

22 December 2015

David Brownlee
Unit Coordinator, Response and Remediation Program
Georgia Department of Natural Resources
Environmental Protection Division
2 Martin Luther King Jr. Dr., Suite 1456
Atlanta, Georgia 30334

**Subject: HIS Site Number: 10844; North Berkeley Lake Road Site
Berkeley Lake Village Owners Association
North Berkeley Lake Road
Duluth, Gwinnett County, Georgia**

Dear Mr. Brownlee:

On behalf of the Berkeley Lake Village Owner's Association (BLVOA), Geosyntec is submitting the attached progress report for the BLVOA property that was accepted into the Voluntary Remediation Program on 25 June 2015. Additionally, we have provided responses below to your comment letter dated 26 June 2015.

Note that groundwater monitoring wells were installed in December 2015. However, we encountered some difficulties in obtaining adequate groundwater samples. Therefore the attached progress report includes the results of additional soil sampling at the site, but does not include the results of the groundwater sampling. These results will be provided in our next progress report due to EPD in June 2016.

GENERAL COMMENTS

GENERAL COMMENT NO. 1:

According to Section 1 of the VRP Application, it is stated that the eight additional subdivided parcels within the boundary of the site are not included as qualifying VRP properties. Please ensure that the first semi-annual progress report clarifies BLVOA's intent on incorporating these parcels into the site, along with the property owner and property use description of these eight parcels and all abutting property owners. Should BLVOA choose not to identify these eight parcels as qualifying properties within the established six month timeframe of detecting a regulated substance(s), EPD will contact

each property owner directly regarding their regulatory requirements associated with the potential release of arsenic to soil on their properties.

Response:

These parcels are sub-divisions of the site, and as such, are part of site. However, it is the position of BLOVA that these parcels will not require any investigation or remediation as they are currently capped. Each of these eight parcels is either a building or a concrete slab as a future building site. The language of the VRP will be updated to be inclusive of these parcels.

GENERAL COMMENT NO. 2:

It was noted in the VRP Application that BLVOA would evaluate the results of the pending investigations at the adjacent Gwinnett County Fire Station (Fire Station) in determining potential future actions at their site property, particularly regarding the results associated with any applicable background demonstrations. Please note that the Fire Station's 151 Semi-Annual Progress Report concluded that the source of the arsenic on their property appears to be agricultural rather than naturally occurring and Gwinnett County did not propose an alternate background concentration.

Response:

Noted. We have reviewed the progress report provided by Gwinnett County.

GENERAL COMMENT NO. 3:

According to EPD's October 10, 2013, HSRA Release Notification Letter, soil samples were to be collected not only from the 6-290-232 parcel but also from the 6-267-030 parcel containing the surface water retention pond. Please ensure that sampling and assessment activities are conducted for parcel the BLVOA parcel #6-267-030 to address the delineation requirements in accordance with Section 12-8-108 of the Act. Please note that this additional parcel appears to contain a storm water drainage feature, which may require the collection of the sediment and surface water samples in addition to the required soil samples. Should the surface water and/or sediments be impacted, the site will need to complete an evaluation of the overland run-off route from the site and determine the potential for any offsite impacts to surface water/sediment.

Response:

The additional parcel was sampled as part of the activities during this reporting period. Additional details are provided in the progress report.

GENERAL COMMENT NO. 4:

Section 4 of the VRP Application indicated that asphalt cover and vegetative cover provide engineering controls to eliminate potential direct exposure to impacted soils over much of the site. While EPD concurs that an asphalt cover can be utilized as an engineering control when maintained through an environmental covenant, vegetative cover as it is currently being employed at the site cannot be considered an engineering control to eliminate exposure.

Response:

Noted. The vegetative cover as it currently exists will not be utilized as an engineering control.

GENERAL COMMENT NO. 5:

According to Section 6 of the VRP Application, no further soil sampling is planned. Based on the data provided within the Application, vertical and horizontal delineation to default residential cleanup standards has not been defined in accordance with Section 12-8-108 of the Act. Please ensure that satisfactory evidence of the vertical and horizontal delineation of contamination is completed by June 25, 2017, including soil analytical data for the soils greater than 2-ft below ground surface and to west of SS-Al/SS-El. In support of addressing the delineation requirements, please include a table that indicates the site specific delineation criteria and cleanup standards that will be used at the site as they are applied to each applicable exposure pathway (soils, sediment, groundwater, surface water, etc.). In addition, should an area averaging approach be used to demonstrate compliance for soils onsite, please note that additional laboratory analytical data for soil will be required.

Response:

Additional soil sampling is included as part of the activities during this reporting period in the additional parcel. However, it was our understanding from the July 2014 meeting that EPD agreed to limit the cleanup and investigation of each site to its property boundary.

GENERAL COMMENT NO. 6:

Please provide details associated with the standard operating procedures that were employed for the soil sample collection and analysis activities noted within the VRP Application.

Response:

The sample collection procedures followed standard U.S. EPA Region 4 protocols for soil sample collection using a hand auger (EPA, 2014).

GENERAL COMMENT NO. 7:

EPD requests that BLVOA contact the Gwinnett County Department of Water Resources regarding any remedial or institutional control requirements that the County may require in association with any applicable utility corridors/right-of-ways that may exist within area of impacts at the site property.

Response:

Institutional control requirements will be discussed with Gwinnett County.

GENERAL COMMENT NO. 8:

Once the proposed groundwater monitoring activities are completed at the site, please provide a map having a scale of 1 inch = 200 feet or less depicting the potentiometric surface of groundwater, including illustrations of any engineered structures such as storm and sanitary sewer lines. EPD recommends that BLVOA utilize the neighboring properties' groundwater monitoring well locations and associated groundwater level data when constructing the groundwater potentiometric map for the site.

Response:

Noted. BLVOA will contact Gwinnett County to access the monitoring wells installed at the Fire Station to help prepare a map of the potentiometric surface of groundwater.

GENERAL COMMENT NO. 9:

EPD concurs with the derived Type 5 RRS based on the construction worker using a relative bioavailability of arsenic (RBA) of 60%, pending any changes that may be necessary as a result of addressing the above listed Comment 7.

Response:

Noted.

GENERAL COMMENT NO. 10:

Exposure Parameters (Table 1) - The body weight (BW) of an adult as stipulated in the Rules for Hazardous Site Response (Appendix III Table 3) is 70 kg. The site-specific value of 80 kg is only appropriate for site-specific RRS, i.e. Types 2, 4, and 5. For consistency, the Risk Assessment Guidance for Superfund (RAGS) Equations 6 and 7 will need to be revised based on the correct BW for the Type 3 RRS.

Response:

Noted. The Type 3 RRS values will be recalculated based on a 70 kg adult body weight.

GENERAL COMMENT NO. 11:

Groundwater Type 1 RRS (Table 4) - The groundwater Type 1 RRS for arsenic is incorrect; the correct value is 0.01 mg/L and therefore the correct 'groundwater x 100' term is 1.0. Although this does not affect the overall soil Type 1 RRS for arsenic, Table 4 must be updated with this correction for accuracy.

