

Geotechnical * Environmental* Materials Engineering

7650 E. Redfield Rd, Suite "D-7" * Scottsdale, Arizona 85260 (480) 659-6630 * Fax (480) 659-7280 Providing Services in the United States and Internationally URL: WWW.GTIAZ.COM

LIMITED PHASE II STUDY FOR THE

CENTRAL FOOTHILLS NORTH DEVELOPMENT

located at 25401 North Central Avenue Phoenix, Maricopa County, Arizona 85215. October 3, 2019 GTI PROJECT NO. 195615E



Prepared by: Geotechnical Testing & Inspections (GTI) 7650 East Redfield Road, Suite "D-7" Scottsdale, Arizona 85260 <u>www.gtiaz.com</u>



Prepared for: **K. Hovananian Great Western Homes Arizona, LLC** 20830 North Tatum Blvd #250 Scottsdale, Arizona 85250





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October 3, 2019

То:	GTI Project No. 195615E K. Hovananian Great Western Homes Arizona, LLC 20830 North Tatum Blvd #250 Scottsdale, Arizona 85250
Attention:	Mr. Chuck Chisholm Land Development Manager
Subject:	Limited Phase II Site Study for the Central Foothills North Development located at 25401 North Central Avenue in Phoenix, Maricopa County, Arizona 85215.

Dear Mr. Chisholm,

In accordance with your request and authorization, Geotechnical Testing and Inspections (GTI) has completed the Limited Phase II Study for the Central Foothills North Development located at 25401 North Central Avenue in Phoenix, Maricopa County, Arizona. A general site vicinity map is shown in Figure 1.



Figure 1 - Property Location and General Vicinity Map

1.0 BACKGROUND INFORMATION

The 78.2+ Acre Property known as **CENTRAL FOOTHILLS NORTH**, is located at 25401 North Central Avenue, Phoenix, Maricopa County, Arizona 85215. The Property is undeveloped desert land with typical desert type vegetation.

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According to the Maricopa County Assessor's Map, the Property consists of $78.2\pm$ Acres out of the $160\pm$ Acres located within the following parcel:

210-14-050A (160± Acres) - Property is {*Registered to Patricia Archie Foundation LLC*.}

Historical aerial photographs indicate that the Property was undeveloped desert land as far back as 1940, the earliest available historical aerial photograph. The southern portion of the Parcel contained the former *Universal Propulsion Company (UPCO)* which has had numerous environmental issues.

The *Universal Propulsion Company (UPCO)* is a B.F. Goodrich Aerospace Company which owned the entire 160± Acre Parcel which has been identified on the Arizona Department of Environmental Quality (ADEQ) web-site.

The UPCO facility designed and manufactured components for military aircrafts. It consisted of several operational areas for manufacturing, assembling, testing and storing of energetic materials, and for the treatment of discarded wastes. Contaminated soils at four (4) locations, outside of the Property, was excavated and covers were installed to prevent future contamination migrations. A network of wells have been installed downgradient of the UPCO facility, along with at least twelve (12) private domestic wells north of the facility. The wells are sampled semiannually for Perchlorate a Volatile Organic Compound (VOC). Construction of a groundwater treatment system is anticipated to be completed by September of 2019.

Discovery of contamination at the parcel was identified in December of 2003. The UPCO operations occurred along the southern portion of the entire $160\pm$ Acre Parcel. There were no operational activities of any kind located within the $78.3\pm$ Acre Property which is under consideration for residential development by **K. Hovnanian Great Western Homes Arizona, LLC (Client)**. The following Contaminants have been identified, within the soil and groundwater of the *Universal Propulsion Company (UPCO)* operational parcel, located <u>south of the Property</u>.

- Perchlorate
- Volatile Organic Compounds (VOCs)
- TCE, 1,4-Dioxane, and
- *Heavy metals (lead and arsenic)*

The Arizona Department of Environmental Quality (ADEQ) states that with regard to the soils, south of the Property:

"There is little to no health risk unless there is contact with skin or ingestion of the contaminated soils."

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ADEQ states that with regard to the groundwater south of the Property:

"there is little to no risk of impact from accedence because the water is filtered thorough the public water system for both residential and business use".

More recent testing at the former UFCO site was determined to only contain Perchlorate contamination.

1.1 <u>Reviewed Reports Provided by Client or Available in GTI's Library</u>

As part of GTI's original Phase I Environmental Site Assessment, GTI reviewed historical reports provided to GTI by the Client or available in GTI's library. The following reports were reviewed:

- November 2, 2004 Health Consultation for the Universal Propulsion Company -Report prepared by U.S. Department of Health and Human Services (ADHS). They concluded the following: "As of March 2004, site contaminants have not been detected in adjacent private drinking-water well. The use of these wells poses no public health hazard at this time".
- April 2010 Attachment "A" to the AZ HWMA Permit No. AZD 980 814 479. This report provided general information about the UPCO Property. The report indicates that depth to groundwater ranges from $150\pm$ to $250\pm$ feet below the existing ground surface. Regional groundwater flow direction in the vicinity is generally considered to be in a southwest direction, away from the Property. The report has a map which shows the entire $160\pm$ Acre Parcel and the areas of UPCO operations. Figure 2 Shows a portion of this map.
- July 2012 Updated Groundwater Monitoring Plan Report prepared by Arcadis-US, Inc., as their Project No. 3994003. The report provides details on their sampling procedures and results of chemicals in soil and groundwater. None of the wells located on the 78.2± Acres Property had any Perchlorate concentrations of any concern.
- March 1, 2016 2015 Annual Monitoring Report The report was prepared by Arcadis as their Job No. 03994018.0010. The report was prepared for UTC Aerospace Systems. The report concluded the following:

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"This report summarizes the monitoring activities conducted in 2015 at the former Universal Propulsion Company, Inc. The primary objective of groundwater monitoring is to obtain data to assess groundwater conditions at and near the former UPCO facility."

"The original objective of soil vapor monitoring was to monitor the vertical d i s t r i b u t i o n o f Constituents of Potential Concern (COPCs) in soil gas beneath the suspected V o l a t i l e O r g a n i c Compound (VOC) source are in the former B-Complex area."

The second secon

Figure 2 - Map showing Property and Areas of UPCO operations

"UPCO will request that soil vapor monitoring at the site be discontinued because VOCs have consistently been measured at low concentrations within the nested soil vapor monitoring well." "Since 2008, only low levels of VOC have been detected in each well screen interval".

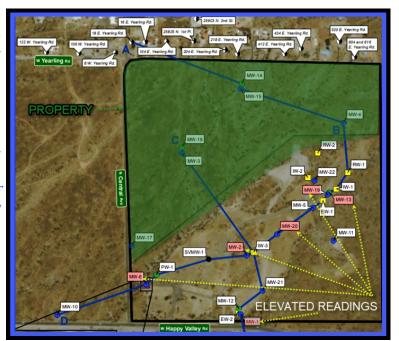


Figure 3 - Location of Wells - Red Highlighted Wells Had Concentrations above Clean up Levels



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Figure 3, shows the location of the Property {78.2± Acres} and some of the wells placed at the Property and south of the Property. The wells highlighted in red, all located downgradient of the Property, had Perchlorate concentrations above the Arizona Health-Based Guidance Level (HBGL). Figure 4 shows the contamination plume south of the Property.

None of the groundwater monitoring wells, located at the Property, had any concentrations above the Arizona Health-Based Guidance Level (HBGL).

Most of the concentrations were found to be less than 3.0 ug/L, which is much lower than the Arizona Health-Based Guidance Level for Perchlorate in drinking water of 14 ug/L.

January 28, 2019 - ALTA Survey - The survey was prepared by Coe & Van Loo Consultants as their Project No. 1-01-03317-01. The survey shows the Property and some of the existing dirt roadways and washes. Figure 5, shows a portion of this Site Plan.

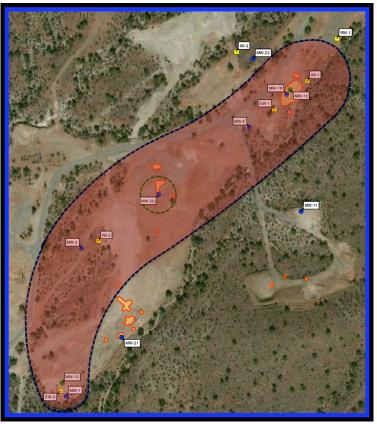


Figure 4 - Zone of Elevated Perchlorate Concentrations {South of the Property}

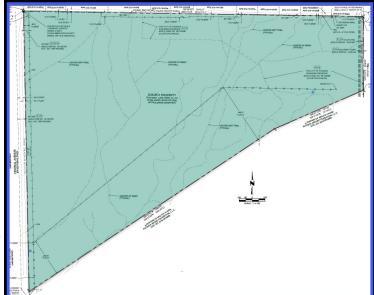


Figure 5 - ALTA Survey Provided by Client Prepared by Coe & Van Loo Consultants



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January 30, 2019 - Phase I Environmental Site Assessment for the Central Foothills North - The report was prepared by ProTeX as their Job No. 8658. The report was prepared for K. Hovnanian Great Western Homes Arizona, LLC. The report concluded the following:

"This ESA has revealed the following Recognized Environmental Conditions (RECs), ProTeX has identified a potential for vapor migration issues in relation to the Site. The responsible parties (RP) have been identified in regards to the source (s) of contamination, and remedial activities are on-going. This ESA has revealed no additional RECs, historical RECs (HREC), or controlled RECs (CREC) in relation to the Site".

" Because the Site is adjacent to the known groundwater contamination plume boundaries of the Universal Jet Propulsion facility, and immediately adjacent to contaminated soils, VEC cannot be ruled out at the subject property."

1.2 **Opinion based on historical testing completed at the Property**

Based on the review of available information, the Limited Vapor Encroachment Condition Study and GTI's experience with the Property and vicinity, GTI concludes that the activities conducted by UPCO, south of the Property, did not result in a VEC or REC to the Property. GTI's conclusions are based on the following facts:

- Responsible parties have been identified by the Arizona Department of Environmental Quality (ADEQ) and numerous environmental investigations and soil and groundwater testing have been conducted by others. Activities at the Property {within the $78.2 \pm Acres$ } have **not** contributed to any soil or groundwater contamination.
- Remediation operations of soil, south of the Property, were conducted in the past and groundwater remediation is currently on-going.
- Elevated Perchlorate Concentrations were only detected south of the Property and the contamination plume never extended under the Property.
- Results of chemical testing on groundwater wells and gas surveys at the Property and within the private wells located north of the Property indicated Perchlorate concentrations of less than 3.0 ug/L, which is far less than the Arizona Health-Based *Guidance Level (HBGL) for Perchlorate in drinking water of 14 ug/L.*

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- In general, groundwater has been determined to be flowing in a southwesterly direction, which is cross-gradient to downgradient of the Property, and therefore most groundwater contamination would flow away from the Property. For contaminated sites located hydrologically downgradient to cross-gradient of the Property, the Area of Concern (AOC) has been established at 100± to 300± feet from the edge of a contaminated plume. As the Property is located more than 800+ feet from the contamination plume, this condition does not resulting in a VEC or REC to the Property. In addition, the newly constructed groundwater treatment facility would direct groundwater towards the new wells and ensure that groundwater will flow away from the Property.
- The U.S. Department of Health and Human Services (ADHS), indicated that "As of March 2004, site contaminants have not been detected in adjacent private drinking-water well. The use of these wells poses <u>no</u> public health hazard at this time"
- The results of the 2015 Annual Groundwater Monitoring Report indicated "UPCO will request that soil vapor monitoring at the site be discontinued because VOCs have consistently been measured at low concentrations within the nested soil vapor monitoring well." and "Since 2008, only low levels of VOC have been detected in each well screen interval".
- GTI conducted a Limited Vapor Encroachment Condition (VEC) study. The results show that the likelihood of any vapor encroachment to the Property from the UPCO operations conducted south of the Property is very low. The contaminated plume is located more than 800± feet south of the Property boundary. Contaminated Plumes which are located more than 100+ feet downgradient from the Property or 300± feet cross-gradient of the Property are not considered to be a VEC to the Property. In addition, the depth to groundwater is more than 200± feet below the existing ground surface, therefore, GTI believes that a VEC at this Property can be ruled out and therefore there is no REC at this Property.

From the research and analysis of past documented work and files reviewed at the Arizona Department of Environmental Quality it was determined that the *Universal Propulsion Company (UPCO)* facility and past uses did not *negatively impacted the residential area* being proposed by **K. Hovnanian Homes**.

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2.0 LIMITED PHASE II STUDY

GTI understands that many of the surrounding neighbors had concerns with regards to the historical uses of the land and the environmental impact the proposed residential development could have on the Property and the neighboring properties.

Due to these concerns the Arizona Department of Environmental Quality (ADEQ) as well as K. Hovnanian Homes requested additional testing to be conducted at the Property in order to confirm weather or not any soil contamination, above the Arizona Soil Remediation Levels (SRLs) exists within the soils of the Property.

GTI utilized a CME-75 power drill rig to drill ten (10) soil borings at random locations across the **CENTRAL FOOTHILLS NORTH DEVELOPMENT** and obtain soil samples at varying depths to determine if any contamination exists. Figure 6 Shows a photograph of the drilling operations at the Property.

2.1 <u>Soil Sampling</u>

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GTI obtained a total of twenty (20) soil samples of the underlying soils from the ten (10) soil test boring locations. The samples were taken at varying depths from $2\pm$ feet to $15\pm$ feet below the existing ground surface.

An experienced GTI environmental professional conducted the soil sampling on September 18, 2019.



Figure 6 - Photograph of the Drilling Operations

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Soil sampling was conducted in general accordance with EPA protocols. The field and chemical testing procedures along with the results of the laboratory testing as well as GTI's analysis and recommendations are described in detail below.

A sketch of the Property and the approximate soil test boring locations is shown on Figure 7.

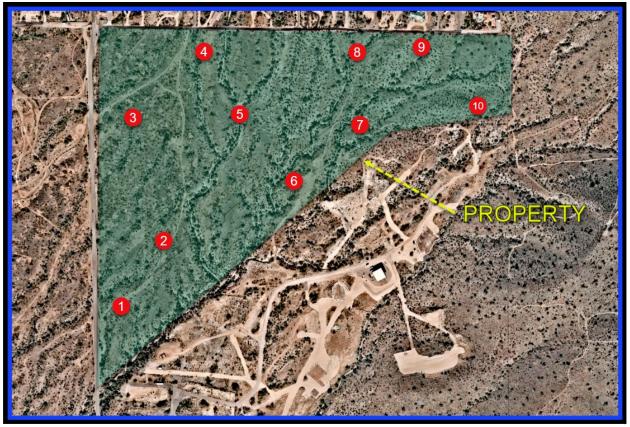


Figure 7: Aerial Photograph Showing Boring Locations

2.2 <u>Site Safety & Health Plan</u>

In accordance with OSHA regulations, a site-specific Safety and Health Plan (SHP) was prepared for all work performed at the Property. The SHP was prepared by Dr. Peter Fleming, P.E. and was reviewed by the field staff, prior to starting work.

