:

Lab Sample ID	Time	Element Li-6	Q	Element Sc/2	Q	Element Sc/3	Q	Element Ge/2	Q	Element Ge/3	Q
IC 160-458483/2	15:55	99		101		100		103		101	
IC 160-458483/3	16:02	97		99		99		109		102	
IC 160-458483/4	16:09	96		98		98		108		102	
ICV 160-458483/5	16:15	96		98		97		110		101	
ICB 160-458483/6	16:22	98		98		99		100		99	
CRI 160-458483/7	16:29	101		101		100		105		102	
ICSA 160-458483/8	16:36	89		105		96		106		96	
ICSAB 160-458483/9	16:43	88		109		97		111		97	
LRC 160-458483/11	16:56			110		95		107		94	
CCV 160-458483/12	17:03	86		96		92		107		96	
CCB 160-458483/13	17:10	90		96		95		100		95	
MB 160-458034/1-A	17:17	91		94		95		100		98	
LCS 160-458034/2-A	17:23	85		94		91		99		96	
440-255674-4	17:30	89		91		93		99		98	
440-255674-19	17:37	90		91		94		100		98	
440-256946-A-4-E SD	17:57	94		90		96		96		99	
440-256946-A-4-F MS	18:03	87		91		93		96		98	
440-256946-A-4-G MSD	18:10	87		91		93		98		98	
CCVL 160-458483/24	18:24	91		91		95		99		99	
CCV 160-458483/25	18:30	89		91		94		104		101	
CCB 160-458483/26	18:37	91		91		95		96		97	

FORM XV - IN

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

Lab Name: Eurofins TestAmerica, St. Louis Job No.: 440-255674-2

SDG No.:

ICP-MS Instrument ID: ICPMS7700 Start Date: 01/28/2020 End Date: 01/28/2020

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 160-458483/2	15:55	100		100		99		99		99	
IC 160-458483/3	16:02	97		99		99		98		98	
IC 160-458483/4	16:09	98		98		100		98		98	
ICV 160-458483/5	16:15	99		101		99		101		100	
ICB 160-458483/6	16:22	100		100		100		100		100	
CRI 160-458483/7	16:29	102		101		101		101		102	
ICSA 160-458483/8	16:36	92		99		94		91		89	
ICSAB 160-458483/9	16:43	91		98		95		90		89	
LRC 160-458483/11	16:56	89		97		94		90		90	
CCV 160-458483/12	17:03	95		100		97		100		97	
CCB 160-458483/13	17:10	99		100		99		101		100	
MB 160-458034/1-A	17:17	98		100		98		100		99	
LCS 160-458034/2-A	17:23	95		98		97		96		97	
440-255674-4	17:30	98		99		100		101		100	
440-255674-19	17:37	98		99		100		99		100	
440-256946-A-4-E SD	17:57	101		98		102		102		103	
440-256946-A-4-F MS	18:03	95		98		99		96		99	
440-256946-A-4-G MSD	18:10	96		99		100		97		99	
CCVL 160-458483/24	18:24	100		100		102		102		103	
CCV 160-458483/25	18:30	99		101		102		102		102	
CCB 160-458483/26	18:37	100		98		100		101		101	

FORM XV - IN

METALS BATCH WORKSHEET

Lab Name: Eurofins Irvine Job No.: 440-255674-2

SDG No.:

Batch Number: 583098 Batch Start Date: 11/30/19 11:17 Batch Analyst: Perez, Edwin