Response:

Noted. Table 4 will be updated to reflect the correct "groundwater x 100" term of 1.0. This change will also be made in Table 6.

GENERAL COMMENT NO. 12:

Type 3 RRS (Table 6) - Please revise the cancer and noncancer endpoints based on Comment 10 above and revise the surface soil (< 2 feet) Type 3 RRS.

Response:

The Type 3 RRS values presented in Table 6 will be revised to reflect the use of a 70 kg adult body weight in the calculations. Table 1 will also be revised to reflect the correct body weight value.

22 December 2015

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CLOSING

We appreciate your assistance with this matter and look forward to working with you through the VRP process. If you have any questions, feel free to contact the undersigned or Mr. Robbie Stephens.

Sincerely,



Peter J. de Haven, P.E.

Principal



Cristin Krachon, BCES

Project Scientist

Attachments: Progress Report for BLVOA Site

Copies to: Robbie Stephens, Northside Bank
Scott Hitch, Nelson Mullins Riley & Scarborough LLP

Prepared for

Berkeley Lake Village Owners Association, LLC

P.O. Box 283

Adairsville, GA, 30103

VOLUNTARY REMEDIATION PROGRAM PROGRESS REPORT

**BERKELEY LAKE VILLAGE OWNERS
ASSOCIATION SITE
DULUTH, GEORGIA
HSI #10844**

Prepared by

Geosyntec 
consultants

engineers | scientists | innovators

1255 Roberts Boulevard, Suite 200
Kennesaw, Georgia 30144

Project Number GR5658

December 2015

PROFESSIONAL ENGINEER CERTIFICATION

I certify that I am a qualified engineer who has received a baccalaureate or post-graduate degree in the natural science or engineering, and have sufficient training and experience in environmental assessment and corrective measures, as demonstrated by state registration and completion of accredited university courses, that enable me to make sound professional judgments. I further certify that this report was prepared by myself or by a subordinate working under my direction.

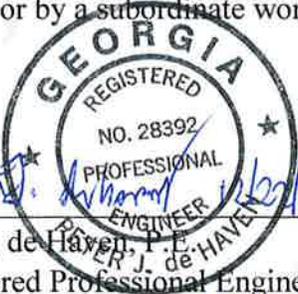

Peter J. de Haven, P.E.
Registered Professional Engineer
Georgia Registration # 28392

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1. INTRODUCTION

1.1 Site Background

On behalf of Berkeley Lake Village Owners Association (BLVOA), Geosyntec Consultants (Geosyntec) has prepared this progress report for the facility located at 3351 North Berkeley Lake Rd NW in the City of Duluth, Gwinnett County, Georgia as part of its participation in the Voluntary Remediation Program Application (VRPA). Berkeley Lake Village (BLV) is part of a larger EPD “site” known as the North Berkeley Lake Road Site (NBLRS). Geosyntec has prepared this report specifically for parcels described below and referred to as Berkeley Lake Village (BLV) or hereafter referred to as “the site”.

The site has Gwinnett County parcel IDs of 6290 232 and 6267 030 and a location corresponding to latitude 33.9834 and longitude -84.1702. The approximate area of the site is 5.3 acres. The parcel 6290 232 includes the parking lot and common areas between the on-site building footprints (**Figure 1**). The additional parcel (6267 030) is located to the southwest and consists of some landscaped areas and detention basin. There are eight additional subdivided parcels within the boundary of the “site”. Two of these parcels are future building footprints (6290 242 and 6290 243) and there are six other parcels with multi-story buildings used for commercial use. These parcels are limited to the building footprints and are administratively part of the site; however, they are not effectively involved with the VRP since they are all capped by concrete foundations. The site property is bounded to the east by North Berkeley Lake Road NW and the Gwinnett Regional Distribution Center (GRDC) (commercial/warehousing), and to the west by Peachtree Industrial Boulevard and commercial buildings. There is an undeveloped parcel to the north of the site and the Gwinnett County Fire Department Station No. 19 (Fire Station) directly to the south. The general area surrounding the BLV site is heavy commercial and industrial use. An aerial photograph of the site is shown on **Figure 2**.

1.2 Site Investigations

In 2006, the Gwinnett Regional Distribution Center (GRDC) property, located directly east of the BLV site, was placed on the Hazardous Site Inventory (HSI), Site #10844, for elevated levels of arsenic in the soil and groundwater. In 2013, during planning for the installation of a gravity sewer line in the area, the Gwinnett County Department of Water Resources conducted soil sampling at the Fire Station after finding that the adjacent GRDC was listed on the HSI. This investigation revealed levels of arsenic exceeding the Hazardous Site Response Act (HSRA) soil notification concentration. Subsequently, a release notification was submitted to Georgia's Environmental Protection Division (EPD) and the Fire Station was listed on the HSI in December 2013. An EPD inspection of the Fire Station noted that a daycare center was located less than 300 feet from the property. In August 2013, EPD personnel mobilized to collect seven surface soil samples from the BLV site, including four from the area being used for an outdoor playground area. EPD performed subsequent surficial soil sampling at the playground which resulted in six samples that exceeded the default residential risk reduction soil standard of 20 mg/kg as well as the promulgated notification concentration of 41 mg/kg. In October 2013, BLVOA received a HSRA Release Notification letter from EPA, and in February 2014, the BLV site was listed on the HSI. Two additional adjacent parcels, Diamond Crystal Brands and Suzanna's Kitchen, were also placed on the HSI.

A preliminary and limited investigation of the site was conducted by Georgia EPD personnel in August 2013. As described above, the surface soils were found to contain concentrations of arsenic above the default residential risk reduction soil standards. Cadmium was also detected at levels between 7.7 and 11 mg/kg, but could not be confirmed through further analyses by the EPD laboratory.

Geosyntec conducted additional field investigation of site surface soils in January 2015. The landscaped areas (i.e., areas not capped with asphalt or building) of the BLV site were screened in the field using a portable x-ray fluorescence machine (XRF: Olympus Delta Classic Plus RK). Soil samples were collected from 30 locations throughout the site using clean, decontaminated hand augers. The field investigation confirmed the widespread presence of arsenic at values greater than the notification concentration of 41 mg/kg. Concentrations ranged from 35.3 mg/kg to 239.7 mg/kg. Cadmium was also screened in the field; however, it was not detected in any of the 45 samples screened

with the XRF. The sample collection procedures followed standard U.S. EPA Region 4 protocols for soil sample collection using a hand auger (EPA, 2014).

2. SUMMARY OF ACTIONS DURING THE REPORTING PERIOD

This section discusses activities conducted since the submittal of the April 2015 VRP Application.

2.1 Sampling on Additional Parcel

Geosyntec conducted additional sampling on parcel 6267 030 in December 2015. This parcel is to the southwest of the previously sampled parcel. The area consists of a large area intended for stormwater detention. The upland soil area around the parcel was sampled on 3 December 2015. Soil samples were collected from 10 locations using clean, decontaminated hand augers. Samples were collected from 0-1 ft below ground surface (bgs). Some locations had additional samples collected at 1-2 ft and 2-3 ft bgs. The sample collection procedures followed standard U.S. EPA Region 4 protocols for soil sample collection using a hand auger (EPA, 2014).