2.3 <u>Decontamination</u>

The sampling equipment was thoroughly decontaminated by a three-stage decontamination process, as described below.

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In order to prevent crosscontamination, all the tools used for excavating and sampling were washed with a mild solution of Tri-Sodium Phosphate (TSP), rinsed with clean tap water, and finally rinsed with distilled water. A photograph showing the decontamination buckets is shown on Figure 8. The representative soil samples were obtained by wearing dedicated latex gloves.

The samples were immediately sealed, labeled,



placed in a chilled ice chest at 4° Centigrade and delivered to an Arizona Department of Health Services Certified Laboratory (TestAmerica in Tempe, Arizona), accompanied by a Chain of Custody Record.

All soil sampling activities were under the direct supervision of a GTI project manager, with environmental experience.

2.4 Laboratory Test Results

The soil samples were transported to an Arizona Department of Health Services certified laboratory for chemical testing. The soil samples were tested for RCRA Metals using EPA Method 6010C and for Perchlorate in accordance with EPA Method 314. The samples were analyzed to determine if the above listed contaminates were present at or above the Residential and Non-Residential Soil Remediation Level's (SRL's) as established by the Arizona Department of Environmental Quality (ADEQ). The laboratory test results are summarized in TABLE 1. The entire laboratory test results can be found in the appendix of this report.



Geotechnical Testing

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	TABLE 1	- RESULTS OF	F CHEMICAL	TESTING	
Sample ID -Depth (ft)	Barium* (SRL 15,000)	Chromium* (SRL 120,000)	Lead* (SRL 400)	Perchlorate* (SRL 55)	Concern Yes / NO
B1-2'	140	31	7.7	ND	NO
B1-4'	130	26	7.9	ND	NO
B2-5'	120	17	4.6	0.011	NO
B2-7'	120	16	3.4	ND	NO
B3-2'	130	29	7.1	ND	NO
B3-6'	92	23	4.9	ND	NO
B4-5'	99	30	5.2	ND	NO
B4-10'	78	12	3.1	ND	NO
B5-7'	79	13	3.5	ND	NO
B5-11'	83	18	2.8	ND	NO
B6-7'	150	25	5.8	0.011	NO
B6-10'	120	19	4.7	ND	NO
B7-2'	120	18	5.4	0.041	NO
B7-5'	150	17	2.9	0.021	NO
B8-2'	210	12	4.2	ND	NO
B8-4'	270	13	4	ND	NO
B9-5'	110	7.6	13	ND	NO
B9-7'	93	7.1	11	ND	NO
B10-5'	120	12	3.1	ND	NO
B10-7'	120	3.4	4.7	ND	NO

All results are reported in milligrams per kilogram (mg/kg) which is equal to parts per million (ppm) -ND = Non Detect.

* These values are based on both the residential pre-determined risk-based remediation standards developed as part of the Soil Remediation Standards Rule (R18-7-201). This standard, called Soil Remediation Levels (SRL's), have been calculated for the Arizona Department of Environmental Quality (ADEQ) by the Arizona Department of Health Services (ADHS), Office of Environmental Health. SRL's

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are protective of human health, including sensitive groups, over a lifetime. It should be noted that chemical concentrations in soils that exceed SRL's may not necessarily represent a health risk. Rather, when contaminant concentrations in soil exceed these standards, further evaluation may be necessary to determine whether the site poses an unacceptable risk to human health.

3.0 CONCLUSION

Based on the results of the previous testing conducted at the Property and the recent Limited Phase II Study and chemical testing, GTI has confirmed that the underlying soils have chemical concentrations that are all *well below* the Residential Arizona State Soil Remediation Levels (SRL).

It is GTI's professional opinion that the soils within the proposed residential area of the Property have not been negatively impacted by the past activities conducted by *Universal Propulsion Company (UPCO)*. GTI recommends no further environmental testing at this Property.

If you have any questions regarding this letter report, or any other matter, please do not hesitate to call GTI at (480) 659-6630.

Sincerely, Geotechnical Testing & Inspections

Landy.

Randy Smith, P.E. Geotechnical Department Manager



Reviewed b

Dr. Peter Fleming, P.E. President

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APPENDIX

Limited Phase II Study **CENTRAL FOOTHILLS NORTH DEVELOPMENT K. Hovananian Great Western Homes Arizona, LLC** GTI Project No. 195615E

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🛟 eurofins

Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Phoenix 4625 East Cotton Ctr Blvd Suite 189 Phoenix, AZ 85040

Tel: (602)437-3340

Laboratory Job ID: 550-129882-1

Laboratory Sample Delivery Group: Central Foothills Client Project/Site: 195615E

For:

Geotechnical Testing & Inspection LLC 7855 E. Evans Road Suite C Scottsdale, Arizona 85260

Attn: Taylor Eppers

Carlin McCutchen

Authorized for release by: 9/30/2019 9:52:48 AM Carlene McCutcheon, Project Manager II

(602)659-7612 carlene.mccutcheon@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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Qualifiers

Metals Qualifier	Qualifier Description	
M2	Matrix spike recovery was low, the associated blank spike recovery was acceptable.	
		5
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	0
DER	Duplicate Error Ratio (normalized absolute difference)	8
Dil Fac	Dilution Factor	
DL	Detection Limit (DoD/DOE)	9
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	13 14
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: 550-129882-1

Laboratory: Eurofins TestAmerica, Phoenix

Narrative

Job Narrative 550-129882-1

Case Narrative

Comments

No additional comments.

Receipt

The samples were received on 9/18/2019 1:34 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.3° C.

HPLC/IC

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

Metals

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

General Chemistry

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

Sample Summary

Client: Geotechnical Testing & Inspection LLC Project/Site: 195615E

Job ID: 550-129882-1 SDG: Central Foothills

ab Sample ID.	Client Sample ID	Matrix	Collected	Received	Asset ID
50-129882-1	B1-2'	Solid	09/18/19 07:10	09/18/19 13:34	
50-129882-2	B1-4'	Solid	09/18/19 07:14	09/18/19 13:34	
50-129882-3	B2-5'	Solid	09/18/19 07:22	09/18/19 13:34	
50-129882-4	B2-7'	Solid	09/18/19 07:23	09/18/19 13:34	
50-129882-5	B3-2'	Solid	09/18/19 07:33	09/18/19 13:34	
50-129882-6	B3-6'	Solid	09/18/19 07:35	09/18/19 13:34	
50-129882-7	B4-5'	Solid	09/18/19 07:44	09/18/19 13:34	
50-129882-8	B4-10'	Solid	09/18/19 07:52	09/18/19 13:34	
50-129882-9	B5-7'	Solid	09/18/19 08:35	09/18/19 13:34	
50-129882-10	B5-11'	Solid	09/18/19 08:37	09/18/19 13:34	
50-129882-11	B6-7'	Solid	09/18/19 08:49	09/18/19 13:34	
50-129882-12	B6-10'	Solid	09/18/19 08:50	09/18/19 13:34	
50-129882-13	B7-2'	Solid	09/18/19 08:59	09/18/19 13:34	
50-129882-14	B7-5'	Solid	09/18/19 09:01	09/18/19 13:34	
50-129882-15	B8-2'	Solid	09/18/19 09:14	09/18/19 13:34	
50-129882-16	B8-4'	Solid	09/18/19 09:17	09/18/19 13:34	
50-129882-17	B9-5'	Solid	09/18/19 10:24	09/18/19 13:34	
50-129882-18	B9-7'	Solid	09/18/19 10:25	09/18/19 13:34	
50-129882-19	B10-5'	Solid	09/18/19 10:34	09/18/19 13:34	
50-129882-20	B10-7'	Solid	09/18/19 10:35	09/18/19 13:34	

Detection Summary

Job ID: 550-129882-1 SDG: Central Foothills

Project/Site: 195615E								SDG: (Central Foothills
Client Sample ID: B1-2						Lab Sa	am	ple ID: 5	550-129882-1
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	140		4.9		mg/Kg	1	_	6010C	Total/NA
Chromium	31		1.9		mg/Kg	1		6010C	Total/NA
Lead	7.7		0.97		mg/Kg	1		6010C	Total/NA
Client Sample ID: B1-4'						Lab Sa	am	ple ID: 5	550-129882-2
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	130		5.0		mg/Kg	1	_	6010C	Total/NA
Chromium	26		2.0		mg/Kg	1		6010C	Total/NA
Lead	7.9		0.99		mg/Kg	1		6010C	Total/NA
Client Sample ID: B2-5'						Lab Sa	am	ple ID: 5	550-129882-3
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perchlorate	0.011		0.0098		mg/Kg	1	_	314.0	Soluble
Barium	120		5.0		mg/Kg	1		6010C	Total/NA
Chromium	17		2.0		mg/Kg	1		6010C	Total/NA
Lead	4.6		0.99		mg/Kg	1		6010C	Total/NA
Client Sample ID: B2-7'						Lab Sa	arr	ple ID: 5	550-129882-4
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	120		4.9		mg/Kg	$-\frac{-1}{1}$	_	6010C	Total/NA
Chromium	16		2.0		mg/Kg	1		6010C	Total/NA
Lead	3.4		0.98		mg/Kg	1		6010C	Total/NA
- Client Sample ID: B3-2'						Lab Sa	arr	ple ID: 5	550-129882-5
 Analyte	Result	Qualifier	RL	MDL	Unit			Method	Prep Type
Barium	130		4.9		mg/Kg	1	_	6010C	Total/NA
Chromium	29		2.0		mg/Kg	1		6010C	Total/NA
Lead	7.1		0.99			1		6010C	Total/NA
-			0.99		mg/Kg				
Client Sample ID: B3-6'						Lab Sa	am	iple ID: 5	550-129882-6
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	92		4.9		mg/Kg	1	_	6010C	Total/NA
Chromium	23		2.0		mg/Kg	1		6010C	Total/NA
Lead	4.9		0.99		mg/Kg	1		6010C	Total/NA
Client Sample ID: B4-5'						Lab Sa	am	ple ID: 5	550-129882-7
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	99		5.0		mg/Kg	1	—	6010C	Total/NA
Chromium	30		2.0		mg/Kg	1		6010C	Total/NA
Lead	5.2		0.99		mg/Kg	1		6010C	Total/NA
-									
Client Sample ID: B4-10'									550-129882-8
Analyte		Qualifier		MDL	Unit		_	Method	Prep Type
Barium	78		4.9		mg/Kg	1		6010C	Total/NA
Chromium Lead	12 3.1		2.0 0.98		mg/Kg mg/Kg	1 1		6010C 6010C	Total/NA Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

RL

5.0

2.0

0.99

mg/Kg

mg/Kg

Result Qualifier

79

13

3.5

Job ID: 550-129882-1 SDG: Central Foothills

Total/NA

Total/NA

6

	Lab Sample ID: 550-129882-9										
MDL	Unit	Dil Fac	D	Method	Prep Type						
	mg/Kg	1	_	6010C	Total/NA						

6010C

6010C

Lab Sample ID: 550-129882-10

Lab Sample ID: 550-129882-11

Lab Sample ID: 550-129882-12

Lab Sample ID: 550-129882-13

Lab Sample ID: 550-129882-14

Lab Sample ID: 550-129882-15

Lab Sample ID: 550-129882-16

1

1

Client Sample ID: B5-11'

Client Sample ID: B5-7'

Analyte

Barium

Lead

Chromium

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Me	ethod	Prep Type
Barium	83		5.0		mg/Kg	1	60	10C	Total/NA
Chromium	18		2.0		mg/Kg	1	60	10C	Total/NA
Lead	2.8		1.0		mg/Kg	1	60	10C	Total/NA

Client Sample ID: B6-7'

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D	Method	Prep Type
Perchlorate	0.011	0.0098	mg/Kg		314.0	Soluble
Barium	150	4.9	mg/Kg	1	6010C	Total/NA
Chromium	25	1.9	mg/Kg	1	6010C	Total/NA
Lead	5.8	0.97	mg/Kg	1	6010C	Total/NA

Client Sample ID: B6-10'

Analyte	Result C	Qualifier RL	MDL	Unit	Dil Fac D	Method	Prep Type
Barium	120	4.9		mg/Kg	1	6010C	Total/NA
Chromium	19	2.0		mg/Kg	1	6010C	Total/NA
Lead	4.7	0.98		mg/Kg	1	6010C	Total/NA

Client Sample ID: B7-2'

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perchlorate	0.041		0.0099		mg/Kg	1	_	314.0	Soluble
Barium	120		4.9		mg/Kg	1		6010C	Total/NA
Chromium	18		2.0		mg/Kg	1		6010C	Total/NA
Lead	5.4		0.99		mg/Kg	1		6010C	Total/NA

Client Sample ID: B7-5'

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perchlorate	0.021		0.010		mg/Kg	1	_	314.0	Soluble
Barium	150		5.0		mg/Kg	1		6010C	Total/NA
Chromium	17		2.0		mg/Kg	1		6010C	Total/NA
Lead	2.9		1.0		mg/Kg	1		6010C	Total/NA

Client Sample ID: B8-2'

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac	D Method	Ргер Туре
Barium	210	5.0	mg/Kg	1	6010C	Total/NA
Chromium	12	2.0	mg/Kg	1	6010C	Total/NA
Lead	4.2	0.99	mg/Kg	1	6010C	Total/NA

Client Sample ID: B8-4'

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D Metho	d Prep Type
Barium	270	4.9	mg/Kg	1 6010C	Total/NA
Chromium	13	1.9	mg/Kg	1 6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Job ID: 550-129882-1 SDG: Central Foothills