Batch Method: 3005A Batch End Date: 11/30/19 16:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	ME HCl 00532	ME HNO3 00545	ME ICP PREP S 00022
MB 440-583098/1		3005A, 6010B			25 mL	25 mL	1.25 mL	0.5 mL	
LCS 440-583098/2		3005A, 6010B			25 mL	25 mL	1.25 mL	0.5 mL	0.25 mL
440-255901-B-8 MS		3005A, 6010B	R	<2 SU	25 mL	25 mL	1.25 mL	0.5 mL	0.25 mL
440-255901-B-8 MSD		3005A, 6010B	R	<2 SU	25 mL	25 mL	1.25 mL	0.5 mL	0.25 mL
440-255901-B-8 PDS		3005A, 6010B	R	<2 SU	25 mL	25 mL	1.25 mL	0.5 mL	0.25 mL
440-255674-A-4	EB01	3005A, 6010B	R	<2 SU	25 mL	25 mL	1.25 mL	0.5 mL	
440-255674-A-19	FB01	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 00023
MB 440-583098/1		3005A, 6010B		
LCS 440-583098/2		3005A, 6010B		0.25 mL
440-255901-B-8 MS		3005A, 6010B	R	0.25 mL
440-255901-B-8 MSD		3005A, 6010B	R	0.25 mL
440-255901-B-8 PDS		3005A, 6010B	R	0.25 mL
440-255674-A-4	EB01	3005A, 6010B	R	
440-255674-A-19	FB01	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.: 440-255674-2

SDG No.:

Batch Number: 583098

Batch Start Date: 11/30/19 11:17

Batch Analyst: Perez, Edwin

Batch Method: 3005A

Batch End Date: 11/30/19 16:10

	Batch Notes
Temperature - Corrected - End	90 Degrees C
Temperature - Corrected - Start	90 Degrees C
Digestion End Time	11/29/2019 16:00
Digestion Start Time	11/30/2019 12:00
Digestion Unit ID	6
Hydrochloric Acid ID	0000240180
Nitric Acid ID	0000221803
Thermometer ID	p-125, C16, CF=-2
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.: 440-255674-2

SDG No.:

Batch Number: 583233 Batch Start Date: 12/02/19 08:49 Batch Analyst: Perez, Edwin

Batch Method: 3005A Batch End Date: 12/02/19 13:40

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	ME HCl 00532	ME HNO3 00545	ME ICPMS ICV 00229
MB 440-583233/1		3005A, 6020			25 mL	25 mL	0.125 mL	0.25 mL	
LCS 440-583233/2		3005A, 6020			25 mL	25 mL	0.125 mL	0.25 mL	0.2 mL
440-255863-G-1 MS		3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	0.2 mL
440-255863-G-1 MSD		3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	0.2 mL
440-255863-G-1 PDS		3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	0.2 mL
440-255674-A-4	EB01	3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	
440-255674-A-19	FB01	3005A, 6020	R	<2 SU	25 mL	25 mL	0.125 mL	0.25 mL	

Batch Notes

Temperature - Corrected - End	93 Degrees C
Temperature - Corrected - Start	93 Degrees C
Digestion End Time	11/30/2019 13:30
Digestion Start Time	12/02/2019 09:30
Digestion Unit ID	1
Hydrochloric Acid ID	0000240180
Nitric Acid ID	0000221803
Thermometer ID	p-135, C17, CF=-2
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	95 Degrees C
Temperature - Uncorrected - Start	95 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.: 440-255674-2

SDG No.:

Batch Number: 583752 Batch Start Date: 12/04/19 10:56 Batch Analyst: Mercado, Michael E

Batch Method: 7470A Batch End Date: 12/04/19 14:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	ME 1 PPM HG1 00404	ME 1 PPM HG1 00405	ME H2SO4 00094
ICV 440-583752/1		7470A, 7470A		n/a SU	20 mL	20 mL		80 uL	1 mL
ICB 440-583752/2		7470A, 7470A		n/a SU	20 mL	20 mL			1 mL
CCV 440-583752/3		7470A, 7470A		n/a SU	20 mL	20 mL	80 uL		1 mL
CCB 440-583752/4		7470A, 7470A		n/a SU	20 mL	20 mL			1 mL
CRA 440-583752/5		7470A, 7470A		n/a SU	20 mL	20 mL	4 uL		1 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	ME HNO3 00540	ME HYDROX SOL 00114	ME K2S2O8 00088	ME KMNO4 00186
ICV 440-583752/1		7470A, 7470A		0.5 mL	2 mL	1.6 mL	3 mL
ICB 440-583752/2		7470A, 7470A		0.5 mL	2 mL	1.6 mL	3 mL
CCV 440-583752/3		7470A, 7470A		0.5 mL	2 mL	1.6 mL	3 mL
CCB 440-583752/4		7470A, 7470A		0.5 mL	2 mL	1.6 mL	3 mL
CRA 440-583752/5		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.: 440-255674-2