The field investigation confirmed the widespread presence of arsenic at values greater than the notification concentration (NC) of 41 mg/kg. Only one sample, the sediment sample collected from beneath the water's surface in the ponded area, was less than the NC. The sediment sample had an arsenic concentration of 24 mg/kg. Concentrations ranged from 48 mg/kg to 170 mg/kg.

A surface water sample was also collected from the ponded area of the detention basin. EPA Region 4 protocols for surface water collection by dipping using sample container was followed (EPA, 2013). This sample had a concentration of 0.0076 mg/L. This value is below the Georgia instream water quality standard of 0.15 mg/L for chronic exposure to arsenic (Georgia 391-3-6-.03). The results are shown in Table 1 and Figure 3.

2.2 Groundwater Well Installation

Two permanent groundwater monitoring wells were installed on site from 30 November 2015 to 1 December 2015. The wells were installed using direct push technology (DPT)

to log the soil and determine the depth of the water table, and hollow-stem augers (HSA) to install the well casing and filter pack. The well construction consisted of 2-inch, schedule 40-PVC with a 10-foot pre-packed well screen. A sand filter pack extending approximately 2 feet above the screen was installed around the pre-packed screen, a bentonite seal was extended 2 feet above that, and a bentonite-grout mixture was installed up to the surface. Monitoring well MW-01 is located at the southwest corner of the site, and is screened from 30-40 ft bgs. Monitoring well MW-02 is located near the northeast corner of the site, and is screened from 20-30 ft bgs.

The groundwater wells were sampled on 18 December 2015 via low-flow sampling, and shipped to TestAmerica Laboratory in North Canton, Ohio. An unfiltered sample and a sample filtered with a 0.45 micron filter was collected from each well. Lab results of the groundwater samples are currently pending. Groundwater results and a potentiometric groundwater surface map, utilizing the wells on the Gwinnett Fire Station property, will be included in the next progress report.

3. PROPOSED REMEDIATION PLAN

The current delineation at the site and neighboring sites suggests that arsenic concentrations above the Type 1 RRS are ubiquitous.

Geosyntec and BLVOA will evaluate the removal and/or capping of hot spots to achieve a site-wide average concentration that will meet the appropriate risk reduction standards. Various scenarios for removal of two feet of surface soils will be evaluated. The majority of the site is already “capped” by the presence of asphalt parking lot and buildings. The results of the various scenarios will be presented to EPD for discussion of the best way to meet the site’s risk reduction objectives.

Environmental covenants are likely to be implemented at the site so that the areas of the site that are capped remain as such and remain properly maintained. No corrective action on the subsurface soils is planned, and environmental covenants will be put in place so that proper controls are used during any future construction activities that may occur at the site.

4. SCHEDULE

BLVOA proposes the following schedule (see **Figure 9**). The extended schedule allows the various parties within BLVOA to meet the financial obligations of the remediation plan.

Submit VRP Application, Enrollment in the VRP Program	April 16, 2015
Complete horizontal delineation of arsenic impacted soils	Completed December 2015
Complete groundwater investigation	January 2016
Submit updated CSM and update remediation plan, provide cost estimate	June 25, 2016
Complete implementation of remediation plan	June 25, 2017
Submit Compliance Status Report	December 25, 2018

5. REFERENCES

USEPA. 2013. Surface Water Sampling Operating Procedure. SESDPROC-201-R3. U.S. EPA Science and Ecosystem Support Division. Athens, Georgia. February 28, 2013. <http://www.epa.gov/sites/production/files/2015-06/documents/Surfacewater-Sampling.pdf>

USEPA. 2014. Soil Sampling Operating Procedure. SESDPROC-300-R3. U.S. EPA Science and Ecosystem Support Division. Athens, Georgia. August 21, 2014. <http://www.epa.gov/sites/production/files/2015-06/documents/Soil-Sampling.pdf>

TABLE

Table 1. Arsenic Results in Soil, Sediment and Surface Water, 12/3/2015

Sample ID	Depth (ft)	Arsenic Concentration	
Soil (mg/kg)			
SS-J1 (0-1)	0-1	150	F1
SS-J1 (1-2)	1-2	100	
SS-J1 (2-3)	2-3	170	
SS-J2 (0-1)	0-1	89	
SS-J2 (1-2)	1-2	130	
SS-J2 (2-3)	2-3	100	
SS-J3 (0-1)	0-1	140	
SS-J4 (0-1)	0-1	85	
SS-J5 (0-1)	0-1	79	
SS-J5 (1-2)	1-2	88	
SS-J5 (2-3)	2-3	68	
SS-J6 (0-1)	0-1	48	
SS-J6 (1-2)	1-2	62	
SS-J6 (2-3)	2-3	63	
SS-J7 (0-1)	0-1	81	
SS-J8 (0-1)	0-1	61	
SS-J8 (1-2)	1-2	67	
SS-J8 (2-3)	2-3	66	
SS-J9 (0-1)	0-1	65	
Sediment (mg/kg)			
SED_1	NA	24	
Surface Water (mg/L)			
POND_1	NA	0.0076	J