Client Sample ID: B8-4' (Co	ntinued)					Lab Sam	ple ID:	550-129882-16
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	Method	Prep Type
Lead	4.0		0.97		mg/Kg	1	6010C	Total/NA
Client Sample ID: B9-5'						Lab Sam	ple ID:	550-129882-17
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	Method	Prep Type
Barium	110		5.0		mg/Kg	1	6010C	Total/NA
Chromium	7.6		2.0		mg/Kg	1	6010C	Total/NA
Lead	13		1.0		mg/Kg	1	6010C	Total/NA
Client Sample ID: B9-7'						Lab Sam	ple ID:	550-129882-18
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Barium	93		5.0		mg/Kg	1	6010C	Total/NA
Chromium	7.1		2.0		mg/Kg	1	6010C	Total/NA
Lead	11		1.0		mg/Kg	1	6010C	Total/NA
Client Sample ID: B10-5'						Lab Sam	ple ID:	550-129882-19
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Barium	120		5.0		mg/Kg		6010C	Total/NA
Chromium	12		2.0		mg/Kg	1	6010C	Total/NA
Lead	3.1		1.0		mg/Kg	1	6010C	Total/NA
Client Sample ID: B10-7'						Lab Sam	ple ID:	550-129882-20
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac D	Method	Prep Type
Barium	120		5.0		mg/Kg	1	6010C	Total/NA
Chromium	3.4		2.0		mg/Kg	1	6010C	Total/NA
Lead	4.7		0.99		mg/Kg	1	6010C	Total/NA

Client Sample ID: B1-2'

Date Collected: 09/18/19 07:10

Date Received: 09/18/19 13:34

Job ID: 550-129882-1 SDG: Central Foothills

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Lab Sample ID: 550-129882-1 Matrix: Solid

Lab Sample ID: 550-129882-2

Matrix: Solid

Method: 314.0 - Perchlorate (IC)	- Soluble						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND	0.0099	mg/Kg			09/26/19 14:19	1
Method: 6010C - Metals (ICP)							

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.9		mg/Kg		09/19/19 16:02	09/26/19 03:17	1
Barium	140		4.9		mg/Kg		09/19/19 16:02	09/26/19 03:17	1
Cadmium	ND		0.49		mg/Kg		09/19/19 16:02	09/26/19 03:17	1
Chromium	31		1.9		mg/Kg		09/19/19 16:02	09/27/19 01:10	1
Lead	7.7		0.97		mg/Kg		09/19/19 16:02	09/27/19 01:10	1
Selenium	ND	M2	4.9		mg/Kg		09/19/19 16:02	09/27/19 01:10	1
Silver	ND		2.4		mg/Kg		09/19/19 16:02	09/26/19 03:17	1
Method: 7471B - Mercury (CVA)	۵)								

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	0.099		mg/Kg		09/20/19 12:34	09/20/19 15:25	1

Client Sample ID: B1-4' Date Collected: 09/18/19 07:14 Date Received: 09/18/19 13:34

Cadmium

Chromium

Method: 314.0 - Perchlorate (IC) - Soluble Analyte **Result Qualifier** RL MDL Unit D Prepared Analyzed Dil Fac Perchlorate ND 0.0098 mg/Kg 09/26/19 14:42 Method: 6010C - Metals (ICP) Analyte **Result Qualifier** RL MDL Unit D Prepared Analyzed Dil Fac Arsenic ND 3.0 mg/Kg 09/19/19 16:02 09/26/19 03:20 1 **Barium** 130 5.0 mg/Kg 09/19/19 16:02 09/26/19 03:20 1 0.50 Cadmium ND mg/Kg 09/19/19 16:02 09/26/19 03:20 1 2.0 09/19/19 16:02 09/27/19 01:13 Chromium 26 mg/Kg 1 Lead 7.9 0.99 mg/Kg 09/19/19 16:02 09/27/19 01:13 1 Selenium ND 5.0 mg/Kg 09/19/19 16:02 09/27/19 01:13 1 Silver ND 2.5 mg/Kg 09/19/19 16:02 09/26/19 03:20 1 Method: 7471B - Mercury (CVAA) MDL Unit RL Analyte **Result Qualifier** D Prepared Analyzed Dil Fac 09/20/19 12:34 09/20/19 15:27 Mercury ND 0.096 mg/Kg 1 Client Sample ID: B2-5' Lab Sample ID: 550-129882-3 Date Collected: 09/18/19 07:22 Matrix: Solid Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC) - Soluble Analyte **Result Qualifier** RL MDL Unit D Prepared Analyzed Dil Fac Perchlorate 0.011 0.0098 mg/Kg 09/26/19 15:05 1 Method: 6010C - Metals (ICP) Analyte **Result Qualifier** RL MDL Unit Prepared D Analyzed Dil Fac Arsenic ND 3.0 mg/Kg 09/19/19 16:02 09/26/19 03:22 1 5.0 120 mg/Kg 09/19/19 16:02 09/26/19 03:22 **Barium** 1

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09/19/19 16:02 09/26/19 03:22

09/19/19 16:02 09/27/19 01:16

0.50

2.0

mg/Kg

mg/Kg

ND

17

1

1

Job ID: 550-129882-1 SDG: Central Foothills

Client Sample ID: B2-5' Date Collected: 09/18/19 07:22 Date Received: 09/18/19 13:34						La	ib Sample)882-3 c: Soli
Method: 6010C - Metals (ICP) (Co	ontinued								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Lead	4.6		0.99		mg/Kg		09/19/19 16:02	09/27/19 01:16	
Selenium	ND		5.0		mg/Kg		09/19/19 16:02	09/27/19 01:16	
Silver	ND		2.5		mg/Kg		09/19/19 16:02	09/26/19 03:22	
Method: 7471B - Mercury (CVAA	.)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Mercury	ND		0.095		mg/Kg		09/20/19 12:34	09/20/19 15:29	
Client Sample ID: B2-7' Date Collected: 09/18/19 07:23 Date Received: 09/18/19 13:34						La	ib Sample	ID: 550-129 Matrix)882-4 c: Soli
Method: 314.0 - Perchlorate (IC)	- Soluble)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Perchlorate	ND		0.010		mg/Kg			09/26/19 15:28	
Method: 6010C - Metals (ICP)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Arsenic	ND		2.9		mg/Kg		09/19/19 16:02	09/26/19 03:25	
Barium	120		4.9		mg/Kg		09/19/19 16:02	09/26/19 03:25	
Cadmium	ND		0.49		mg/Kg		09/19/19 16:02	09/26/19 03:25	
Chromium	16		2.0		mg/Kg		09/19/19 16:02	09/27/19 01:18	
Lead	3.4		0.98		mg/Kg		09/19/19 16:02	09/27/19 01:18	
Selenium	ND		4.9		mg/Kg		09/19/19 16:02	09/27/19 01:18	
Silver	ND		2.4		mg/Kg		09/19/19 16:02	09/26/19 03:25	
Method: 7471B - Mercury (CVAA	.)								
Analyte		Qualifier		MDL	Unit	D	Prepared	Analyzed	Dil Fa
Mercury	ND		0.097		mg/Kg		09/20/19 12:34	09/20/19 15:31	
							b Sample	ID. 550 120	
Date Collected: 09/18/19 07:33						La			
Date Collected: 09/18/19 07:33 Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC)								Matrix	c: Soli
ate Collected: 09/18/19 07:33 ate Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC) Analyte		Qualifier	RL 0.0099	MDL		<u>D</u>	Prepared		c: Soli Dil Fa
ate Collected: 09/18/19 07:33 ate Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC) Analyte Perchlorate	Result			MDL	Unit mg/Kg			Matrix Analyzed	c: Soli Dil Fa
Date Collected: 09/18/19 07:33 Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC) Analyte Perchlorate Method: 6010C - Metals (ICP)	Result ND	Qualifier	0.0099		mg/Kg	<u>D</u>	Prepared	Matriz Analyzed 09/26/19 15:51	c: Soli
Analyte Collected: 09/18/19 07:33 Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC) Analyte Perchlorate Method: 6010C - Metals (ICP) Analyte	Result ND Result		0.0099 RL	MDL	mg/Kg Unit		Prepared	Matriz Analyzed 09/26/19 15:51 Analyzed	c: Soli
Arsenic	Result ND Result ND	Qualifier	0.0099 RL 3.0		mg/Kg Unit mg/Kg	<u>D</u>	Prepared Prepared 09/19/19 16:02	Matri: Analyzed 09/26/19 15:51 Analyzed 09/26/19 03:27	c: Soli
Analyte Arsenic Barium	Result ND Result ND 130	Qualifier	0.0099 RL 3.0 4.9		mg/Kg Unit mg/Kg mg/Kg	<u>D</u>	Prepared Prepared 09/19/19 16:02 09/19/19 16:02	Matrix Analyzed 09/26/19 15:51 Analyzed 09/26/19 03:27 09/26/19 03:27	c: Soli
Analyte Arsenic Barium Cadmium Cadmium Cadmium Pate Collected: 09/18/19 07:33 Perchlorate (IC) Analyte Perchlorate	Result ND Result ND 130 ND	Qualifier	0.0099 RL 3.0 4.9 0.49		mg/Kg Unit mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared Prepared 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02	Matrix Analyzed 09/26/19 15:51 Analyzed 09/26/19 03:27 09/26/19 03:27 09/26/19 03:27	c: Soli
Date Collected: 09/18/19 07:33 Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC) Analyte Perchlorate Method: 6010C - Metals (ICP) Analyte Arsenic Barium Cadmium Chromium	Result ND Result ND 130 ND 29	Qualifier	0.0099 RL 3.0 4.9 0.49 2.0		Unit mg/Kg mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared Prepared 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02	Matrix Analyzed 09/26/19 15:51 Analyzed 09/26/19 03:27 09/26/19 03:27 09/26/19 03:27 09/26/19 03:27	c: Soli
Analyte Perchlorate Perchlorate Perchlorate Perchlorate Perchlorate Perchlorate Perchlorate Perchlorate Cadmium Cadmium Lead	Result ND Result ND 130 ND 29 7.1	Qualifier	0.0099 RL 3.0 4.9 0.49 2.0 0.99		Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared Prepared 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02	Matrix Analyzed 09/26/19 15:51 Analyzed 09/26/19 03:27 09/26/19 03:27 09/26/19 03:27 09/26/19 03:27 09/27/19 01:20	c: Soli
Analyte Arsenic Barium Cadmium Chromium Lead Selenium Date Collected: 09/18/19 07:33 Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC) Analyte Perchlorate Method: 6010C - Metals (ICP) Analyte Chromium Lead Selenium	Result ND Result ND 130 ND 29 7.1 ND	Qualifier	0.0099 RL 3.0 4.9 0.49 2.0 0.99 4.9		mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared Prepared 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02	Matrix Analyzed 09/26/19 15:51 Analyzed 09/26/19 03:27 09/26/19 03:27 09/26/19 03:27 09/27/19 01:20 09/27/19 01:20	c: Soli
Analyte Arsenic Barium Cadmium Chromium Lead Selenium Date Collected: 09/18/19 07:33 Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC) Analyte Perchlorate Method: 6010C - Metals (ICP) Analyte Chromium Lead Selenium	Result ND Result ND 130 ND 29 7.1	Qualifier	0.0099 RL 3.0 4.9 0.49 2.0 0.99		Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared Prepared 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02	Matrix Analyzed 09/26/19 15:51 Analyzed 09/26/19 03:27 09/26/19 03:27 09/26/19 03:27 09/26/19 03:27 09/27/19 01:20	c: Soli
Cadmium Chromium Lead	Result ND Result ND 130 ND 29 7.1 ND ND ND	Qualifier	0.0099 RL 3.0 4.9 0.49 2.0 0.99 4.9		mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	<u>D</u>	Prepared Prepared 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02	Matrix Analyzed 09/26/19 15:51 Analyzed 09/26/19 03:27 09/26/19 03:27 09/26/19 03:27 09/27/19 01:20 09/27/19 01:20	Dil Fa

Job ID: 550-129882-1 SDG: Central Foothills

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Lab Sample ID: 550-129882-6 Matrix: Solid

Date Collected: 09/18/19 07:35 Date Received: 09/18/19 13:34

Client Sample ID: B3-6'

Method: 314.0 - Perchlorate (IC) - Soluble								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		0.0098		mg/Kg			09/26/19 16:13	1

Method: 6010C - Metals (ICP)								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	3.0		mg/Kg		09/19/19 16:02	09/26/19 03:30	1
Barium	92	4.9		mg/Kg		09/19/19 16:02	09/26/19 03:30	1
Cadmium	ND	0.49		mg/Kg		09/19/19 16:02	09/26/19 03:30	1
Chromium	23	2.0		mg/Kg		09/19/19 16:02	09/27/19 01:23	1
Lead	4.9	0.99		mg/Kg		09/19/19 16:02	09/27/19 01:23	1
Selenium	ND	4.9		mg/Kg		09/19/19 16:02	09/27/19 01:23	1
Silver	ND	2.5		mg/Kg		09/19/19 16:02	09/26/19 03:30	1
Method: 7471B - Mercury (CVAA	A)							

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	0.085	mg/Kg		09/20/19 12:34	09/20/19 15:35	1

Client Sample ID: B4-5' Date Collected: 09/18/19 07:44 Date Received: 09/18/19 13:34

Method: 314.0 - Perchlorate (IC) Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		0.0098		mg/Kg			09/26/19 16:36	1
_ Method: 6010C - Metals (ICP)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.0		mg/Kg		09/19/19 16:02	09/26/19 03:32	1
Barium	99		5.0		mg/Kg		09/19/19 16:02	09/26/19 03:32	1
Cadmium	ND		0.50		mg/Kg		09/19/19 16:02	09/26/19 03:32	1
Chromium	30		2.0		mg/Kg		09/19/19 16:02	09/27/19 01:25	
Lead	5.2		0.99		mg/Kg		09/19/19 16:02	09/27/19 01:25	1
Selenium	ND		5.0		mg/Kg		09/19/19 16:02	09/27/19 01:25	1
Silver	ND		2.5		mg/Kg		09/19/19 16:02	09/26/19 03:32	
Method: 7471B - Mercury (CVAA		Qualifier	ы	MDI	11		Dremered	Anolymod	
Analyte		Qualifier	RL	MDL		D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.097		mg/Kg		09/20/19 12:34	09/20/19 15:37	1
Client Sample ID: B4-10'						La	ab Sample	ID: 550-129	882-8
Date Collected: 09/18/19 07:52								Matrix	c: Solid
Date Received: 09/18/19 13:34									
Method: 314.0 - Perchlorate (IC)	- Soluble								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		0.0099		mg/Kg			09/26/19 16:59	1
Method: 6010C - Metals (ICP)									