SDG No.:

Batch Number: 583752 Batch Start Date: 12/04/19 10:56 Batch Analyst: Mercado, Michael E

Batch Method: 7470A Batch End Date: 12/04/19 14:45

Batch Notes	
Batch Comment	ICB Loc: A5
Temperature - Corrected - End	93 Degrees C
Temperature - Corrected - Start	92 Degrees C
Digestion End Time	12/04/2019 14:15
Digestion Start Time	12/04/2019 12:15
Digestion Unit ID	8
Sulfuric Acid ID	Lot: 0000222813
Nitric Acid ID	Lot: 0000221803
Hydroxylamine ID	5901782 @ 12/04/2019 14:30
Potassium Persulfate ID	5786723
Potassium Permanganate ID	5949091
Pipette/Syringe/Dispenser ID	800
Analyst ID - Spike Analyst	MM
Thermometer ID	P-120 CF -1 Loc: A6
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	94 Degrees C
Temperature - Uncorrected - Start	93 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.: 440-255674-2

SDG No.:

Batch Number: 583759 Batch Start Date: 12/04/19 11:02 Batch Analyst: Mercado, Michael E

Batch Method: 7470A Batch End Date: 12/04/19 14:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	ME 1 PPM HG1 00404	ME H2SO4 00094	ME HNO3 00540
MB 440-583759/1		7470A, 7470A		n/a SU	20 mL	20 mL		1 mL	0.5 mL
LCS 440-583759/2		7470A, 7470A		n/a SU	20 mL	20 mL	80 uL	1 mL	0.5 mL
720-96142-O-5 MS		7470A, 7470A	T	<2 SU	20 mL	20 mL	80 uL	1 mL	0.5 mL
720-96142-O-5 MSD		7470A, 7470A	T	<2 SU	20 mL	20 mL	80 uL	1 mL	0.5 mL
440-255674-A-4	EB01	7470A, 7470A	T	<2 SU	20 mL	20 mL		1 mL	0.5 mL
440-255674-A-19	FB01	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 00114	ME K2S2O8 00088	ME KMNO4 00186
MB 440-583759/1		7470A, 7470A		2 mL	1.6 mL	3 mL
LCS 440-583759/2		7470A, 7470A		2 mL	1.6 mL	3 mL
720-96142-O-5 MS		7470A, 7470A	T	2 mL	1.6 mL	3 mL
720-96142-O-5 MSD		7470A, 7470A	T	2 mL	1.6 mL	3 mL
440-255674-A-4	EB01	7470A, 7470A	T	2 mL	1.6 mL	3 mL
440-255674-A-19	FB01	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.: 440-255674-2

SDG No.:

Batch Number: 583759 Batch Start Date: 12/04/19 11:02 Batch Analyst: Mercado, Michael E

Batch Method: 7470A Batch End Date: 12/04/19 14:45

Batch Notes	
Batch Comment	MB Loc: A5
Temperature - Corrected - End	91 Degrees C
Temperature - Corrected - Start	92 Degrees C
Digestion End Time	12/04/2019 14:15
Digestion Start Time	12/04/2019 12:15
Digestion Unit ID	2
Sulfuric Acid ID	Lot: 0000222813
Nitric Acid ID	Lot: 0000221803
Hydroxylamine ID	5901782 @ 12/04/2019 14:30
Potassium Persulfate ID	5786723
Potassium Permanganate ID	5949091
pH Indicator ID	HC991818
Pipette/Syringe/Dispenser ID	800
Analyst ID - Spike Analyst	MM
Thermometer ID	P-144 CF 0 Loc: A6
Digestion Tube/Cup ID	1906257
Temperature - Uncorrected - End	91 Degrees C
Temperature - Uncorrected - Start	92 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.: 440-255674-2