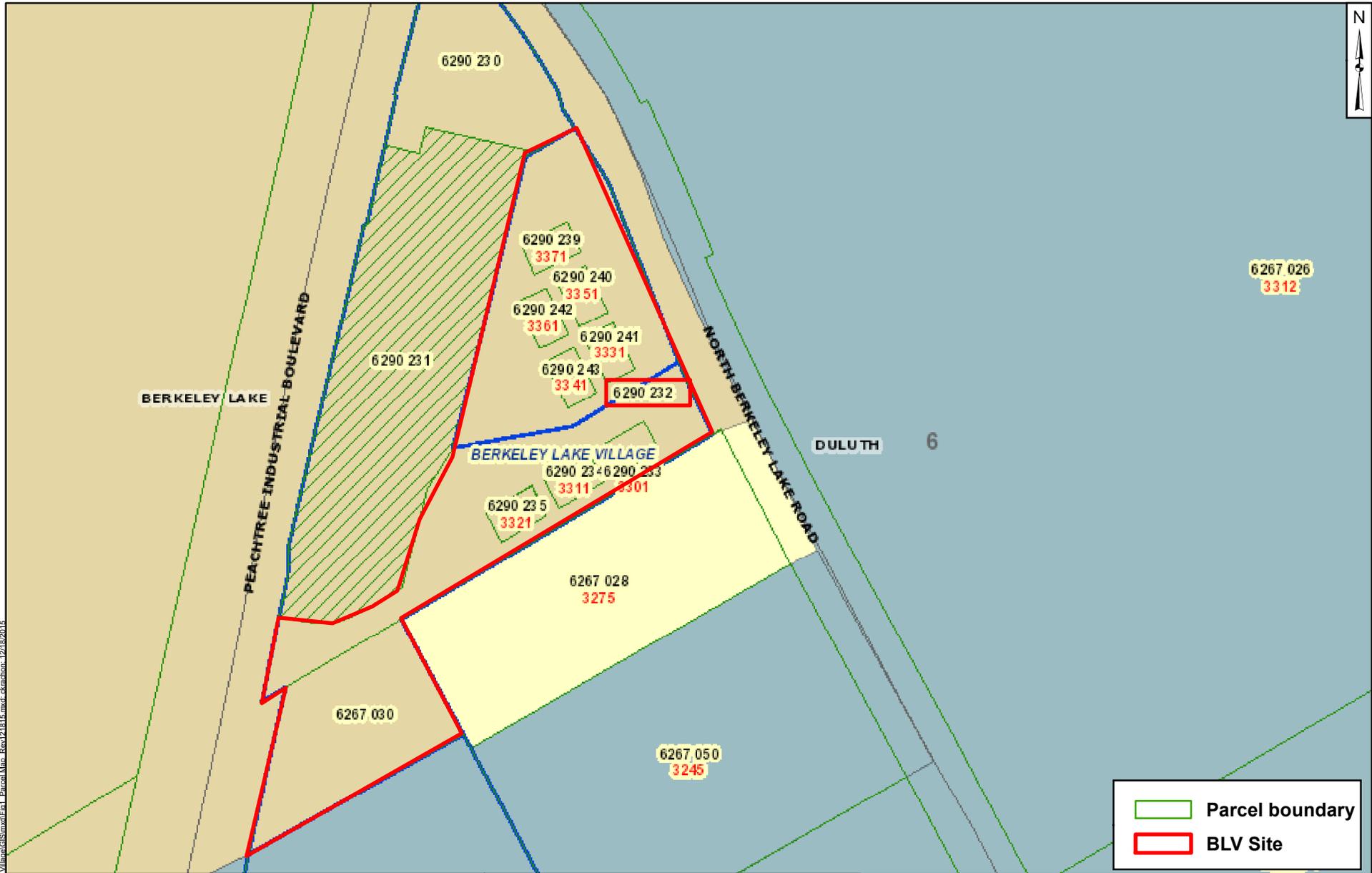
Notes

NA: not applicable

J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

F1: MS and/or MSD Recovery is outside acceptance limits.

FIGURES



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0 250 500 Feet



Gwinnett County Parcel Map

Berkeley Lake Village
Duluth, Georgia

Geosyntec
consultants

Kennesaw, Georgia

18-December-2015

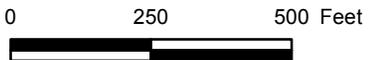
Figure

1



Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

N:\NINorthside_Bank\BerkeleyLake_Village\GIS\SummerSite_Map_Dec2015.mxd_ekr\ch01p_12172015



**Berkeley Lake Road Site
Site Number 10844**

Berkeley Lake Village
Duluth, Georgia

Geosyntec
consultants

Kennesaw, Georgia

18-December-2015

Figure

2



Notes: Concentrations reported on map are from the December 2015 sampling event on parcel 6267 030. Sample locations for previous investigation (January 2015) on parcel 6290 232 are shown as locations only.

**Berkeley Lake Road Site
December 2015 Soil Sampling**

Berkeley Lake Village
Duluth, Georgia

Geosyntec
consultants

Kennesaw, Georgia

18-December-2015

Figure

3

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ATTACHMENT A

Laboratory Data Report

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-58678-1
Client Project/Site: Berkeley Lake

For:
Geosyntec Consultants, Inc.
1255 Roberts Blvd, NW
Suite 200
Kennesaw, Georgia 30144

Attn: Andy Speake



Authorized for release by:
12/10/2015 2:11:35 PM

John McFadden, Project Manager I
(330)497-9396
john.mcfadden@testamericainc.com

LINKS

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www.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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Definitions/Glossary

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Qualifiers

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
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)

Case Narrative

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Job ID: 240-58678-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Geosyntec Consultants, Inc.

Project: Berkeley Lake

Report Number: 240-58678-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 12/5/2015 10:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

TOTAL METALS (ICP)

Samples SS-J1 (0-1) (240-58678-1), SS-J1 (1-2) (240-58678-2), SS-J1 (2-3) (240-58678-3), SS-J2 (0-1) (240-58678-4), SS-J2 (1-2) (240-58678-5), SS-J2 (2-3) (240-58678-6), SS-J3 (0-1) (240-58678-7), SS-J4 (0-1) (240-58678-8), SS-J5 (0-1) (240-58678-9), SS-J5 (1-2) (240-58678-10), SS-J5 (2-3) (240-58678-11), SS-J6 (0-1) (240-58678-12), SS-J6 (1-2) (240-58678-13), SS-J6 (2-3) (240-58678-14), SED_1 (240-58678-15), SS-J9 (0-1) (240-58678-17), SS-J8 (0-1) (240-58678-18), SS-J8 (1-2) (240-58678-19), SS-J8 (2-3) (240-58678-20), SS-J7 (0-1) (240-58678-21) and DUP_1 (240-58678-22) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 12/07/2015 and analyzed on 12/08/2015.

Samples SS-J2 (1-2) (240-58678-5)[10X], SS-J2 (2-3) (240-58678-6)[10X], SS-J3 (0-1) (240-58678-7)[10X], SS-J4 (0-1) (240-58678-8)[2X], SS-J6 (1-2) (240-58678-13)[2X] and DUP_1 (240-58678-22)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

Case Narrative

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Job ID: 240-58678-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

TOTAL RECOVERABLE METALS (ICP)

Sample POND_1 (240-58678-16) was analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010C. The sample was prepared on 12/07/2015 and analyzed on 12/08/2015.

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

PERCENT SOLIDS

Samples SS-J1 (0-1) (240-58678-1), SS-J1 (1-2) (240-58678-2), SS-J1 (2-3) (240-58678-3), SS-J2 (0-1) (240-58678-4), SS-J2 (1-2) (240-58678-5), SS-J2 (2-3) (240-58678-6), SS-J3 (0-1) (240-58678-7), SS-J4 (0-1) (240-58678-8), SS-J5 (0-1) (240-58678-9), SS-J5 (1-2) (240-58678-10), SS-J5 (2-3) (240-58678-11), SS-J6 (0-1) (240-58678-12), SS-J6 (1-2) (240-58678-13), SS-J6 (2-3) (240-58678-14), SED_1 (240-58678-15), SS-J9 (0-1) (240-58678-17), SS-J8 (0-1) (240-58678-18), SS-J8 (1-2) (240-58678-19), SS-J8 (2-3) (240-58678-20), SS-J7 (0-1) (240-58678-21) and DUP_1 (240-58678-22) were analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 12/07/2015.