Analyte	Result	Qualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	2.9		mg/Kg		09/19/19 16:02	09/26/19 03:35	1
Barium	78	4.9		mg/Kg		09/19/19 16:02	09/26/19 03:35	1
Cadmium	ND	0.49		mg/Kg		09/19/19 16:02	09/26/19 03:35	1
Chromium	12	2.0		mg/Kg		09/19/19 16:02	09/27/19 01:28	1

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Lab Sample ID: 550-129882-7

Matrix: Solid

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Job ID: 550-129882-1 SDG: Central Foothills

Client Sample ID: B4-10' Date Collected: 09/18/19 07:52 Date Received: 09/18/19 13:34						La	ib Sample	ID: 550-129 Matrix	9882-6 x: Soli
Method: 6010C - Metals (ICP) (C	ontinued								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Lead	3.1		0.98		mg/Kg		09/19/19 16:02	09/27/19 01:28	
Selenium	ND		4.9		mg/Kg			09/27/19 01:28	
Silver	ND		2.4		mg/Kg			09/26/19 03:35	
Method: 7471B - Mercury (CVAA	N)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Mercury	ND		0.089		mg/Kg		09/20/19 12:34	09/20/19 15:39	
Client Sample ID: B5-7' Date Collected: 09/18/19 08:35 Date Received: 09/18/19 13:34						La	ib Sample	ID: 550-129 Matri	9882-9 x: Soli
Method: 314.0 - Perchlorate (IC)	- Soluble	ł.							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Perchlorate	ND		0.0099		mg/Kg			09/25/19 20:35	
Method: 6010C - Metals (ICP)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
Arsenic	ND		3.0		mg/Kg		09/19/19 16:02	09/26/19 03:37	
Barium	79		5.0		mg/Kg		09/19/19 16:02	09/26/19 03:37	
Cadmium	ND		0.50		mg/Kg		09/19/19 16:02	09/26/19 03:37	
Chromium	13		2.0		mg/Kg		09/19/19 16:02	09/27/19 01:30	
Lead	3.5		0.99		mg/Kg		09/19/19 16:02	09/27/19 01:30	
Selenium	ND		5.0		mg/Kg		09/19/19 16:02	09/27/19 01:30	
Silver	ND		2.5		mg/Kg		09/19/19 16:02	09/26/19 03:37	
Method: 7471B - Mercury (CVAA									
Analyte Mercury	Result ND	Qualifier		MDL	Unit mg/Kg	D	Prepared 09/20/19 12:34	Analyzed 09/20/19 15:41	Dil Fa
							0		000 4
Client Sample ID: B5-11' Date Collected: 09/18/19 08:37 Date Received: 09/18/19 13:34							Sample II	D: 550-1298 Matri	x: Soli
Method: 314.0 - Perchlorate (IC)						_			
Analyte Perchlorate	Result ND	Qualifier	RL 0.0099	MDL	Unit mg/Kg	D	Prepared	Analyzed 09/25/19 20:58	Dil Fa
Mothod: 6010C Motols (ICP)									
Method: 6010C - Metals (ICP) Analyte	Rocult	Qualifier	RL	мп	Unit	D	Prepared	Analyzed	Dil Fa
Arsenic	ND	strainici		MDL	mg/Kg		09/19/19 16:02	09/26/19 03:40	
Barium	83		5.0		mg/Kg mg/Kg			09/26/19 03:40	
an an a shi ta ta shi			0.50		mg/Kg mg/Kg			09/26/19 03:40	
	NI I				mg/Kg mg/Kg			09/27/19 01:33	
Cadmium	ND 18		20				20,10,10,10,10.02	55, <u> </u>	
Cadmium Chromium	18		2.0 1.0				09/19/19 16:02	09/27/19 01:33	
Cadmium Chromium Lead	18 2.8		1.0		mg/Kg			09/27/19 01:33 09/27/19 01:33	
Cadmium Chromium	18						09/19/19 16:02	09/27/19 01:33 09/27/19 01:33 09/26/19 03:40	
Cadmium Chromium Lead Selenium Silver	18 2.8 ND ND		1.0 5.0		mg/Kg mg/Kg		09/19/19 16:02	09/27/19 01:33	
Cadmium Chromium Lead Selenium	18 2.8 ND ND	Qualifier	1.0 5.0	MDL	mg/Kg mg/Kg	D	09/19/19 16:02	09/27/19 01:33	Dil Fa

Lab Sample ID: 550-129882-11 Matrix: Solid

Lab Sample ID: 550-129882-12

Date Collected: 09/18/19 08:49 **Date Received: 0**

Client Sample ID: B6-7'

Date Received: 09/18/19 13:34	4							
Method: 314.0 - Perchlorate Analyte	(IC) - Soluble Result Qualifier	RL	MDL Uni	· .) Prepared	Analvzed	Dil Fac	i
Perchlorate	0.011	0.0098	mg/	Kg		09/25/19 21:21	1	

Method: 6010C - Metals (ICP)							
Analyte	Result Quali	fier RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	2.9	mg/Kg		09/19/19 16:02	09/26/19 03:48	1
Barium	150	4.9	mg/Kg		09/19/19 16:02	09/26/19 03:48	1
Cadmium	ND	0.49	mg/Kg		09/19/19 16:02	09/26/19 03:48	1
Chromium	25	1.9	mg/Kg		09/19/19 16:02	09/27/19 01:41	1
Lead	5.8	0.97	mg/Kg		09/19/19 16:02	09/27/19 01:41	1
Selenium	ND	4.9	mg/Kg		09/19/19 16:02	09/27/19 01:41	1
Silver	ND	2.4	mg/Kg		09/19/19 16:02	09/26/19 03:48	1
Method: 7471B - Mercury (CVAA	A)						
Analyte	Result Qualit	fier RI	MDI Unit	D	Prepared	Analyzed	Dil Fac

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND	0.097	mg/Kg		09/20/19 12:34	09/20/19 15:49	1

Client Sample ID: B6-10' Date Collected: 09/18/19 08:50 Date Received: 09/18/19 13:34

Method: 314.0 - Perchlorate (IC) - Soluble Analyte **Result Qualifier** RL MDL Unit D Prepared Analyzed Dil Fac Perchlorate ND 0.010 mg/Kg 09/25/19 21:44 Method: 6010C - Metals (ICP) Analyte **Result Qualifier** RL MDL Unit D Prepared Analyzed Dil Fac Arsenic ND 3.0 mg/Kg 09/19/19 16:02 09/26/19 03:51 1 **Barium** 120 4.9 mg/Kg 09/19/19 16:02 09/26/19 03:51 1 Cadmium ND 0.49 mg/Kg 09/19/19 16:02 09/26/19 03:51 1 2.0 09/19/19 16:02 09/27/19 01:44 Chromium 19 mg/Kg 1 0.98 Lead 4.7 mg/Kg 09/19/19 16:02 09/27/19 01:44 1 Selenium ND mg/Kg 09/19/19 16:02 09/27/19 01:44 4.9 1 Silver ND 2.5 mg/Kg 09/19/19 16:02 09/26/19 03:51 1 Method: 7471B - Mercury (CVAA) MDL Unit RL Analyte **Result Qualifier** D Prepared Analyzed Dil Fac 09/20/19 12:34 09/20/19 15:51 Mercury ND 0.095 mg/Kg 1 Client Sample ID: B7-2' Lab Sample ID: 550-129882-13 Date Collected: 09/18/19 08:59 Matrix: Solid Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC) - Soluble Analyte **Result Qualifier** RL MDL Unit D Prepared Analyzed Dil Fac Perchlorate 0.041 0.0099 mg/Kg 09/25/19 22:07 1

Method: 6010C - Metals (ICP) Analyte	Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac
Arsenic	ND	3.0	mg/Kg	09/19/19 16:02	09/26/19 03:54	1
Barium	120	4.9	mg/Kg	09/19/19 16:02	09/26/19 03:54	1
Cadmium	ND	0.49	mg/Kg	09/19/19 16:02	09/26/19 03:54	1
Chromium	18	2.0	mg/Kg	09/19/19 16:02	09/27/19 01:46	1

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Matrix: Solid

Job ID: 550-129882-1 SDG: Central Foothills

Client Sample ID: B7-2' Date Collected: 09/18/19 08:59 Date Received: 09/18/19 13:34						Lat	Sample II	D: 550-1298 Matri	382-13 x: Solic
Method: 6010C - Metals (ICP) (C	ontinued)							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5.4		0.99		mg/Kg		09/19/19 16:02	09/27/19 01:46	1
Selenium	ND		4.9		mg/Kg		09/19/19 16:02	09/27/19 01:46	1
Silver	ND		2.5		mg/Kg		09/19/19 16:02	09/26/19 03:54	1
Method: 7471B - Mercury (CVA/						_			
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.097		mg/Kg		09/20/19 12:34	09/20/19 15:53	1
Client Sample ID: B7-5' Date Collected: 09/18/19 09:01 Date Received: 09/18/19 13:34						Lat	Sample II	D: 550-1298 Matri	382-14 x: Solic
Method: 314.0 - Perchlorate (IC)						_			
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	0.021		0.010		mg/Kg			09/25/19 22:29	1
Method: 6010C - Metals (ICP)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.0		mg/Kg		09/19/19 16:02	09/26/19 03:56	1
Barium	150		5.0		mg/Kg		09/19/19 16:02	09/26/19 03:56	-
Cadmium	ND		0.50		mg/Kg		09/19/19 16:02	09/26/19 03:56	-
Chromium	17		2.0		mg/Kg			09/27/19 01:49	
Lead	2.9		1.0		mg/Kg			09/27/19 01:49	1
Selenium	ND		5.0		mg/Kg			09/27/19 01:49	1
Silver	ND		2.5		mg/Kg		09/19/19 16:02	09/26/19 03:56	1
_ Method: 7471B - Mercury (CVA/	A)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.097		mg/Kg		09/20/19 12:34	09/20/19 15:55	1
Client Sample ID: B8-2' Date Collected: 09/18/19 09:14 Date Received: 09/18/19 13:34						Lat) Sample II	D: 550-1298 Matri	382-15 x: Solic
Method: 314.0 - Perchlorate (IC)						_			
Analyte		Qualifier		MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		0.010		mg/Kg			09/25/19 22:52	1
Method: 6010C - Metals (ICP)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.0		mg/Kg		09/19/19 16:02	09/26/19 03:59	1
Barium	210		5.0		mg/Kg		09/19/19 16:02	09/26/19 03:59	1
Cadmium	ND		0.50		mg/Kg		09/19/19 16:02	09/26/19 03:59	1
			2.0		mg/Kg		09/19/19 16:02	09/27/19 01:51	1
Chromium	12						09/19/19 16:02	00/07/40 04-54	-
Chromium Lead			0.99		mg/Kg		09/19/19 10:02	09/27/19 01.51	
	12 4.2 ND		0.99 5.0		mg/Kg mg/Kg			09/27/19 01:51	
Lead	4.2						09/19/19 16:02		
Lead Selenium Silver	4.2 ND ND		5.0		mg/Kg		09/19/19 16:02	09/27/19 01:51	
Lead Selenium	4.2 ND ND	Qualifier	5.0	MDL	mg/Kg	D	09/19/19 16:02	09/27/19 01:51	1 1 Dil Fac

Job ID: 550-129882-1 SDG: Central Foothills

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Lab Sample ID: 550-129882-16 Matrix: Solid

Client Sample ID: B8-4' Date Collected: 09/18/19 09:17 Date Received: 09/18/19 13:34

Method: 314.0 - Perchlorate (IC)	- Soluble						
Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND	0.0099	mg/Kg			09/26/19 00:01	1
Method: 6010C - Metals (ICP)							

Analyte	Result Qualifier	RL	MDL Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<u>ND</u>	2.9	mg/Kg		09/19/19 16:02	09/26/19 04:01	1
Barium	270	4.9	mg/Kg		09/19/19 16:02	09/26/19 04:01	1
Cadmium	ND	0.49	mg/Kg		09/19/19 16:02	09/26/19 04:01	1
Chromium	13	1.9	mg/Kg		09/19/19 16:02	09/27/19 01:54	1
Lead	4.0	0.97	mg/Kg		09/19/19 16:02	09/27/19 01:54	1
Selenium	ND	4.9	mg/Kg		09/19/19 16:02	09/27/19 01:54	1
Silver	ND	2.4	mg/Kg		09/19/19 16:02	09/26/19 04:01	1
Method: 7471B - Mercury	$(CV\Delta\Delta)$						

Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.097		mg/Kg	_	09/20/19 12:34	09/20/19 15:59	1

Client Sample ID: B9-5' Date Collected: 09/18/19 10:24 Date Received: 09/18/19 13:34

Method: 314.0 - Perchlorate (IC) - Soluble Analyte **Result Qualifier** RL MDL Unit D Prepared Analyzed Dil Fac Perchlorate ND 0.0098 mg/Kg 09/26/19 00:24 Method: 6010C - Metals (ICP) Analyte **Result Qualifier** RL MDL Unit D Prepared Analyzed Dil Fac Arsenic ND 3.0 mg/Kg 09/19/19 16:02 09/26/19 04:04 1 **Barium** 110 5.0 mg/Kg 09/19/19 16:02 09/26/19 04:04 1 Cadmium ND 0.50 mg/Kg 09/19/19 16:02 09/26/19 04:04 1 2.0 09/19/19 16:02 09/27/19 01:56 Chromium 7.6 mg/Kg 1 Lead 1.0 mg/Kg 09/19/19 16:02 09/27/19 01:56 1 13 Selenium ND 5.0 mg/Kg 09/19/19 16:02 09/27/19 01:56 1 Silver ND 2.5 mg/Kg 09/19/19 16:02 09/26/19 04:04 1 Method: 7471B - Mercury (CVAA) MDL Unit RL Analyte **Result Qualifier** D Prepared Analyzed Dil Fac 09/20/19 12:34 09/20/19 16:01 Mercury ND 0.092 mg/Kg 1 Client Sample ID: B9-7' Lab Sample ID: 550-129882-18 Date Collected: 09/18/19 10:25 Matrix: Solid Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC) - Soluble Analyte **Result Qualifier** RL MDL Unit D Prepared Analyzed Dil Fac Perchlorate ND 0.010 mg/Kg 09/26/19 00:47 1 Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.0		mg/Kg		09/19/19 16:02	09/26/19 04:07	1
Barium	93		5.0		mg/Kg		09/19/19 16:02	09/26/19 04:07	1
Cadmium	ND		0.50		mg/Kg		09/19/19 16:02	09/26/19 04:07	1
Chromium	7.1		2.0		mg/Kg		09/19/19 16:02	09/27/19 01:59	1