SDG No.:

Batch Number: 458034 Batch Start Date: 01/27/20 11:50 Batch Analyst: Mazariegos, Leonel A

Batch Method: 3010A Batch End Date: 01/28/20 11:08

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MPREP1-A 00004	MPREP1-B 00004	MPREP2 00022	AnalysisComment
MB 160-458034/1		3010A, 6020A		50 mL	50 mL				REWORK
LCS 160-458034/2		3010A, 6020A		50 mL	50 mL	0.25 mL	0.25 mL	0.25 mL	Incorrect method
440-255674-A-4	EB01	3010A, 6020A	T	50 mL	50 mL				
440-255674-A-19	FB01	3010A, 6020A	T	50 mL	50 mL				
440-256946-A-4 MS		3010A, 6020A	T	50 mL	50 mL	0.25 mL	0.25 mL	0.25 mL	
440-256946-A-4 MSD		3010A, 6020A	T	50 mL	50 mL	0.25 mL	0.25 mL	0.25 mL	

Batch Notes	
Temperature - Corrected - End	C4: 91.5 Degrees C
Temperature - Corrected - Start	B5: 91.8 Degrees C
Digestion End Time	01/28/2020 10:48
Digestion Start Time	01/27/2020 15:27
Digestion Unit ID	HOTBLOCK 1
Hydrochloric Acid ID	1864826
Nitric Acid ID	1854883
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.

US EPA Tune Check Sample Report

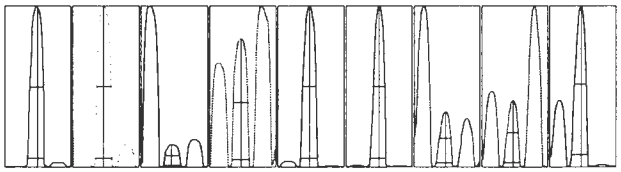
Batch Folder D:\Agilent\ICPMH\1\DATA\6_6020_template_170802_rev1C_3.b
Report Comment
Instrument Name G8403A JP16211410

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	2982	1.46	5.00	
24	18357	1.81	5.00	
25	2518	1.95	5.00	
26	3121	1.06	5.00	
59	38093	2.04	5.00	
115	61907	2.44	5.00	
206	12274	3.82	5.00	
207	10730	3.81	5.00	
208	25884	3.67	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	2931	2951	2996	3043	2989
24	17877	18423	18773	18489	18222
25	2443	2519	2581	2525	2520
26	3064	3129	3135	3124	3151
59	36813	37961	38783	38356	38552
115	59517	63642	62352	62307	61717
206	11498	12743	12278	12352	12496
207	10019	10857	10915	11056	10802
208	24264	25789	26508	26419	26440

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	4846	9.00	8.9 - 9.1		0.783	0.900	
24	28953	23.90	23.9 - 24.1		0.789	0.900	
25	3938	24.90	24.9 - 25.1		0.789	0.900	
26	4868	25.95	25.9 - 26.1		0.789	0.900	
59	63935	58.95	58.9 - 59.1		0.782	0.900	
115	113955	115.00	114.9 - 115.1		0.734	0.900	
206	22992	205.95	205.9 - 206.1		0.768	0.900	
207	20245	206.95	206.9 - 207.1		0.771	0.900	
208	48911	207.95	207.9 - 208.1		0.776	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	8.1	V	Deflect	16.6	V
Extract 2	-225.0	V	Cell Entrance	-38	V	Plate Bias	-50	V
Omega Bias	-90	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	190	V			

US EPA Tune Check Sample Report

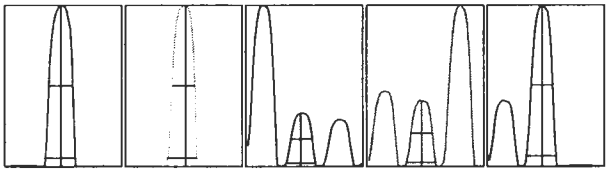
Batch Folder D:\Agilent\ICPMH\1\DATA\6_6020_template_170802_rev1C_3.b
Report Comment
Instrument Name G8403A JP16211410