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



Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN

Protocol References:

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 CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396



Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-58678-1	SS-J1 (0-1)	Solid	12/03/15 09:15	12/05/15 10:10
240-58678-2	SS-J1 (1-2)	Solid	12/03/15 09:15	12/05/15 10:10
240-58678-3	SS-J1 (2-3)	Solid	12/03/15 09:15	12/05/15 10:10
240-58678-4	SS-J2 (0-1)	Solid	12/03/15 09:15	12/05/15 10:10
240-58678-5	SS-J2 (1-2)	Solid	12/03/15 09:15	12/05/15 10:10
240-58678-6	SS-J2 (2-3)	Solid	12/03/15 09:15	12/05/15 10:10
240-58678-7	SS-J3 (0-1)	Solid	12/03/15 10:05	12/05/15 10:10
240-58678-8	SS-J4 (0-1)	Solid	12/03/15 10:20	12/05/15 10:10
240-58678-9	SS-J5 (0-1)	Solid	12/03/15 10:35	12/05/15 10:10
240-58678-10	SS-J5 (1-2)	Solid	12/03/15 10:35	12/05/15 10:10
240-58678-11	SS-J5 (2-3)	Solid	12/03/15 10:35	12/05/15 10:10
240-58678-12	SS-J6 (0-1)	Solid	12/03/15 10:55	12/05/15 10:10
240-58678-13	SS-J6 (1-2)	Solid	12/03/15 10:55	12/05/15 10:10
240-58678-14	SS-J6 (2-3)	Solid	12/03/15 10:55	12/05/15 10:10
240-58678-15	SED_1	Solid	12/03/15 11:25	12/05/15 10:10
240-58678-16	POND_1	Water	12/03/15 11:20	12/05/15 10:10
240-58678-17	SS-J9 (0-1)	Solid	12/03/15 12:30	12/05/15 10:10
240-58678-18	SS-J8 (0-1)	Solid	12/03/15 12:35	12/05/15 10:10
240-58678-19	SS-J8 (1-2)	Solid	12/03/15 12:35	12/05/15 10:10
240-58678-20	SS-J8 (2-3)	Solid	12/03/15 12:35	12/05/15 10:10
240-58678-21	SS-J7 (0-1)	Solid	12/03/15 12:40	12/05/15 10:10
240-58678-22	DUP_1	Solid	12/03/15 00:00	12/05/15 10:10

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J1 (0-1)

Lab Sample ID: 240-58678-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	150	F1	2.0	0.53	mg/Kg	1	☒	6010C	Total/NA

Client Sample ID: SS-J1 (1-2)

Lab Sample ID: 240-58678-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	100		1.4	0.37	mg/Kg	1	☒	6010C	Total/NA

Client Sample ID: SS-J1 (2-3)

Lab Sample ID: 240-58678-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	170		1.5	0.42	mg/Kg	1	☒	6010C	Total/NA

Client Sample ID: SS-J2 (0-1)

Lab Sample ID: 240-58678-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	89		1.6	0.44	mg/Kg	1	☒	6010C	Total/NA

Client Sample ID: SS-J2 (1-2)

Lab Sample ID: 240-58678-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	130		14	3.9	mg/Kg	10	☒	6010C	Total/NA

Client Sample ID: SS-J2 (2-3)

Lab Sample ID: 240-58678-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	100		18	4.9	mg/Kg	10	☒	6010C	Total/NA

Client Sample ID: SS-J3 (0-1)

Lab Sample ID: 240-58678-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	140		12	3.4	mg/Kg	10	☒	6010C	Total/NA

Client Sample ID: SS-J4 (0-1)

Lab Sample ID: 240-58678-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	85		3.2	0.88	mg/Kg	2	☒	6010C	Total/NA

Client Sample ID: SS-J5 (0-1)

Lab Sample ID: 240-58678-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	79		1.7	0.46	mg/Kg	1	☒	6010C	Total/NA

Client Sample ID: SS-J5 (1-2)

Lab Sample ID: 240-58678-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	88		1.6	0.45	mg/Kg	1	☒	6010C	Total/NA

Client Sample ID: SS-J5 (2-3)

Lab Sample ID: 240-58678-11

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J5 (2-3) (Continued)

Lab Sample ID: 240-58678-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	68		1.6	0.45	mg/Kg	1	☒	6010C	Total/NA

Client Sample ID: SS-J6 (0-1)

Lab Sample ID: 240-58678-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	48		1.5	0.41	mg/Kg	1	☒	6010C	Total/NA

Client Sample ID: SS-J6 (1-2)

Lab Sample ID: 240-58678-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	62		3.7	1.0	mg/Kg	2	☒	6010C	Total/NA

Client Sample ID: SS-J6 (2-3)

Lab Sample ID: 240-58678-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	63		1.6	0.45	mg/Kg	1	☒	6010C	Total/NA

Client Sample ID: SED_1

Lab Sample ID: 240-58678-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	24		3.9	1.1	mg/Kg	1	☒	6010C	Total/NA

Client Sample ID: POND_1

Lab Sample ID: 240-58678-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0076	J	0.015	0.0029	mg/L	1		6010C	Total Recoverable

Client Sample ID: SS-J9 (0-1)

Lab Sample ID: 240-58678-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	65		1.6	0.43	mg/Kg	1	☒	6010C	Total/NA

Client Sample ID: SS-J8 (0-1)

Lab Sample ID: 240-58678-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	61		1.7	0.47	mg/Kg	1	☒	6010C	Total/NA

Client Sample ID: SS-J8 (1-2)

Lab Sample ID: 240-58678-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	67		1.4	0.39	mg/Kg	1	☒	6010C	Total/NA

Client Sample ID: SS-J8 (2-3)

Lab Sample ID: 240-58678-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	66		1.8	0.48	mg/Kg	1	☒	6010C	Total/NA

Client Sample ID: SS-J7 (0-1)

Lab Sample ID: 240-58678-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic									

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J7 (0-1) (Continued)

Lab Sample ID: 240-58678-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	81		1.8	0.48	mg/Kg	1	☒	6010C	Total/NA

Client Sample ID: DUP_1

Lab Sample ID: 240-58678-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	110		3.4	0.93	mg/Kg	2	☒	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton



Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J1 (0-1)

Lab Sample ID: 240-58678-1

Date Collected: 12/03/15 09:15

Matrix: Solid

Date Received: 12/05/15 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	75		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	25		0.10	0.10	%			12/07/15 07:05	1

- 1
- 2
- 3
- 4
- 5
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- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J1 (0-1)

Lab Sample ID: 240-58678-1

Date Collected: 12/03/15 09:15

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 75.3

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	150	F1	2.0	0.53	mg/Kg	☼	12/07/15 10:28	12/08/15 12:42	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J1 (1-2)

Lab Sample ID: 240-58678-2

Date Collected: 12/03/15 09:15

Matrix: Solid

Date Received: 12/05/15 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	16		0.10	0.10	%			12/07/15 07:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J1 (1-2)

Lab Sample ID: 240-58678-2

Date Collected: 12/03/15 09:15

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 84.5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	100		1.4	0.37	mg/Kg	☼	12/07/15 10:28	12/08/15 13:03	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J1 (2-3)

Lab Sample ID: 240-58678-3

Date Collected: 12/03/15 09:15

Matrix: Solid

Date Received: 12/05/15 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	17		0.10	0.10	%			12/07/15 07:05	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J1 (2-3)

Lab Sample ID: 240-58678-3

Date Collected: 12/03/15 09:15

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 83.0

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	170		1.5	0.42	mg/Kg	☼	12/07/15 10:28	12/08/15 13:07	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J2 (0-1)