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Lab Sample ID: 550-129882-17

Matrix: Solid

Job ID: 550-129882-1 SDG: Central Foothills

Client Sample ID: B9-7'						Lab	Sample I	D: 550-1298	82-18
Date Collected: 09/18/19 10:25							•		c: Solid
Date Received: 09/18/19 13:34									
Method: 6010C - Metals (ICP) ()							
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	11		1.0		mg/Kg		09/19/19 16:02	09/27/19 01:59	1
Selenium	ND		5.0		mg/Kg		09/19/19 16:02	09/27/19 01:59	1
Silver	ND		2.5		mg/Kg		09/19/19 16:02	09/26/19 04:07	1
Method: 7471B - Mercury (CVA	(A)								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.098		mg/Kg		09/20/19 12:34	09/20/19 16:03	1
Client Sample ID: B10-5' Date Collected: 09/18/19 10:34 Date Received: 09/18/19 13:34						Lat	Sample II	D: 550-1298 Matrix	82-19 c: Solid
_									
Method: 314.0 - Perchlorate (IC Analyte		Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		0.0099		mg/Kg			09/26/19 01:10	1
_	ne in e		0.0000		mgang			00,20,10 01.10	
Method: 6010C - Metals (ICP)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		3.0		mg/Kg		09/19/19 16:02	09/26/19 04:09	1
Barium	120		5.0		mg/Kg		09/19/19 16:02	09/26/19 04:09	1
Cadmium	ND		0.50		mg/Kg		09/19/19 16:02	09/26/19 04:09	1
Chromium	12		2.0		mg/Kg		09/19/19 16:02	09/27/19 02:02	1
Lead	3.1		1.0		mg/Kg		09/19/19 16:02	09/27/19 02:02	1
Selenium	ND		5.0		mg/Kg		09/19/19 16:02	09/27/19 02:02	1
Silver	ND		2.5		mg/Kg		09/19/19 16:02	09/26/19 04:09	1
_ Method: 7471B - Mercury (CVA									
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.096		mg/Kg		09/20/19 12:34	09/20/19 16:05	1
Client Sample ID: B10 7							Sampla II		
UNEIN JANNUE ID. DIV-/						Lab) Sample IL): 550-1298	82-20
Date Collected: 09/18/19 10:35						Lab		D: 550-1298 Matrix	82-20 c: Solid
Date Collected: 09/18/19 10:35) - Soluble					Lab			
Date Collected: 09/18/19 10:35 Date Received: 09/18/19 13:34		Qualifier	RL	MDL	Unit	Lat	Prepared		
Date Collected: 09/18/19 10:35 Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC			RL 0.0099	MDL	Unit mg/Kg		•	Matrix	c: Solid
Date Collected: 09/18/19 10:35 Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC Analyte Perchlorate	Result			MDL			•	Matrix Analyzed	c: Solid
Date Collected: 09/18/19 10:35 Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC Analyte	Result ND			MDL	mg/Kg		•	Matrix Analyzed	c: Solid
Date Collected: 09/18/19 10:35 Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC Analyte Perchlorate Method: 6010C - Metals (ICP)	Result ND	Qualifier	0.0099		mg/Kg	D	Prepared	Matrix Analyzed 09/26/19 01:33	C: Solid
Date Collected: 09/18/19 10:35 Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC Analyte Perchlorate Method: 6010C - Metals (ICP) Analyte	Result ND Result	Qualifier	0.0099 RL		mg/Kg Unit	D	Prepared Prepared 09/19/19 16:02	Matrix Analyzed 09/26/19 01:33 Analyzed	C: Solid
Date Collected: 09/18/19 10:35 Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC Analyte Perchlorate Method: 6010C - Metals (ICP) Analyte Arsenic	Result ND Result ND	Qualifier	0.0099 		mg/Kg Unit mg/Kg	D	Prepared Prepared 09/19/19 16:02 09/19/19 16:02	Matrix Analyzed 09/26/19 01:33 Analyzed 09/26/19 04:12	Dil Fac Dil Fac
Date Collected: 09/18/19 10:35 Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC Analyte Perchlorate Method: 6010C - Metals (ICP) Analyte Arsenic Barium	Result ND Result ND 120	Qualifier	0.0099 RL 3.0 5.0		mg/Kg Unit mg/Kg mg/Kg mg/Kg	D	Prepared Prepared 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02	Matrix Analyzed 09/26/19 01:33 Analyzed 09/26/19 04:12 09/26/19 04:12	Dil Fac 1 Dil Fac 1 Dil Fac 1
Date Collected: 09/18/19 10:35 Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC Analyte Perchlorate Method: 6010C - Metals (ICP) Analyte Arsenic Barium Cadmium	Result ND Result ND 120 ND	Qualifier	0.0099 RL 3.0 5.0 0.50		Unit mg/Kg mg/Kg mg/Kg mg/Kg	D	Prepared Prepared 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02	Matrix Analyzed 09/26/19 01:33 Analyzed 09/26/19 04:12 09/26/19 04:12 09/26/19 04:12	Dil Fac 1 Dil Fac 1 1 1 1 1 1 1 1
Date Collected: 09/18/19 10:35 Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC Analyte Perchlorate Method: 6010C - Metals (ICP) Analyte Arsenic Barium Cadmium Chromium	Result ND Result ND 120 ND 3.4	Qualifier	0.0099		mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	D	Prepared Prepared 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02	Matrix Analyzed 09/26/19 01:33 Analyzed 09/26/19 04:12 09/26/19 04:12 09/26/19 04:12 09/26/19 04:12	Dil Fac 1 Dil Fac 1 1 1 1 1 1 1 1
Date Collected: 09/18/19 10:35 Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC Analyte Perchlorate Method: 6010C - Metals (ICP) Analyte Arsenic Barium Cadmium Chromium Lead	Result ND Result ND 120 ND 3.4 4.7	Qualifier	0.0099 RL 3.0 5.0 0.50 2.0 0.99		Unit mg/Kg mg/Kg mg/Kg mg/Kg	D	Prepared Prepared 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02	Matrix Analyzed 09/26/19 01:33 Analyzed 09/26/19 04:12 09/26/19 04:12 09/26/19 04:12 09/26/19 04:25 09/27/19 02:05	Dil Fac 1 Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1
Date Collected: 09/18/19 10:35 Date Received: 09/18/19 13:34 Method: 314.0 - Perchlorate (IC Analyte Perchlorate Method: 6010C - Metals (ICP) Analyte Arsenic Barium Cadmium Chromium Lead Selenium Silver	Result ND Result ND 120 ND 3.4 4.7 ND ND	Qualifier	0.0099 RL 3.0 5.0 0.50 2.0 0.99 5.0		mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	D	Prepared Prepared 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02	Matrix Analyzed 09/26/19 01:33 Analyzed 09/26/19 04:12 09/26/19 04:12 09/26/19 04:12 09/27/19 02:05 09/27/19 02:05	C: Solid Dil Fac 1 Dil Fac 1 1 1 1 1 1 1 1 1
Analyte Perchlorate Method: 6010C - Metals (ICP) Analyte Arsenic Barium Cadmium Chromium Lead Selenium	Result ND Result ND 120 ND 3.4 4.7 ND ND A)	Qualifier	0.0099 RL 3.0 5.0 0.50 2.0 0.99 5.0	MDL	mg/Kg Unit mg/Kg mg/Kg mg/Kg mg/Kg mg/Kg	D	Prepared Prepared 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02 09/19/19 16:02	Matrix Analyzed 09/26/19 01:33 Analyzed 09/26/19 04:12 09/26/19 04:12 09/26/19 04:12 09/27/19 02:05 09/27/19 02:05	C: Solid Dil Fac 1 Dil Fac 1 1 1 1 1 1 1 1 1

QC Sample Results

Method: 314.0 - Perchlorate (IC)

Lab Sample ID: MB 550-19 Matrix: Solid	90481/1-A									Clie	ent Samp	ole ID: Met Prep Typ		
Analysis Batch: 190730														
	_	MB		_	_				_	_	<u>.</u>		_	
Analyte	Re		Qualifier	R		MDL	Unit		D	P	repared	Analyze		Dil Fa
Perchlorate		ND		0.009	9		mg/K	g				09/25/19 15	5:36	
Lab Sample ID: LCS 550-1	90481/2-A							Clie	ent	Sar	nple ID:	Lab Cont	rol S	ampl
Matrix: Solid												Prep Typ	be: S	olubl
Analysis Batch: 190730														
				Spike		LCS				_	~~ -	%Rec.		
Analyte				Added	Result		lifier	Unit		D	%Rec	Limits		
Perchlorate				0.246	0.265			mg/Kg			108	85 - 115		
_ab Sample ID: LCSD 550	-190481/3-A						c	lient S	am	ple	ID: Lab	Control S	ampl	e Di
Matrix: Solid												Prep Typ		
Analysis Batch: 190730														
-				Spike	LCSD	LCS	D					%Rec.		RF
Analyte				Added	Result	Qua	lifier	Unit		D	%Rec	Limits	RPD	Lin
Perchlorate				0.246	0.265			mg/Kg			108	85 - 115	0	
														-
Lab Sample ID: 550-12988	2-1 MS										Cli	ent Samp		
Matrix: Solid												Ргер Тур	be: S	olub
Analysis Batch: 190854	Sample	San	nlo	Spike	МЗ	MS						%Rec.		
Analyte	Result		•	Added	Result	-	lifior	Unit		D	%Rec	Limits		
Perchlorate	ND	Guu		0.250	0.269			mg/Kg			108	80 - 120		
/atrix: Solid Analysis Batch: 190854		•		o ''			_					Prep Typ		
A molecto	Sample		•	Spike	-	MSI		11		•	9/ Dee	%Rec.	RPD	RF
Analyte Perchlorate	Result	Qua		Added	0.261	Qua	limer	Unit mg/Kg			%Rec	Limits 80 - 120	3	Lin
erchiorate	ND			0.247	0.201			ing/itg			100	00 - 120	5	
athadi COAOO Matal														
ethod: 6010C - Metal	s (ICP)													
Lab Sample ID: MB 550-19										Clie	ent Samp	ole ID: Met	thod	Blar
_ab Sample ID: MB 550-19 Matrix: Solid										Clie		Prep Type	e: To	tal/N
_ab Sample ID: MB 550-19 Matrix: Solid										Clie			e: To	tal/N
∟ab Sample ID: MB 550-19 Matrix: Solid Analysis Batch: 190686	90087/1-A	MB										Prep Type Prep Bate	e: To ch: 1	tal/N 9008
_ab Sample ID: MB 550-19 Matrix: Solid Analysis Batch: 190686 Analyte	90087/1-A	sult	MB Qualifier	R		MDL	Unit		D	P	repared	Prep Type Prep Bate Analyze	e: To ch: 1 d	tal/N 9008
Lab Sample ID: MB 550-19 Matrix: Solid Analysis Batch: 190686 Analyte Arsenic	90087/1-A	sult ND		2.	9	MDL	mg/K	-	D	P 09/1	repared 9/19 16:02	Prep Type Prep Bate Analyze	e: To ch: 1 d 3:02	tal/N 9008
Lab Sample ID: MB 550-19 Matrix: Solid Analysis Batch: 190686 Analyte Arsenic Barium	90087/1-A	sult ND ND		2. 4.	9	MDL	mg/K mg/K	g	D	P 09/1 09/1	repared 9/19 16:02 9/19 16:02	Prep Type Prep Bate Analyze 09/26/19 03 09/26/19 03	e: To ch: 1 d 3:02 3:02	tal/N 9008
Lab Sample ID: MB 550-19 Matrix: Solid Analysis Batch: 190686 Analyte Arsenic Barium Cadmium	90087/1-A	sult ND ND ND		2. 4. 0.4	9 9 9	MDL	mg/K mg/K mg/K	g g	<u>D</u>	P 09/1 09/1 09/1	repared 9/19 16:02 9/19 16:02 9/19 16:02	Prep Type Prep Bate 09/26/19 03 09/26/19 03 09/26/19 03	e: To ch: 1 d 3:02 3:02 3:02	tal/N 9008
Lab Sample ID: MB 550-19 Matrix: Solid Analysis Batch: 190686 Analyte Arsenic Barium Cadmium	90087/1-A	sult ND ND		2. 4.	9 9 9	MDL	mg/K mg/K	g g	<u>D</u>	P 09/1 09/1 09/1	repared 9/19 16:02 9/19 16:02 9/19 16:02	Prep Type Prep Bate Analyze 09/26/19 03 09/26/19 03	e: To ch: 1 d 3:02 3:02 3:02	tal/N 9008
Lab Sample ID: MB 550-19 Matrix: Solid Analysis Batch: 190686 Analyte Arsenic Barium Cadmium Silver Lab Sample ID: MB 550-19	90087/1-A 	sult ND ND ND		2. 4. 0.4	9 9 9	MDL	mg/K mg/K mg/K	g g	<u>D</u>	P 09/1 09/1 09/1 09/1	repared 9/19 16:02 9/19 16:02 9/19 16:02 9/19 16:02 ent Samp	Prep Type Prep Bate 09/26/19 03 09/26/19 03 09/26/19 03 09/26/19 03	d 3:02 3:02 3:02 3:02 3:02 3:02 3:02 3:02 bod	tal/N 9008 Dil F
Lab Sample ID: MB 550-19 Matrix: Solid Analysis Batch: 190686 Analyte Arsenic Barium Cadmium Silver Lab Sample ID: MB 550-19 Matrix: Solid	90087/1-A 	sult ND ND ND		2. 4. 0.4	9 9 9	MDL	mg/K mg/K mg/K	g g	<u>D</u>	P 09/1 09/1 09/1 09/1	repared 9/19 16:02 9/19 16:02 9/19 16:02 9/19 16:02 ent Samp	Prep Type Prep Bate 09/26/19 03 09/26/19 03 09/26/19 03 09/26/19 03 09/26/19 03	d d 3 :02 3 :	tal/N 9008 Dil F Blar tal/N
Lab Sample ID: MB 550-19 Matrix: Solid Analysis Batch: 190686 Analyte Arsenic Barium Cadmium Silver Lab Sample ID: MB 550-19 Matrix: Solid	90087/1-A 	sult ND ND ND	Qualifier	2. 4. 0.4	9 9 9	MDL	mg/K mg/K mg/K	g g	<u>D</u>	P 09/1 09/1 09/1 09/1	repared 9/19 16:02 9/19 16:02 9/19 16:02 9/19 16:02 ent Samp	Prep Type Prep Bate 09/26/19 03 09/26/19 03 09/26/19 03 09/26/19 03	d d 3 :02 3 :	tal/N 9008 Dil F Blar tal/N
Lab Sample ID: MB 550-19 Matrix: Solid Analysis Batch: 190686 Analyte Arsenic Barium Cadmium Silver Lab Sample ID: MB 550-19 Matrix: Solid Analysis Batch: 190815	90087/1-A 	ND ND ND ND	Qualifier	2. 4. 0.4 2.	9 9 9 4		mg/K mg/K mg/K	g g	<u>D</u>	P 09/1 09/1 09/1 09/1 Clie	repared 9/19 16:02 9/19 16:02 9/19 16:02 9/19 16:02 ent Samp	Prep Type Prep Bate 09/26/19 02 09/26/19 02 09/26/19 02 09/26/19 02 09/26/19 02 09/26/19 02 09/26/19 02 09/26/19 02	e: To ch: 1 d 3:02 3:02 3:02 3:02 3:02 3:02 3:02 dthod e: To ch: 1	tal/N 9008 Dil Fa Blar tal/N 9008
Lab Sample ID: MB 550-19 Matrix: Solid Analysis Batch: 190686 Analyte Arsenic Barium Cadmium Silver Lab Sample ID: MB 550-19 Matrix: Solid Analysis Batch: 190815 Analyte	90087/1-A 	ND ND ND ND	Qualifier	2. 4. 0.4	9 9 9 4		mg/K mg/K mg/K mg/K	g g	D 	P 09/1 09/1 09/1 09/1 Clie	repared 9/19 16:02 9/19 16:02 9/19 16:02 9/19 16:02 ent Samp repared	Prep Type Prep Bate 09/26/19 02 09/26/19 02 09/26/20 09/26/20 09/26/20 09/26/20 09/26/20 00 09/26/20 00 09/26/20 00 00 00 00 00 00 00 00 00 00 00 00 0	e: To ch: 1 d 3:02 3:02 3:02 3:02 3:02 3:02 3:02 3:02	tal/N 9008 Dil Fa Blan tal/N 9008
lethod: 6010C - Metals Lab Sample ID: MB 550-19 Matrix: Solid Analysis Batch: 190686 Analyte Arsenic Barium Cadmium Silver Lab Sample ID: MB 550-19 Matrix: Solid Analysis Batch: 190815 Analyte Chromium Lead	90087/1-A 	sult ND ND ND MB sult	Qualifier	2. 4. 0.4 2.	9 9 4 L		mg/K mg/K mg/K	g g g	<u>D</u> 	P(09/1 09/1 09/1 09/1 Clie	repared 9/19 16:02 9/19 16:02 9/19 16:02 9/19 16:02 9/19 16:02 ent Samp repared 9/19 16:02	Prep Type Prep Bate 09/26/19 02 09/26/19 02 09/26/19 02 09/26/19 02 09/26/19 02 09/26/19 02 09/26/19 02 09/26/19 02	e: To ch: 1 d 3:02 3:02 3:02 3:02 3:02 3:02 3:02 3:02	tal/N 9008 Dil Fa Blan tal/N