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
59	7481	0.84	5.00	
115	7201	1.73	5.00	
206	5067	0.58	5.00	
207	4460	0.53	5.00	
208	10904	0.36	5.00	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	7466	7382	7511	7494	7550
115	7059	7085	7227	7333	7302
206	5057	5109	5084	5052	5034
207	4425	4489	4451	4468	4467
208	10926	10879	10893	10864	10960

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
59	12774	59.00	58.9 - 59.1		0.777	0.900	
115	13168	115.05	114.9 - 115.1		0.726	0.900	
206	9672	205.95	205.9 - 206.1		0.737	0.900	
207	8433	206.95	206.9 - 207.1		0.759	0.900	
208	20767	207.95	207.9 - 208.1		0.761	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

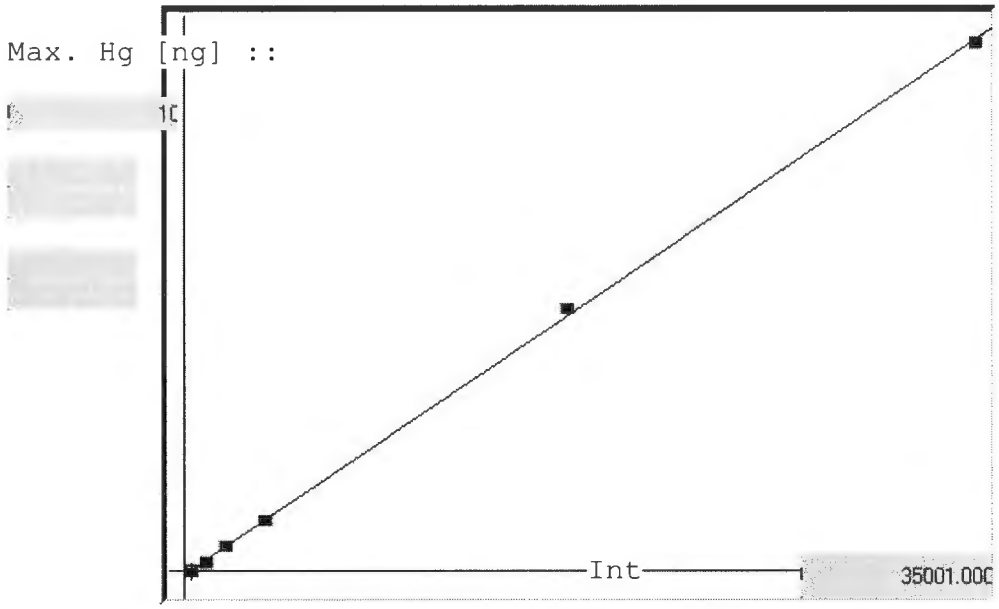
ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	1.3	V	Omega Lens	8.1	V	Deflect	3.2	V
Extract 2	-225.0	V	Cell Entrance	-38	V	Plate Bias	-60	V
Omega Bias	-90	V	Cell Exit	-60	V			