Lab Sample ID: 240-58678-4

Date Collected: 12/03/15 09:15

Matrix: Solid

Date Received: 12/05/15 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	17		0.10	0.10	%			12/07/15 07:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J2 (0-1)

Lab Sample ID: 240-58678-4

Date Collected: 12/03/15 09:15

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 83.3

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	89		1.6	0.44	mg/Kg	☼	12/07/15 10:28	12/08/15 13:12	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J2 (1-2)

Lab Sample ID: 240-58678-5

Date Collected: 12/03/15 09:15

Matrix: Solid

Date Received: 12/05/15 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	15		0.10	0.10	%			12/07/15 07:05	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J2 (1-2)

Date Collected: 12/03/15 09:15

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-5

Matrix: Solid

Percent Solids: 85.2

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	130		14	3.9	mg/Kg	☼	12/07/15 10:28	12/08/15 14:40	10

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J2 (2-3)

Date Collected: 12/03/15 09:15

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-6

Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	78		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	22		0.10	0.10	%			12/07/15 07:05	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J2 (2-3)

Lab Sample ID: 240-58678-6

Date Collected: 12/03/15 09:15

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 77.8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	100		18	4.9	mg/Kg	☼	12/07/15 10:28	12/08/15 14:44	10

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J3 (0-1)

Lab Sample ID: 240-58678-7

Date Collected: 12/03/15 10:05

Matrix: Solid

Date Received: 12/05/15 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	86		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	14		0.10	0.10	%			12/07/15 07:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J3 (0-1)

Lab Sample ID: 240-58678-7

Date Collected: 12/03/15 10:05

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 85.9

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	140		12	3.4	mg/Kg	☼	12/07/15 10:28	12/08/15 14:48	10

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J4 (0-1)

Lab Sample ID: 240-58678-8

Date Collected: 12/03/15 10:20

Matrix: Solid

Date Received: 12/05/15 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	16		0.10	0.10	%			12/07/15 07:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J4 (0-1)

Lab Sample ID: 240-58678-8

Date Collected: 12/03/15 10:20

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 84.4

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	85		3.2	0.88	mg/Kg	☼	12/07/15 10:28	12/08/15 14:52	2

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J5 (0-1)

Lab Sample ID: 240-58678-9

Date Collected: 12/03/15 10:35

Matrix: Solid

Date Received: 12/05/15 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	16		0.10	0.10	%			12/07/15 07:05	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J5 (0-1)

Lab Sample ID: 240-58678-9

Date Collected: 12/03/15 10:35

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 84.2

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	79		1.7	0.46	mg/Kg	☼	12/07/15 10:28	12/08/15 13:41	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J5 (1-2)

Lab Sample ID: 240-58678-10

Date Collected: 12/03/15 10:35

Matrix: Solid

Date Received: 12/05/15 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	82		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	18		0.10	0.10	%			12/07/15 07:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J5 (1-2)

Date Collected: 12/03/15 10:35

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-10

Matrix: Solid

Percent Solids: 82.5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	88		1.6	0.45	mg/Kg	☼	12/07/15 10:28	12/08/15 13:45	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J5 (2-3)

Lab Sample ID: 240-58678-11

Date Collected: 12/03/15 10:35

Matrix: Solid

Date Received: 12/05/15 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	81		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	19		0.10	0.10	%			12/07/15 07:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J5 (2-3)

Lab Sample ID: 240-58678-11

Date Collected: 12/03/15 10:35

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 81.2

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	68		1.6	0.45	mg/Kg	☼	12/07/15 10:28	12/08/15 13:50	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J6 (0-1)

Lab Sample ID: 240-58678-12

Date Collected: 12/03/15 10:55

Matrix: Solid

Date Received: 12/05/15 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	81		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	19		0.10	0.10	%			12/07/15 07:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J6 (0-1)

Lab Sample ID: 240-58678-12

Date Collected: 12/03/15 10:55

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 81.5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	48		1.5	0.41	mg/Kg	☼	12/07/15 10:28	12/08/15 13:54	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J6 (1-2)

Date Collected: 12/03/15 10:55

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-13

Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	79		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	21		0.10	0.10	%			12/07/15 07:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J6 (1-2)

Lab Sample ID: 240-58678-13

Date Collected: 12/03/15 10:55

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 79.3

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	62		3.7	1.0	mg/Kg	☼	12/07/15 10:28	12/08/15 14:56	2

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J6 (2-3)

Lab Sample ID: 240-58678-14

Date Collected: 12/03/15 10:55

Matrix: Solid

Date Received: 12/05/15 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	84		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	16		0.10	0.10	%			12/07/15 07:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J6 (2-3)

Lab Sample ID: 240-58678-14

Date Collected: 12/03/15 10:55

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 83.5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	63		1.6	0.45	mg/Kg	☼	12/07/15 10:28	12/08/15 14:02	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SED_1

Date Collected: 12/03/15 11:25

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-15

Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	37		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	63		0.10	0.10	%			12/07/15 07:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SED_1
Date Collected: 12/03/15 11:25
Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-15
Matrix: Solid
Percent Solids: 37.2

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	24		3.9	1.1	mg/Kg	☼	12/07/15 10:28	12/08/15 14:06	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: POND_1

Date Collected: 12/03/15 11:20

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-16

Matrix: Water

Method: 6010C - Metals (ICP) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0076	J	0.015	0.0029	mg/L		12/07/15 12:00	12/08/15 12:18	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J9 (0-1)

Date Collected: 12/03/15 12:30

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-17

Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	81		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	19		0.10	0.10	%			12/07/15 07:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J9 (0-1)

Lab Sample ID: 240-58678-17

Date Collected: 12/03/15 12:30

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 81.3

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	65		1.6	0.43	mg/Kg	☼	12/07/15 10:28	12/08/15 14:10	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J8 (0-1)

Lab Sample ID: 240-58678-18

Date Collected: 12/03/15 12:35

Matrix: Solid

Date Received: 12/05/15 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	81		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	19		0.10	0.10	%			12/07/15 07:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J8 (0-1)

Lab Sample ID: 240-58678-18

Date Collected: 12/03/15 12:35

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 80.8

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	61		1.7	0.47	mg/Kg	☼	12/07/15 10:28	12/08/15 14:23	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J8 (1-2)

Lab Sample ID: 240-58678-19

Date Collected: 12/03/15 12:35

Matrix: Solid

Date Received: 12/05/15 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	17		0.10	0.10	%			12/07/15 07:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J8 (1-2)

Lab Sample ID: 240-58678-19

Date Collected: 12/03/15 12:35

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 83.4

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	67		1.4	0.39	mg/Kg	☼	12/07/15 10:28	12/08/15 14:27	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J8 (2-3)

Lab Sample ID: 240-58678-20

Date Collected: 12/03/15 12:35

Matrix: Solid

Date Received: 12/05/15 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	82		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	18		0.10	0.10	%			12/07/15 07:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J8 (2-3)

Lab Sample ID: 240-58678-20

Date Collected: 12/03/15 12:35

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 81.9

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	66		1.8	0.48	mg/Kg	☼	12/07/15 10:28	12/08/15 14:31	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J7 (0-1)