Lead

Mathad: 6010C Motolo 4.5 -1)

Lab Sample ID: LCS 550-19	0087/2-A					Clier	nt Sar	nple ID	: Lab Con		_
Matrix: Solid									Prep Ty	pe: Tot	al/NA
Analysis Batch: 190686									Prep Ba	tch: 19	90087
			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Arsenic			49.9	52.8		mg/Kg		106	80 - 110		
Barium			49.9	53.4		mg/Kg		107	88 - 110		
Cadmium			49.9	50.6		mg/Kg		101	83 - 110		
Silver			3.74	3.70		mg/Kg		99	80 - 110		
Lab Sample ID: LCS 550-19	0087/2-A					Clier	nt Sar	nple ID	: Lab Con	trol Sa	mple
Matrix: Solid									Prep Ty	pe: Tot	al/NA
Analysis Batch: 190815									Prep Ba	tch: 19	90087
-			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chromium			49.9	46.4		mg/Kg		93	86 - 110		
Lead			49.9	47.0		mg/Kg		94	83 - 110		
Selenium			49.9	45.1		mg/Kg		91	80 - 110		
Lab Sample ID: LCSD 550-1	190087/3-A				C	lient Sa	mple	ID: Lat	o Control	Sample	e Duj
Matrix: Solid									Prep Ty	pe: Tot	al/N/
Analysis Batch: 190686									Prep Ba	tch: 19	9008
-			Spike	LCSD	LCSD				%Rec.		RPI
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Lim
Arsenic			49.1	52.8		mg/Kg		107	80 - 110	0	2
Barium			49.1	52.8		mg/Kg		108	88 - 110	1	20
Cadmium			49.1	50.3		mg/Kg		102	83 - 110	1	20
Silver			3.68	3.65		mg/Kg		99	80 - 110	1	20
Lab Sample ID: LCSD 550-1	190087/3-A	•			c	lient Sa	mple	ID: Lat	o Control	Sample	e Dup
Matrix: Solid									Prep Ty	pe: Tot	al/NA
Analysis Batch: 190815									Prep Ba	tch: 19	90087
			Spike	LCSD	LCSD				%Rec.		RPE
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limi
Chromium			49.1	46.1		mg/Kg		94	86 - 110	1	20
Lead			49.1	47.1		mg/Kg		96	83 - 110	0	20
Selenium			49.1	45.4		mg/Kg		92	80 - 110	1	20
Lab Sample ID: 550-129882	-1 MS							С	lient Sam		
Matrix: Solid									Prep Ty		
Analysis Batch: 190686									Prep Ba	tch: 19	9008
		Sample	Spike		MS				%Rec.		
Analyte		Qualifier	Added		Qualifier	Unit	D	%Rec	Limits		
Arsenic	ND		49.0	48.2		mg/Kg		98	75 - 125		
Barium	140		49.0	186		mg/Kg		105	75 - 125		
Cadmium	ND		49.0	48.6		mg/Kg		99	75 - 125		
Silver	ND		3.68	3.45		mg/Kg		94	75 - 125		
Lab Sample ID: 550-129882	-1 MS							С	lient Sam	-	
Matrix: Solid									Prep Ty		
Analysis Batch: 190815									Prep Ba	tch: 19	90087
		Sample	Spike		MS				%Rec.		
Analyte		Qualifier	Added		Qualifier	Unit	D	%Rec	Limits		
Chromium	31		49.0	72.7		mg/Kg		85	75 - 125		
1	77		40.0	40.2		malla		05	75 105		

Eurofins TestAmerica, Phoenix

75 - 125

85

49.3

mg/Kg

49.0

7.7

8 9

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

Lab Sample ID: 550-129882 Matrix: Solid	2-1 MS							С	lient Sam Prep Ty	-	
Analysis Batch: 190815									Prep Ba		
	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Selenium	ND	M2	49.0	24.5	M2	mg/Kg		50	75 - 125		
Lab Sample ID: 550-129882	2-1 MSD							С	lient Sam	ple ID:	B1-2'
Matrix: Solid									Prep Ty	pe: Tot	al/NA
Analysis Batch: 190686									Prep Ba	tch: 19	9008 7
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limi
Arsenic	ND		49.9	48.0		mg/Kg		96	75 - 125	0	20
Barium	140		49.9	190		mg/Kg		110	75 - 125	2	20
Cadmium	ND		49.9	49.8		mg/Kg		100	75 - 125	2	20
Silver	ND		3.74	3.56		mg/Kg		95	75 ₋ 125	3	20
Lab Sample ID: 550-129882	2-1 MSD							С	lient Sam	ple ID:	B1-2
Matrix: Solid									Prep Ty	pe: Tot	al/NA
Analysis Batch: 190815									Prep Ba		
•	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limi
Chromium	31		49.9	73.3		mg/Kg		85	75 - 125	1	20
_ead	7.7		49.9	49.4		mg/Kg		83	75 - 125	0	20
Selenium	ND	M2	49.9	27.4	M2	mg/Kg		55	75 - 125	11	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 550-190	185/1-A							Clie		ole ID: Me		
Matrix: Solid										Prep Typ		
Analysis Batch: 190209										Prep Bat	ch: 19	90185
		MB MB										
Analyte		sult Qualifie	r	RL	MDL U	nit	D		repared	Analyze	-	Dil Fac
Mercury		ND		0.10	m	g/Kg		09/2	0/19 12:34	09/20/19 1	5:12	1
Lab Sample ID: LCS 550-19	0185/2-A					CI	lient	Sar	nple ID:	Lab Cont	rol Sa	ample
Matrix: Solid										Prep Typ	e: Tot	al/NA
Analysis Batch: 190209										Prep Bat	ch: 19	90185
-			Spike	LCS	LCS					%Rec.		
Analyte			Added	Resul	t Qualifi	er Unit		D	%Rec	Limits		
Mercury			0.971	0.945	5	mg/Kg	1		97	80 - 120		
-			0.07.1	0.0.0		5.5	,					
	90185/3-A					0.0		nple	ID: Lab		ample	e Dup
Lab Sample ID: LCSD 550-1 Matrix: Solid	90185/3-A					0.0		ple		Control S		
Lab Sample ID: LCSD 550-1 Matrix: Solid	90185/3-A					0.0		nple		Control S Prep Type	e: Tot	al/NA
Lab Sample ID: LCSD 550-1	90185/3-A		Spike		LCSD	0.0		nple		Control S	e: Tot	al/NA
Lab Sample ID: LCSD 550-1 Matrix: Solid	90185/3-A			LCSE		Client		nple D		Control S Prep Type Prep Bat	e: Tot	al/NA 90185
Lab Sample ID: LCSD 550-1 Matrix: Solid Analysis Batch: 190209	90185/3-A		Spike	LCSE	LCSD	Client	Sam			Control S Prep Type Prep Bat %Rec.	e: Tot ch: 19	al/NA 90185 RPD
Lab Sample ID: LCSD 550-1 Matrix: Solid Analysis Batch: 190209 Analyte Mercury			Spike Added	LCSE Resul	LCSD	Client	Sam		%Rec	Control S Prep Type Prep Bat %Rec. Limits 80 - 120	e: Tot ch: 19 RPD 3	al/NA 90185 RPD Limit 20
Lab Sample ID: LCSD 550-1 Matrix: Solid Analysis Batch: 190209 Analyte			Spike Added	LCSE Resul	LCSD	Client	Sam		<u>%Rec</u> 98 Clie	Control S Prep Type Prep Bat %Rec. Limits 80 - 120 ent Samp	e: Tot ch: 19 <u>RPD</u> 3 le ID:	al/NA 90185 RPD Limit 20 B1-2'
Lab Sample ID: LCSD 550-1 Matrix: Solid Analysis Batch: 190209 Analyte Mercury Lab Sample ID: 550-129882			Spike Added	LCSE Resul	LCSD	Client	Sam		<u>%Rec</u> 98 Clie	Control S Prep Type Prep Bat %Rec. Limits 80 - 120 ent Samp Prep Type	e: Tot ch: 19 <u>RPD</u> 3 le ID: e: Tot	al/NA 90185 RPD Limit 20 B1-2' cal/NA
Lab Sample ID: LCSD 550-1 Matrix: Solid Analysis Batch: 190209 Analyte Mercury Lab Sample ID: 550-129882 Matrix: Solid			Spike Added	LCSE Resul	LCSD Qualifi	Client	Sam		<u>%Rec</u> 98 Clie	Control S Prep Type Prep Bat %Rec. Limits 80 - 120 ent Samp	e: Tot ch: 19 <u>RPD</u> 3 le ID: e: Tot	al/NA 90185 RPD Limit 20 B1-2' cal/NA
Lab Sample ID: LCSD 550-1 Matrix: Solid Analysis Batch: 190209 Analyte Mercury Lab Sample ID: 550-129882 Matrix: Solid	-1 MS Sample	Sample Qualifier	Spike Added 0.990	LCSE Resul 0.971	LCSD Qualifi	Client	Sam		<u>%Rec</u> 98 Clie	Control S Prep Type Prep Bat %Rec. Limits 80 - 120 ent Samp Prep Type Prep Bat	e: Tot ch: 19 <u>RPD</u> 3 le ID: e: Tot	Allina Al

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

Lab Sample ID: 550-129882-1 MSD Matrix: Solid Analysis Batch: 190209								Client Sample ID: B1-2' Prep Type: Total/NA Prep Batch: 190185				
		Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Mercury	ND		0.976	1.01		mg/Kg		104	80 - 120	5	20

HPLC/IC

Leach Batch: 190481

HPLC/IC					3
Leach Batch: 190481					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-129882-1	B1-2'	Soluble	Solid	DI Leach	
550-129882-2	B1-4'	Soluble	Solid	DI Leach	5
550-129882-3	B2-5'	Soluble	Solid	DI Leach	
550-129882-4	B2-7'	Soluble	Solid	DI Leach	
550-129882-5	B3-2'	Soluble	Solid	DI Leach	
550-129882-6	B3-6'	Soluble	Solid	DI Leach	
550-129882-7	B4-5'	Soluble	Solid	DI Leach	
550-129882-8	B4-10'	Soluble	Solid	DI Leach	8
550-129882-9	B5-7'	Soluble	Solid	DI Leach	
550-129882-10	B5-11'	Soluble	Solid	DI Leach	9
550-129882-11	B6-7'	Soluble	Solid	DI Leach	–
550-129882-12	B6-10'	Soluble	Solid	DI Leach	
550-129882-13	B7-2'	Soluble	Solid	DI Leach	
550-129882-14	B7-5'	Soluble	Solid	DI Leach	
550-129882-15	B8-2'	Soluble	Solid	DI Leach	
550-129882-16	B8-4'	Soluble	Solid	DI Leach	
550-129882-17	B9-5'	Soluble	Solid	DI Leach	
550-129882-18	B9-7'	Soluble	Solid	DI Leach	
550-129882-19	B10-5'	Soluble	Solid	DI Leach	
550-129882-20	B10-7'	Soluble	Solid	DI Leach	
MB 550-190481/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 550-190481/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 550-190481/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
550-129882-1 MS	B1-2'	Soluble	Solid	DI Leach	
550-129882-1 MSD	B1-2'	Soluble	Solid	DI Leach	