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	190	V			

WATER

Linear



A= 0.0000e+000

B= 2.8914e-004

C= 5.1613e-002

Rho= 0.9998218

Accept=Accepted

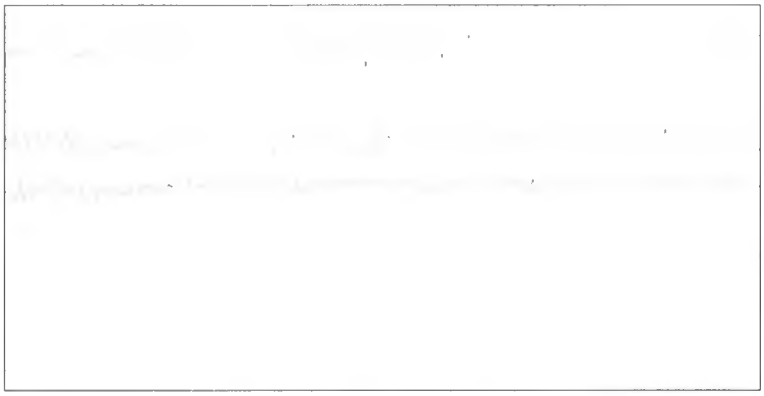
Accepted Date=

12/04/19 20:25

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
IC 440-583752/6-A	0.000	0.044	0.044	330	10.500	341	320			
IC 440-583752/7-A	0.200	0.239	0.039	1004	0.5 %	999	1009			
IC 440-583752/8-A	0.500	0.507	0.007	1933	0.6 %	1922	1945			
IC 440-583752/9-A	1.000	0.983	-0.017	3578	1.8 %	3514	3642			
IC 440-583752/10-A	5.000	4.859	-0.141	16982	2.0 %	16651	17314			
IC 440-583752/11-A	10.000	10.068	0.068	35001	1.6 %	34458	35544			

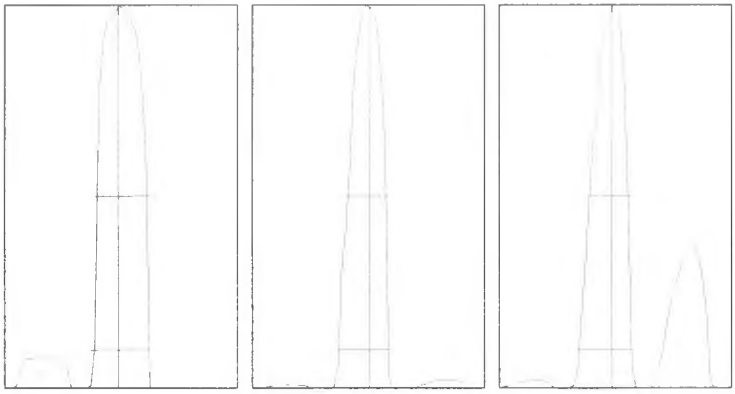
Tune Report

Tune File : autotune.u
Comment :



Integration Time:	0.1000 sec	
Sampling Period:	0.3100 sec	
n:	200	
Oxide:	156/140	0.459%
Doubly Charged:	70/140	1.380%

m/z	Range	Count	Mean	RSD%	Background
7	50,000	31581.0	32056.3	2.54	2.40
89	100,000	92459.0	89393.8	2.39	3.50
205	100,000	53400.0	53056.3	2.51	7.80



m/z:	7	89	205
Height:	32,230	89,719	52,439
Axis:	7.00	89.05	205.00
W-50%:	0.70	0.55	0.55
W-10%:	0.7500	0.6500	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 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	:	1935 V
Nebulizer Pump	:	0.1 rps	OctP RF	:	190 V	Pulse HV	:	1226 V
Sample Pump	:	--- rps	OctP Bias	:	-8 V			
S/C Temp	:	2 degC						

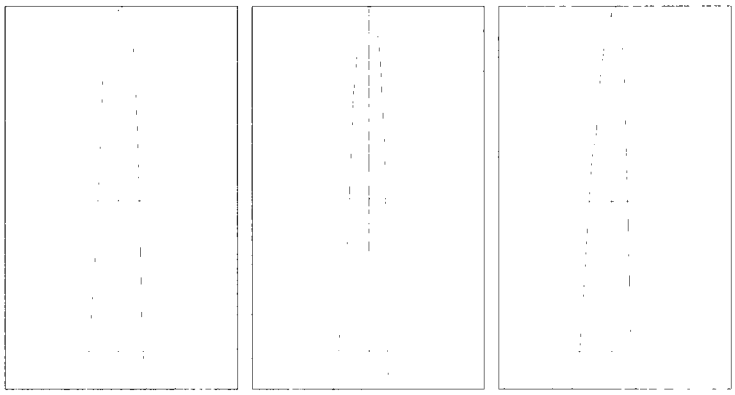
===Reaction Cell===								
Reaction Mode	:	OFF						
H2 Gas	:	0 mL/min	He Gas	:	0 mL/min	Optional Gas	:	--- %