Date Collected: 12/03/15 12:40

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-21

Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	15		0.10	0.10	%			12/07/15 07:05	1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J7 (0-1)

Date Collected: 12/03/15 12:40

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-21

Matrix: Solid

Percent Solids: 85.3

Method: 6010C - Metals (ICP)

Analyte

Result

Qualifier

RL

MDL

Unit

D

Prepared

Analyzed

Dil Fac

Arsenic

81

1.8

0.48 mg/Kg

☼

12/07/15 10:28

12/08/15 14:35

1

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: DUP_1
Date Collected: 12/03/15 00:00
Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-22
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	83		0.10	0.10	%			12/07/15 07:05	1
Percent Moisture	17		0.10	0.10	%			12/07/15 07:05	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: DUP_1
Date Collected: 12/03/15 00:00
Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-22
Matrix: Solid
Percent Solids: 83.2

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	110		3.4	0.93	mg/Kg	☼	12/07/15 11:06	12/08/15 15:33	2

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 240-209731/1-A
Matrix: Solid
Analysis Batch: 209994

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 209731

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.41	U	1.5	0.41	mg/Kg		12/07/15 10:28	12/08/15 12:26	1

Lab Sample ID: LCS 240-209731/2-A
Matrix: Solid
Analysis Batch: 209994

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 209731

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	200	192		mg/Kg		96	80 - 120

Lab Sample ID: 240-58678-1 MS
Matrix: Solid
Analysis Batch: 209994

Client Sample ID: SS-J1 (0-1)
Prep Type: Total/NA
Prep Batch: 209731

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Arsenic	150	F1	181	245	F1	mg/Kg	☼	54	75 - 125

Lab Sample ID: 240-58678-1 MSD
Matrix: Solid
Analysis Batch: 209994

Client Sample ID: SS-J1 (0-1)
Prep Type: Total/NA
Prep Batch: 209731

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	150	F1	181	224	F1	mg/Kg	☼	42	75 - 125	9	20

Lab Sample ID: MB 240-209736/1-A
Matrix: Solid
Analysis Batch: 209994

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 209736

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.41	U	1.5	0.41	mg/Kg		12/07/15 11:06	12/08/15 15:00	1

Lab Sample ID: LCS 240-209736/2-A
Matrix: Solid
Analysis Batch: 209994

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 209736

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	200	195		mg/Kg		98	80 - 120

Lab Sample ID: MB 240-209745/1-A
Matrix: Water
Analysis Batch: 209994

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 209745

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.0029	U	0.015	0.0029	mg/L		12/07/15 12:00	12/08/15 11:29	1

Lab Sample ID: LCS 240-209745/2-A
Matrix: Water
Analysis Batch: 209994

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 209745

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Arsenic	2.00	1.94		mg/L		97	80 - 120

TestAmerica Canton

QC Sample Results

Client: Geosyntec Consultants, Inc.
 Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Method: Moisture - Percent Moisture

Lab Sample ID: 240-58678-4 DU

Matrix: Solid

Analysis Batch: 209668

Client Sample ID: SS-J2 (0-1)

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	83		83		%		0.2	20
Percent Moisture	17		17		%		0.9	20

Lab Sample ID: 240-58678-13 DU

Matrix: Solid

Analysis Batch: 209668

Client Sample ID: SS-J6 (1-2)

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Solids	79		80		%		0.9	20
Percent Moisture	21		20		%		3	20



QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Metals

Prep Batch: 209731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-58678-1	SS-J1 (0-1)	Total/NA	Solid	3050B	
240-58678-1 MS	SS-J1 (0-1)	Total/NA	Solid	3050B	
240-58678-1 MSD	SS-J1 (0-1)	Total/NA	Solid	3050B	
240-58678-2	SS-J1 (1-2)	Total/NA	Solid	3050B	
240-58678-3	SS-J1 (2-3)	Total/NA	Solid	3050B	
240-58678-4	SS-J2 (0-1)	Total/NA	Solid	3050B	
240-58678-5	SS-J2 (1-2)	Total/NA	Solid	3050B	
240-58678-6	SS-J2 (2-3)	Total/NA	Solid	3050B	
240-58678-7	SS-J3 (0-1)	Total/NA	Solid	3050B	
240-58678-8	SS-J4 (0-1)	Total/NA	Solid	3050B	
240-58678-9	SS-J5 (0-1)	Total/NA	Solid	3050B	
240-58678-10	SS-J5 (1-2)	Total/NA	Solid	3050B	
240-58678-11	SS-J5 (2-3)	Total/NA	Solid	3050B	
240-58678-12	SS-J6 (0-1)	Total/NA	Solid	3050B	
240-58678-13	SS-J6 (1-2)	Total/NA	Solid	3050B	
240-58678-14	SS-J6 (2-3)	Total/NA	Solid	3050B	
240-58678-15	SED_1	Total/NA	Solid	3050B	
240-58678-17	SS-J9 (0-1)	Total/NA	Solid	3050B	
240-58678-18	SS-J8 (0-1)	Total/NA	Solid	3050B	
240-58678-19	SS-J8 (1-2)	Total/NA	Solid	3050B	
240-58678-20	SS-J8 (2-3)	Total/NA	Solid	3050B	
240-58678-21	SS-J7 (0-1)	Total/NA	Solid	3050B	
LCS 240-209731/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-209731/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 209736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-58678-22	DUP_1	Total/NA	Solid	3050B	
LCS 240-209736/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 240-209736/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 209745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-58678-16	POND_1	Total Recoverable	Water	3005A	
LCS 240-209745/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
MB 240-209745/1-A	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 209994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-58678-1	SS-J1 (0-1)	Total/NA	Solid	6010C	209731
240-58678-1 MS	SS-J1 (0-1)	Total/NA	Solid	6010C	209731
240-58678-1 MSD	SS-J1 (0-1)	Total/NA	Solid	6010C	209731
240-58678-2	SS-J1 (1-2)	Total/NA	Solid	6010C	209731
240-58678-3	SS-J1 (2-3)	Total/NA	Solid	6010C	209731
240-58678-4	SS-J2 (0-1)	Total/NA	Solid	6010C	209731
240-58678-5	SS-J2 (1-2)	Total/NA	Solid	6010C	209731
240-58678-6	SS-J2 (2-3)	Total/NA	Solid	6010C	209731
240-58678-7	SS-J3 (0-1)	Total/NA	Solid	6010C	209731
240-58678-8	SS-J4 (0-1)	Total/NA	Solid	6010C	209731
240-58678-9	SS-J5 (0-1)	Total/NA	Solid	6010C	209731
240-58678-10	SS-J5 (1-2)	Total/NA	Solid	6010C	209731

TestAmerica Canton

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Metals (Continued)