Analysis Batch: 190730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-129882-9	B5-7'	Soluble	Solid	314.0	190481
550-129882-10	B5-11'	Soluble	Solid	314.0	190481
550-129882-11	B6-7'	Soluble	Solid	314.0	190481
550-129882-12	B6-10'	Soluble	Solid	314.0	190481
550-129882-13	B7-2'	Soluble	Solid	314.0	190481
550-129882-14	B7-5'	Soluble	Solid	314.0	190481
550-129882-15	B8-2'	Soluble	Solid	314.0	190481
550-129882-16	B8-4'	Soluble	Solid	314.0	190481
550-129882-17	B9-5'	Soluble	Solid	314.0	190481
550-129882-18	B9-7'	Soluble	Solid	314.0	190481
550-129882-19	B10-5'	Soluble	Solid	314.0	190481
550-129882-20	B10-7'	Soluble	Solid	314.0	190481
MB 550-190481/1-A	Method Blank	Soluble	Solid	314.0	190481
LCS 550-190481/2-A	Lab Control Sample	Soluble	Solid	314.0	190481
LCSD 550-190481/3-A	Lab Control Sample Dup	Soluble	Solid	314.0	190481

Analysis Batch: 190854

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
550-129882-1	B1-2'	Soluble	Solid	314.0	190481
550-129882-2	B1-4'	Soluble	Solid	314.0	190481
550-129882-3	B2-5'	Soluble	Solid	314.0	190481
550-129882-4	B2-7'	Soluble	Solid	314.0	190481
550-129882-5	B3-2'	Soluble	Solid	314.0	190481

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HPLC/IC (Continued)

Analysis Batch: 190854 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
50-129882-6 B3-6'		Soluble	Solid	314.0	190481	
550-129882-7	B4-5'	Soluble	Solid	314.0	190481	
550-129882-8	B4-10'	Soluble	Solid	314.0	190481	
550-129882-1 MS	B1-2'	Soluble	Solid	314.0	190481	
550-129882-1 MSD	B1-2'	Soluble	Solid	314.0	190481	

Metals

Prep Batch: 190087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-129882-1	B1-2'	Total/NA	Solid	3050B	
550-129882-2	B1-4'	Total/NA	Solid	3050B	
550-129882-3	B2-5'	Total/NA	Solid	3050B	
550-129882-4	B2-7'	Total/NA	Solid	3050B	
550-129882-5	B3-2'	Total/NA	Solid	3050B	
550-129882-6	B3-6'	Total/NA	Solid	3050B	
550-129882-7	B4-5'	Total/NA	Solid	3050B	
550-129882-8	B4-10'	Total/NA	Solid	3050B	
550-129882-9	B5-7'	Total/NA	Solid	3050B	
550-129882-10	B5-11'	Total/NA	Solid	3050B	
550-129882-11	B6-7'	Total/NA	Solid	3050B	
550-129882-12	B6-10'	Total/NA	Solid	3050B	
550-129882-13	B7-2'	Total/NA	Solid	3050B	
550-129882-14	B7-5'	Total/NA	Solid	3050B	
550-129882-15	B8-2'	Total/NA	Solid	3050B	
550-129882-16	B8-4'	Total/NA	Solid	3050B	
550-129882-17	B9-5'	Total/NA	Solid	3050B	
550-129882-18	B9-7'	Total/NA	Solid	3050B	
550-129882-19	B10-5'	Total/NA	Solid	3050B	
550-129882-20	B10-7'	Total/NA	Solid	3050B	
MB 550-190087/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 550-190087/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSD 550-190087/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
550-129882-1 MS	B1-2'	Total/NA	Solid	3050B	
550-129882-1 MSD	B1-2'	Total/NA	Solid	3050B	

Prep Batch: 190185

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
550-129882-1	B1-2'	Total/NA	Solid	7471B	
550-129882-2	B1-4'	Total/NA	Solid	7471B	
550-129882-3	B2-5'	Total/NA	Solid	7471B	
550-129882-4	B2-7'	Total/NA	Solid	7471B	
550-129882-5	B3-2'	Total/NA	Solid	7471B	
550-129882-6	B3-6'	Total/NA	Solid	7471B	
550-129882-7	B4-5'	Total/NA	Solid	7471B	
550-129882-8	B4-10'	Total/NA	Solid	7471B	
550-129882-9	B5-7'	Total/NA	Solid	7471B	
550-129882-10	B5-11'	Total/NA	Solid	7471B	
550-129882-11	B6-7'	Total/NA	Solid	7471B	
550-129882-12	B6-10'	Total/NA	Solid	7471B	
550-129882-13	B7-2'	Total/NA	Solid	7471B	

Job ID: 550-129882-1 SDG: Central Foothills

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Metals (Continued)

Prep Batch: 190185 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-129882-14	B7-5'	Total/NA Solid		7471B	
550-129882-15	B8-2'	Total/NA	Solid	7471B	
550-129882-16	B8-4'	Total/NA	Solid	7471B	
550-129882-17	B9-5'	Total/NA	Solid	7471B	
550-129882-18	B9-7'	Total/NA	Solid	7471B	
550-129882-19	B10-5'	Total/NA	Solid	7471B	
550-129882-20	B10-7'	Total/NA	Solid	7471B	
MB 550-190185/1-A	Method Blank	Total/NA	Solid	7471B	
LCS 550-190185/2-A	Lab Control Sample	Total/NA	Solid	7471B	
LCSD 550-190185/3-A	Lab Control Sample Dup	Total/NA	Solid	7471B	
550-129882-1 MS	B1-2'	Total/NA	Solid	7471B	
550-129882-1 MSD	B1-2'	Total/NA	Solid	7471B	

Analysis Batch: 190209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-129882-1	B1-2'	Total/NA	Solid	7471B	190185
550-129882-2	B1-4'	Total/NA	Solid	7471B	190185
550-129882-3	B2-5'	Total/NA	Solid	7471B	190185
550-129882-4	B2-7'	Total/NA	Solid	7471B	190185
550-129882-5	B3-2'	Total/NA	Solid	7471B	190185
550-129882-6	B3-6'	Total/NA	Solid	7471B	190185
550-129882-7	B4-5'	Total/NA	Solid	7471B	190185
550-129882-8	B4-10'	Total/NA	Solid	7471B	190185
550-129882-9	B5-7'	Total/NA	Solid	7471B	190185
550-129882-10	B5-11'	Total/NA	Solid	7471B	190185
550-129882-11	B6-7'	Total/NA	Solid	7471B	190185
550-129882-12	B6-10'	Total/NA	Solid	7471B	190185
550-129882-13	B7-2'	Total/NA	Solid	7471B	190185
550-129882-14	B7-5'	Total/NA	Solid	7471B	190185
550-129882-15	B8-2'	Total/NA	Solid	7471B	190185
550-129882-16	B8-4'	Total/NA	Solid	7471B	190185
550-129882-17	B9-5'	Total/NA	Solid	7471B	190185
550-129882-18	B9-7'	Total/NA	Solid	7471B	190185
550-129882-19	B10-5'	Total/NA	Solid	7471B	190185
550-129882-20	B10-7'	Total/NA	Solid	7471B	190185
MB 550-190185/1-A	Method Blank	Total/NA	Solid	7471B	190185
LCS 550-190185/2-A	Lab Control Sample	Total/NA	Solid	7471B	190185
LCSD 550-190185/3-A	Lab Control Sample Dup	Total/NA	Solid	7471B	190185
550-129882-1 MS	B1-2'	Total/NA	Solid	7471B	190185
550-129882-1 MSD	B1-2'	Total/NA	Solid	7471B	190185

Analysis Batch: 190686

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
550-129882-1	B1-2'	Total/NA	Solid	6010C	190087
550-129882-2	B1-4'	Total/NA	Solid	6010C	190087
550-129882-3	B2-5'	Total/NA	Solid	6010C	190087
550-129882-4	B2-7'	Total/NA	Solid	6010C	190087
550-129882-5	B3-2'	Total/NA	Solid	6010C	190087
550-129882-6	B3-6'	Total/NA	Solid	6010C	190087
550-129882-7	B4-5'	Total/NA	Solid	6010C	190087
550-129882-8	B4-10'	Total/NA	Solid	6010C	190087

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Metals (Continued)

Analysis Batch: 190686 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-129882-9	B5-7'	Total/NA	Solid	6010C	190087
550-129882-10	B5-11'	Total/NA	Solid	6010C	190087
550-129882-11	B6-7'	Total/NA	Solid	6010C	190087
550-129882-12	B6-10'	Total/NA	Solid	6010C	190087
550-129882-13	B7-2'	Total/NA	Solid	6010C	190087
550-129882-14	B7-5'	Total/NA	Solid	6010C	190087
550-129882-15	B8-2'	Total/NA	Solid	6010C	190087
550-129882-16	B8-4'	Total/NA	Solid	6010C	190087
550-129882-17	B9-5'	Total/NA	Solid	6010C	190087
550-129882-18	B9-7'	Total/NA	Solid	6010C	190087
550-129882-19	B10-5'	Total/NA	Solid	6010C	190087
550-129882-20	B10-7'	Total/NA	Solid	6010C	190087
MB 550-190087/1-A	Method Blank	Total/NA	Solid	6010C	190087
LCS 550-190087/2-A	Lab Control Sample	Total/NA	Solid	6010C	190087
LCSD 550-190087/3-A	Lab Control Sample Dup	Total/NA	Solid	6010C	190087
550-129882-1 MS	B1-2'	Total/NA	Solid	6010C	190087
550-129882-1 MSD	B1-2'	Total/NA	Solid	6010C	190087

Analysis Batch: 190815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-129882-1	B1-2'	Total/NA	Solid	6010C	190087
550-129882-2	B1-4'	Total/NA	Solid	6010C	190087
550-129882-3	B2-5'	Total/NA	Solid	6010C	190087
550-129882-4	B2-7'	Total/NA	Solid	6010C	190087
550-129882-5	B3-2'	Total/NA	Solid	6010C	190087
550-129882-6	B3-6'	Total/NA	Solid	6010C	190087
550-129882-7	B4-5'	Total/NA	Solid	6010C	190087
550-129882-8	B4-10'	Total/NA	Solid	6010C	190087
550-129882-9	B5-7'	Total/NA	Solid	6010C	190087
550-129882-10	B5-11'	Total/NA	Solid	6010C	190087
550-129882-11	B6-7'	Total/NA	Solid	6010C	190087
550-129882-12	B6-10'	Total/NA	Solid	6010C	190087
550-129882-13	B7-2'	Total/NA	Solid	6010C	190087
550-129882-14	B7-5'	Total/NA	Solid	6010C	190087
550-129882-15	B8-2'	Total/NA	Solid	6010C	190087
550-129882-16	B8-4'	Total/NA	Solid	6010C	190087
550-129882-17	B9-5'	Total/NA	Solid	6010C	190087
550-129882-18	B9-7'	Total/NA	Solid	6010C	190087
550-129882-19	B10-5'	Total/NA	Solid	6010C	190087
550-129882-20	B10-7'	Total/NA	Solid	6010C	190087
MB 550-190087/1-A	Method Blank	Total/NA	Solid	6010C	190087
LCS 550-190087/2-A	Lab Control Sample	Total/NA	Solid	6010C	190087
LCSD 550-190087/3-A	Lab Control Sample Dup	Total/NA	Solid	6010C	190087
550-129882-1 MS	B1-2'	Total/NA	Solid	6010C	190087
550-129882-1 MSD	B1-2'	Total/NA	Solid	6010C	190087

Job ID: 550-129882-1 SDG: Central Foothills

Matrix: Solid

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Lab Sample ID: 550-129882-1

Client Sample ID: B1-2' Date Collected: 09/18/19 07:10 Date Received: 09/18/19 13:34

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190854	09/26/19 14:19	NEL	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 03:17	SRA	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 01:10	SRA	TAL PHX
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 15:25	BCV	TAL PHX

Lab Sample ID: 550-129882-2

Matrix: Solid

Client Sample ID: B1-4' Date Collected: 09/18/19 07:14 Date Received: 09/18/19 13:34

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190854	09/26/19 14:42	NEL	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 03:20	SRA	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 01:13	SRA	TAL PHX
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 15:27	BCV	TAL PHX

Client Sample ID: B2-5'

Date Collected: 09/18/19 07:22 Date Received: 09/18/19 13:34

Lab Sample ID: 550-129882-3

Lab Sample ID: 550-129882-4

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190854	09/26/19 15:05	NEL	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 03:22	SRA	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 01:16	SRA	TAL PHX
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 15:29	BCV	TAL PHX

Client Sample ID: B2-7' Date Collected: 09/18/19 07:23 Date Received: 09/18/19 13:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190854	09/26/19 15:28	NEL	TAL PHX

Eurofins TestAmerica, Phoenix

Matrix: Solid

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Lab Sample ID: 550-129882-4 Matrix: Solid

Lab Sample ID: 550-129882-5

Date Collected: 09/18/19 07:23 Date Received: 09/18/19 13:34

Client Sample ID: B2-7'

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 03:25	SRA	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 01:18	SRA	TAL PHX
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 15:31	BCV	TAL PHX

Client Sample ID: B3-2' Date Collected: 09/18/19 07:33 Date Received: 09/18/19 13:34

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190854	09/26/19 15:51	NEL	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 03:27	SRA	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 01:20	SRA	TAL PHX
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 15:33	BCV	TAL PHX

Client Sample ID: B3-6' Date Collected: 09/18/19 07:35 Date Received: 09/18/19 13:34

Lab Sample ID: 550-129882-6

Lab Sample ID: 550-129882-7

Matrix: Solid

Matrix: Solid

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190854	09/26/19 16:13	NEL	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 03:30	SRA	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 01:23	SRA	TAL PHX
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 15:35	BCV	TAL PHX

Client Sample ID: B4-5' Date Collected: 09/18/19 07:44 Date Received: 09/18/19 13:34

	Batch	Batch	Dura	Dilution	Batch	Prepared	Amahuat	Lab
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190854	09/26/19 16:36	NEL	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 03:32	SRA	TAL PHX

Matrix: Solid

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Lab Sample ID: 550-129882-7

Lab Sample ID: 550-129882-8

Client Sample ID: B4-5' Date Collected: 09/18/19 07:44 Date Received: 09/18/19 13:34

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 01:25	SRA	TAL PHX
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 15:37	BCV	TAL PHX

Client Sample ID: B4-10' Date Collected: 09/18/19 07:52 Date Received: 09/18/19 13:34

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190854	09/26/19 16:59	NEL	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 03:35	SRA	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 01:28	SRA	TAL PHX
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 15:39	BCV	TAL PHX

Client Sample ID: B5-7' Date Collected: 09/18/19 08:35 Date Received: 09/18/19 13:34