Tune Report

Tune File : he.u
Comment :

Integration Time:	0.1000 sec	
Sampling Period:	0.6200 sec	
n:	200	
Oxide:	156/140	0.226%
Doubly Charged:	70/140	1.403%

m/z	Range	Count	Mean	RSD%	Background
59	50,000	20071.0	20541.1	2.38	0.10
89	50,000	23055.0	22690.6	2.63	0.40
140	100,000	53091.0	54164.9	2.22	0.70
205	50,000	44884.0	44942.3	2.54	0.40
156/140	1	0.251%	0.202%	12.74	
70/140	2	1.402%	1.411%	6.30	



m/z:	59	89	205
Height:	20,421	22,973	44,193
Axis:	59.00	89.05	205.00
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 : Jan 28, 2020 13:26:47
Printed : Jan 28, 2020 13:26:49

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	:	-120 V	AMU Offset	:	127
Smpl Depth	:	8 mm	Omega Bias	:	-80 V	Axis Gain	:	0.9981
Torch-H	:	0.1 mm	Omega Lens	:	8.5 V	Axis Offset	:	0.09
Torch-V	:	0 mm	Cell Entrance	:	-40 V	QP Bias	:	-15 V
Carrier Gas	:	0.55 L/min	Cell Exit	:	-60 V			
Dilution Mode	:	ON	Deflect	:	-0.4 V	===Detector Parameters===		
Dilution Gas	:	0.5 L/min	Plate Bias	:	-60 V	Discriminator	:	4.5 mV
Optional Gas	:	0 %	===Octopole Parameters===			Analog HV	:	1935 V
Nebulizer Pump	:	0.1 rps	OctP RF	:	190 V	Pulse HV	:	1226 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: 28 Jan 2020 03:34:07 pm
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	1.90	5.00	
59 Co	0.42	5.00	
115 In	2.56	5.00	
205 Tl	1.16	5.00	

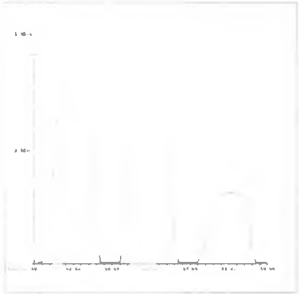
Ion Ratio

Element	Actual	Required	Flag

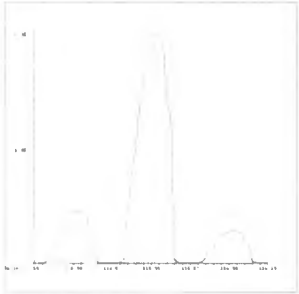
Maximum Bkg. Count(CPS)

Element	Actual	Required	Flag

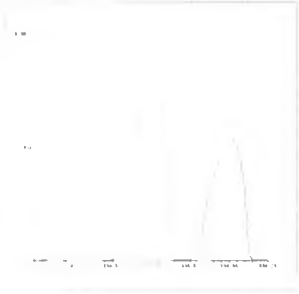
6 Li
Mass Calib.
Actual: 6.05
Required: 5.90-6.10
Flag:
Peak Width
Actual: 0.65
Required: 0.90
Flag:



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

Sample Summary

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

Job ID: 440-255674-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
440-255674-4	EB01	Water	11/21/19 09:36	11/26/19 10:50	
440-255674-19	FB01	Water	11/22/19 09:15	11/26/19 10:50	

Job ID: 440-255674-2

Laboratory: Eurofins Calscience Irvine

Narrative

Job Narrative
440-255674-2

Comments
No additional comments.

Receipt
The samples were received on 11/26/2019 10:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.0° C.

Metals
Method 6020: The method blank for preparation batch 440-583233 and analytical batch 440-583321 contained Zinc above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 6020: The continuing calibration verification (CCV) associated with batch 440-583321 recovered above the upper control limit for Beryllium. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: EB01 (440-255674-4) and FB01 (440-255674-19).

Method 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 440-583233 and analytical batch 440-583321 were outside control limits for Zinc. Sample matrix interference and/or non-homogeneity are suspected. The associated laboratory control sample (LCS) was within acceptance limits.

Method 6010B: The continuing calibration blank (CCB) for 440-583568 contained Titanium above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries of Aluminum and Iron for preparation batch 440-583098 and analytical batch 440-583568 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 440-583568 was outside of control limits.

Method 6010B: The continuing calibration blank (CCB) for 440-583795 contained Titanium above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method 6010B: The continuing calibration blank (CCB) for 440-583795 contained Magnesium above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method 6010B: The serial dilution performed for the following sample associated with batch 440-583568 was outside control limits for Calcium and Magnesium: (440-255901-B-8-D SD ^5).

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

MS/MSD/SD/PDS on ~~Non~~ Non-SDG environmental Samples

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
	STSB27_0-0.5	11/21/19	0915	X			1	1				X	X			[1]Metals are: Al, B, Ca, Fe, K, Li, Mg,
	STSB27_0.5-3	11/21/19	0925	X			1	1				X	X			Na, P, Sr, Sn, Ti, by 6010B;
	STSB27_3-6	11/21/19	0931	X			1	1				X	X			As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn,
	EB01	11/21/19	0936		X		1			1		X	X	X		Mo, Ni, Sb, Se, Ag, Tl, V, Zn by 6020
	STSB27_6-15	11/21/19	0955	X			1	1				X	X			
	STSB28_0-0.5	11/21/19	1145	X			1	1				X	X			
	STSB28-FD_0-0.5	11/21/19	1150	X			1	1				X	X			Report soil on dry weight basis.
	STSB28_0.5-3	11/21/19	1155	X			1	1				X	X			
	STSB28_3-6	11/21/19	1215	X			1	1				X	X			
	STSB28_6-15	11/21/19	1225	X			1	1				X	X			

440-255674 Chain of Custody

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Bryce Johnson						
Sampler's Company: Wood	[signature] / Wood	11/25/19	1030	[signature]	11/26/19	1050
Shipment Method: Fed Ex Ship Date: 11/25/19						
Shipment Tracking No: 8137 9414 1751						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 5.3/5 °F/C | Trip Blank: Yes (No) | MS/MSD Sample Submitted: (Yes) / No

IA-93

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

L3 11/26/19

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
	STSB29_0-0.5	11/21/19	1500	X				1	1						X	X								[1]Metals are. Al, B, Ca, Fe, K, Li, Mg,
	STSB29_0.5-3	11/21/19	1510	X				2	2						X	X							X	Na, P, Sr, Sn, Ti, by 6010B;
	STSB29_3-6	11/21/19	1530	X				1	1						X	X								As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mn,
	STSB29_6-15	11/21/19	1545	X				1	1						X	X								Mo, Ni, Sb, Se, Ag, Tl, V, Zn by 6020
	STSB29-FD_6-15	11/21/19	1550	X				1	1						X	X								
	STSB30_0-0.5	11/22/19	~~0900~~	X				1	1						X	X								Sample Time = 0855 BJ 11/22/19
	STSB30_0.5-3	11/22/19	0902	X				1	1						X	X								Report soil on dry weight basis.
	STSB30_3-6	11/22/19	0910	X				1	1						X	X								
	FB01	11/22/19	0915	X				1			1				X	X	X							
	STSB30_6-15	11/22/19	0925	X				1	1						X	X								

	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Name: Bryce Johnson						
Sampler's Company: Wood	[signature] / Wood	11/25/19	1030	[signature]	11/26/19	1050
Shipment Method: Fed Ex Ship Date: 11/25/19						
Shipment Tracking No: 8137 9414 1751						

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 5.3/5 °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: 440-255674-2

Login Number: 255674
List Number: 1
Creator: Bonta, Lucia F

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.	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").	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: 440-255674-2

Login Number: 255674
List Number: 2
Creator: Harris, Lorin C

List Source: Eurofins TestAmerica, St. Louis
List Creation: 01/18/20 02:52 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	