Lab Sample ID: 550-129882-9 Matrix: Solid

Lab Sample ID: 550-129882-10

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190730	09/25/19 20:35	NEL	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 03:37	SRA	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 01:30	SRA	TAL PHX
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 15:41	BCV	TAL PHX

Client Sample ID: B5-11' Date Collected: 09/18/19 08:37 Date Received: 09/18/19 13:34

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190730	09/25/19 20:58	NEL	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 03:40	SRA	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 01:33	SRA	TAL PHX

Matrix: Solid

Matrix: Solid

Lab Sample ID: 550-129882-10

Lab Sample ID: 550-129882-11

Lab Sample ID: 550-129882-12

Client Sample ID: B5-11' Date Collected: 09/18/19 08:37 Date Received: 09/18/19 13:34

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 15:43	BCV	TAL PHX

Client Sample ID: B6-7' Date Collected: 09/18/19 08:49 Date Received: 09/18/19 13:34

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190730	09/25/19 21:21	NEL	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 03:48	SRA	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 01:41	SRA	TAL PHX
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 15:49	BCV	TAL PHX

Client Sample ID: B6-10' Date Collected: 09/18/19 08:50 Date Received: 09/18/19 13:34

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190730	09/25/19 21:44	NEL	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 03:51	SRA	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 01:44	SRA	TAL PHX
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 15:51	BCV	TAL PHX

Client Sample ID: B7-2' Date Collected: 09/18/19 08:59 Date Received: 09/18/19 13:34

-	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190730	09/25/19 22:07	NEL	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 03:54	SRA	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 01:46	SRA	TAL PHX
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 15:53	BCV	TAL PHX

Lab Sample ID: 550-129882-13 Matrix: Solid

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Client Sample ID: B7-5' Date Collected: 09/18/19 09:01 Date Received: 09/18/19 13:34

	Batch	Batch		Dilution	Batch	Prepared		
Prep Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190730	09/25/19 22:29	NEL	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 03:56	SRA	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 01:49	SRA	TAL PHX
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 15:55	BCV	TAL PHX

Lab Sample ID: 550-129882-15

Lab Sample ID: 550-129882-14

Matrix: Solid

Client Sample ID: B8-2' Date Collected: 09/18/19 09:14 Date Received: 09/18/19 13:34

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190730	09/25/19 22:52	NEL	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 03:59	SRA	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 01:51	SRA	TAL PHX
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 15:57	BCV	TAL PHX

Client Sample ID: B8-4'

Date Collected: 09/18/19 09:17 Date Received: 09/18/19 13:34

Lab Sample ID: 550-129882-16 Matrix: Solid

Lab Sample ID: 550-129882-17

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190730	09/26/19 00:01	NEL	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 04:01	SRA	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 01:54	SRA	TAL PHX
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 15:59	BCV	TAL PHX

Client Sample ID: B9-5' Date Collected: 09/18/19 10:24 Date Received: 09/18/19 13:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190730	09/26/19 00:24	NEL	TAL PHX

Eurofins TestAmerica, Phoenix

Matrix: Solid

Matrix: Solid

5

10

Lab Sample ID: 550-129882-17

Lab Sample ID: 550-129882-18

Client Sample ID: B9-5' Date Collected: 09/18/19 10:24 Date Received: 09/18/19 13:34

	Batch	Batch		Dilution	Batch	Prepared		
Prep Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 04:04	SRA	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 01:56	SRA	TAL PHX
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 16:01	BCV	TAL PHX

Client Sample ID: B9-7' Date Collected: 09/18/19 10:25 Date Received: 09/18/19 13:34

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190730	09/26/19 00:47	NEL	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 04:07	SRA	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 01:59	SRA	TAL PHX
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 16:03	BCV	TAL PHX

Client Sample ID: B10-5' Date Collected: 09/18/19 10:34 Date Received: 09/18/19 13:34

Lab Sample ID: 550-129882-19

Lab Sample ID: 550-129882-20

Matrix: Solid

Matrix: Solid

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190730	09/26/19 01:10	NEL	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 04:09	SRA	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 02:02	SRA	TAL PHX
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 16:05	BCV	TAL PHX

Client Sample ID: B10-7' Date Collected: 09/18/19 10:35 Date Received: 09/18/19 13:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analvzed	Analvst	Lab
гер туре	Туре		Kuli		Number	Of Analyzeu	Analyst	
Soluble	Leach	DI Leach			190481	09/24/19 16:52	NEL	TAL PHX
Soluble	Analysis	314.0		1	190730	09/26/19 01:33	NEL	TAL PHX
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190686	09/26/19 04:12	SRA	TAL PHX

Lab Sample ID: 550-129882-20

Client Sample ID: B10-7' Date Collected: 09/18/19 10:35 Date Received: 09/18/19 13:34

	Batch	Batch		Dilution	Batch	Prepared		
Prep Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			190087	09/19/19 16:02	MGM	TAL PHX
Total/NA	Analysis	6010C		1	190815	09/27/19 02:05	SRA	TAL PHX
Total/NA	Prep	7471B			190185	09/20/19 12:34	BCV	TAL PHX
Total/NA	Analysis	7471B		1	190209	09/20/19 16:07	BCV	TAL PHX

Laboratory References:

TAL PHX = Eurofins TestAmerica, Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Accreditation/Certification Summary

Laboratory: Eurofins TestAmerica, Phoenix

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

Authority	P	rogram	Identification Number	Expiration Date
Arizona	Si	ate Program	AZ0728	06-09-20
The following analytes the agency does not o	•	ort, but the laboratory is i	not certified by the governing authority.	This list may include analytes for whic

Method Summary

Client: Geotechnical Testing & Inspection LLC Project/Site: 195615E

Job ID: 550-129882-1 SDG: Central Foothills

lethod	Method Description	Protocol	Laboratory
314.0	Perchlorate (IC)	EPA	TAL PHX
6010C	Metals (ICP)	SW846	TAL PHX
′471B	Mercury (CVAA)	SW846	TAL PHX
050B	Preparation, Metals	SW846	TAL PHX
471B	Preparation, Mercury	SW846	TAL PHX
OI Leach	Deionized Water Leaching Procedure	ASTM	TAL PHX

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL PHX = Eurofins TestAmerica, Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

100100	0111.0	+ //	4		
Dator De Protoco	Company PK	Received in Kaboratory by:	Date/Time:	Company:	Relinquished by:
Date/Time:	Company:	Reperived by:	Date/Time:	Company:	Relinquished by:
Date/Time:	Company:	3:34 Reconved by:	9/18/19 13:3	Company: GTI	Reinquisned by after After Aller
Therm ID No.:		Cooler Temp. ("C): Obs'd		Custody Seal No .:	s Intact: Yes No
) cdb					C Requirements & Comments:
for Months	Disposal by Lab	Return to Client	Unknown	Poison B	Non-Hazard Flammable Skin Irritant
amed longer (nan 1 month)	A ree may be assessed it samples are retained longer than 1 month	Sampie Disposal (A tee may i	or the sample in the	Please List any EPA Waste Codes for the sample in the	Are any samples from a listed EPA Hazardous Waste? Please Comments Section if the lab is to dispose of the sample.
Line of Lennard Reven A successfiel			110 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5=NaOH; 6= Other	HCI; 3= H2SO4; 4=HNO3;
		V V	4	V 8:50 V	
550-129882 Chain of Custody	550-129882			64:49	-11 BG-7'
				8:37	-10 85-11'
				8:35	-9 85-71
				7:52	-8 34-10'
				Hh:C	-7 BY-5
				7:35	re B3-6;
				7:33	-6 B3-2'
				7:23	4 32-7'
				7:22	-3 82-5'
				1 7:14 1	-2 BI-4'
-		XX	C 1	1/18 7:10 6	-1 B1-2' 9
Sample Specific Notes:		Perform M RURA Percl	Matrix Cont. Filtered Sa	Sample Sample Comp. Date Time C=Crab	Sample Identification S
		15/M		1 day	#
Job / SDG No.: 195615 E		usd Let	∋(Y	1 week	Site: Contral Enthills
Lab Sampling:		141	/N)	2 weeks	_
Walk-in Client		N) 5		TAT if different from Below _	Phone:
Jse			WORKING DAYS		City/State/Zip:
aula				Analysis Turnaround Time	Address:
	Caro.	to contact.	Chody.	mayer / and	C
COC No:	Date:	7	To	+	
129882	129	BCBA Other	DW	Regulatory Program:	Address:
eurofins Environment Testin	360152 🍣	criain of custody record 360152 @ eurofins	chain o		
2		f Custody Doosed	100		
			13 14	10 11 12	1 2 3 4 5 6 7 8 9

Address:			129	29882 TestAmerica
Client Contact	Project Manager: Tay /	In Eacers Site Contact:	Date:	COC No:
Company Name: 677	5100	Thisz. Com	Carrier:	2 of Z COCs
	Analysis Turr			Sampler:
City/State/Zip:	CALENDAR DAYS	AYS		For Lab Use Only:
Phone:	TAT if different from Below	N)		Walk-in Client:
151	2 weeks	(Y) +c		Lab Sampling:
Callel C.L.	1 week	sd h€		ierric
PO#	1 day	/MS		JOD / SEIG NO .: 145615 E
	Sample	I Sam n MS 2.A		
Sample Identification	Sample Sample (C=Comp. Date Time G=Grab)	Matrix Cont. Filtered Perform		Sample Specific Notes:
-13 B7-2'	9/18 8:59 (2	521111		
-14 B7-51	1 10:6			
-15 BR - 2'	1 41:6			
-10 BB-4,	6112			
-17 B7 - S1	10:24			
-18 B9-7'	10:25			
-19 B10-5'	16:34			
-20 BIO-71	4 10:35 4			
Preservation Used: 1= Ice, 2= HCI; 3= H2SO4; 4=HNO3;	O3; 5=NaOH; 6= Other			
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? P Comments Section if the lab is to dispose of the sample.	Please List any EPA Waste Codes for the sample in the		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	sd longer than 1 month)
Non-Hazard Flammable Skin Irritant	Poison B	Unknown	Disposal by Lab	Months
Special Instructions/QC Requirements & Comments:			(1.30)	cos
Custody Seals Intact: Ves No	Custody Seal No.:	Cooler Temp. ("C): Obs'd:		Therm ID No.:
Relinquished by traffector	Company: GTI	g/18/19 13:34 Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time: Received by:	Company;	Date/Time:
Relinquished by:	Company:	Date/Time: Received & Caboratory by	Company AHX	Date 19-1819 1334

Login Sample Receipt Checklist

Client: Geotechnical Testing & Inspection LLC

Login Number: 129882 List Number: 1 Creator: Maycock, Lisa

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	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?	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	

Job Number: 550-129882-1

SDG Number: Central Foothills

List Source: Eurofins TestAmerica, Phoenix

nuu ass.	Regulatory Program:	DW NPDES RCRA Other	12988	5 V
Client Contact	Project Manager: Taylo	oers Site Contact:	Date:	COC No:
Company Name: GTI	1000	107.CON	er:	of Z COCs
	Inalysis			~
City/State/Zip:	CALENDAR DAYS	WORKING DAYS		Jse
Phone:	TAT if different from Below) (N) (S		Walk-in Client:
	2 weeks	41		Lab Sampling:
ct Name: 195	1 week	et.		-
PO#	2 days	MS		Job/SDG No: 175615 た
	Sample	Sam MS A		
Sample Identification	Sample Sample CCCOMP. Date Time CCCOMP.	b) Matrix Cont. Filtered S Perform I RCR/ Perform I		Sample Specific Notes:
-1 81-2'	9/18 7:10 6	C 1 XX		
-2 BI-4'	1 7:14			
-3 32-26	22:52			
-4 BZ -7'	7:23			
~ B3 -2'	7:33			
ru B3 -6!	7:35			
-7 BU-5'	1 7:44			
-8 B4 - 10'	7:52			
-9 BE-21	8:35			
-10 35-11'	1 68:37 1			
-11 BG-7'	64:8		550-129882 Chain of Custody	in of Custody
-12 BG-101	1 8:50 4	TAN + 7		
Preservation Used: 1= Ice, 2= HCI; 3= H2SO4; 4=HNO3;	03; 5=NaOH; 6= Other			
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.	ease List any EPA Waste Codes	Sample Disposa	I (A fee may be assessed if samples are retained longer than 1 month)	longer than 1 month)
Non-Hazard Flammable Skin Irritant	Poison B	Unknown Return to Client	Disposal by Lab	Months
Special Instructions/QC Requirements & Comments:			(1,3%)	CD4
Custody Seals Intact: Ves No	Custody Seal No .:	Cooler Temp. ("C): Obs'd		Therm ID No.:
Relinquished by and April	Company: GTI	Date/Time: 13:34 Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time: Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time: Received in Kaboratory by:	Company: 8M	Data-Fine 8-191335

Chain of Custody Record

Address:	Regulatory Program:	DW NPDES RCBA Other	129	12982 TestAmerica
Client Contact	Project Manager: Tay Isr	Egoers Site Contact:	Date:	COC No:
Company Name: 677	2	haz. way	Carrier:	2 of Z COCs
	Analysis	K		Sampler
City/State/Zip:	CALENDAR DAYS	WORKING DAYS		For Lab Use Only:
Phone:	TAT if different from Below	N) als		Walk-in Client:
Project Name: 155616-6	2 weeks	(Y) eta		ran oampring.
HAL Feet	2 days	isd M€		JOB/SDG NO.: 195615E
++	1 day	S/M		1 2 2 1 2
	Sample Sample Type	rred Sar		
Sample Identification	-	Matrix Cont.		Sample Specific Notes:
-13 B7-2'	9/18 8:59 6	S 2 1 1 1 1		
-14 B7-51	1 10:6			
-15 BE - 2'	1 91:14			
-10 B8-4.	6:17			
3	1 10:24			
-18 B9-71	10:25			
-19 BO-5'	16:34			
-20 BID-71	4 10:35 4	4 4 44		
Preservation Used: 1= Ice, 2= HCI; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other	VO3; 5=NaOH; 6= Other			
Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.	Please List any EPA Waste Codes	_	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	rd longer than 1 month)
Non-Hazard Flammable Skin Irritant	Polson B	Unknown	Disposal by Lab	Months
Special Instructions/QC Requirements & Comments:			(1.300)	co
Custody Seals Intact:	Custody Seal No.:	Cooler Temp. (°	Temp. ("C): Obs'd: Corrd-	Therm ID No.:
Relinquished by: fresh get	Company: GTI	g/18/19 13:54 Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time: Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time: Received in Caboratory by	Company	Date 19-18-19 1334