Analysis Batch: 209994 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-58678-11	SS-J5 (2-3)	Total/NA	Solid	6010C	209731
240-58678-12	SS-J6 (0-1)	Total/NA	Solid	6010C	209731
240-58678-13	SS-J6 (1-2)	Total/NA	Solid	6010C	209731
240-58678-14	SS-J6 (2-3)	Total/NA	Solid	6010C	209731
240-58678-15	SED_1	Total/NA	Solid	6010C	209731
240-58678-16	POND_1	Total Recoverable	Water	6010C	209745
240-58678-17	SS-J9 (0-1)	Total/NA	Solid	6010C	209731
240-58678-18	SS-J8 (0-1)	Total/NA	Solid	6010C	209731
240-58678-19	SS-J8 (1-2)	Total/NA	Solid	6010C	209731
240-58678-20	SS-J8 (2-3)	Total/NA	Solid	6010C	209731
240-58678-21	SS-J7 (0-1)	Total/NA	Solid	6010C	209731
240-58678-22	DUP_1	Total/NA	Solid	6010C	209736
LCS 240-209731/2-A	Lab Control Sample	Total/NA	Solid	6010C	209731
LCS 240-209736/2-A	Lab Control Sample	Total/NA	Solid	6010C	209736
LCS 240-209745/2-A	Lab Control Sample	Total Recoverable	Water	6010C	209745
MB 240-209731/1-A	Method Blank	Total/NA	Solid	6010C	209731
MB 240-209736/1-A	Method Blank	Total/NA	Solid	6010C	209736
MB 240-209745/1-A	Method Blank	Total Recoverable	Water	6010C	209745

General Chemistry

Analysis Batch: 209668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-58678-1	SS-J1 (0-1)	Total/NA	Solid	Moisture	
240-58678-2	SS-J1 (1-2)	Total/NA	Solid	Moisture	
240-58678-3	SS-J1 (2-3)	Total/NA	Solid	Moisture	
240-58678-4	SS-J2 (0-1)	Total/NA	Solid	Moisture	
240-58678-4 DU	SS-J2 (0-1)	Total/NA	Solid	Moisture	
240-58678-5	SS-J2 (1-2)	Total/NA	Solid	Moisture	
240-58678-6	SS-J2 (2-3)	Total/NA	Solid	Moisture	
240-58678-7	SS-J3 (0-1)	Total/NA	Solid	Moisture	
240-58678-8	SS-J4 (0-1)	Total/NA	Solid	Moisture	
240-58678-9	SS-J5 (0-1)	Total/NA	Solid	Moisture	
240-58678-10	SS-J5 (1-2)	Total/NA	Solid	Moisture	
240-58678-11	SS-J5 (2-3)	Total/NA	Solid	Moisture	
240-58678-12	SS-J6 (0-1)	Total/NA	Solid	Moisture	
240-58678-13	SS-J6 (1-2)	Total/NA	Solid	Moisture	
240-58678-13 DU	SS-J6 (1-2)	Total/NA	Solid	Moisture	
240-58678-14	SS-J6 (2-3)	Total/NA	Solid	Moisture	
240-58678-15	SED_1	Total/NA	Solid	Moisture	
240-58678-17	SS-J9 (0-1)	Total/NA	Solid	Moisture	
240-58678-18	SS-J8 (0-1)	Total/NA	Solid	Moisture	
240-58678-19	SS-J8 (1-2)	Total/NA	Solid	Moisture	
240-58678-20	SS-J8 (2-3)	Total/NA	Solid	Moisture	
240-58678-21	SS-J7 (0-1)	Total/NA	Solid	Moisture	
240-58678-22	DUP_1	Total/NA	Solid	Moisture	

TestAmerica Canton

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J1 (0-1)

Date Collected: 12/03/15 09:15

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

Client Sample ID: SS-J1 (0-1)

Date Collected: 12/03/15 09:15

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-1

Matrix: Solid

Percent Solids: 75.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		1	209994	12/08/15 12:42	KLC	TAL CAN

Client Sample ID: SS-J1 (1-2)

Date Collected: 12/03/15 09:15

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

Client Sample ID: SS-J1 (1-2)

Date Collected: 12/03/15 09:15

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-2

Matrix: Solid

Percent Solids: 84.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		1	209994	12/08/15 13:03	KLC	TAL CAN

Client Sample ID: SS-J1 (2-3)

Date Collected: 12/03/15 09:15

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

Client Sample ID: SS-J1 (2-3)

Date Collected: 12/03/15 09:15

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-3

Matrix: Solid

Percent Solids: 83.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		1	209994	12/08/15 13:07	KLC	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J2 (0-1)

Date Collected: 12/03/15 09:15

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

Client Sample ID: SS-J2 (0-1)

Date Collected: 12/03/15 09:15

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-4

Matrix: Solid

Percent Solids: 83.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		1	209994	12/08/15 13:12	KLC	TAL CAN

Client Sample ID: SS-J2 (1-2)

Date Collected: 12/03/15 09:15

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

Client Sample ID: SS-J2 (1-2)

Date Collected: 12/03/15 09:15

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-5

Matrix: Solid

Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		10	209994	12/08/15 14:40	KLC	TAL CAN

Client Sample ID: SS-J2 (2-3)

Date Collected: 12/03/15 09:15

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

Client Sample ID: SS-J2 (2-3)

Date Collected: 12/03/15 09:15

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-6

Matrix: Solid

Percent Solids: 77.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		10	209994	12/08/15 14:44	KLC	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J3 (0-1)

Date Collected: 12/03/15 10:05

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

Client Sample ID: SS-J3 (0-1)

Date Collected: 12/03/15 10:05

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-7

Matrix: Solid

Percent Solids: 85.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		10	209994	12/08/15 14:48	KLC	TAL CAN

Client Sample ID: SS-J4 (0-1)

Date Collected: 12/03/15 10:20

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

Client Sample ID: SS-J4 (0-1)

Date Collected: 12/03/15 10:20

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-8

Matrix: Solid

Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		2	209994	12/08/15 14:52	KLC	TAL CAN

Client Sample ID: SS-J5 (0-1)

Date Collected: 12/03/15 10:35

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

Client Sample ID: SS-J5 (0-1)

Date Collected: 12/03/15 10:35

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-9

Matrix: Solid

Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		1	209994	12/08/15 13:41	KLC	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J5 (1-2)

Lab Sample ID: 240-58678-10

Date Collected: 12/03/15 10:35

Matrix: Solid

Date Received: 12/05/15 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

Client Sample ID: SS-J5 (1-2)

Lab Sample ID: 240-58678-10

Date Collected: 12/03/15 10:35

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 82.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		1	209994	12/08/15 13:45	KLC	TAL CAN

Client Sample ID: SS-J5 (2-3)

Lab Sample ID: 240-58678-11

Date Collected: 12/03/15 10:35

Matrix: Solid

Date Received: 12/05/15 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

Client Sample ID: SS-J5 (2-3)

Lab Sample ID: 240-58678-11

Date Collected: 12/03/15 10:35

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 81.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		1	209994	12/08/15 13:50	KLC	TAL CAN

Client Sample ID: SS-J6 (0-1)

Lab Sample ID: 240-58678-12

Date Collected: 12/03/15 10:55

Matrix: Solid

Date Received: 12/05/15 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

Client Sample ID: SS-J6 (0-1)

Lab Sample ID: 240-58678-12

Date Collected: 12/03/15 10:55

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 81.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		1	209994	12/08/15 13:54	KLC	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J6 (1-2)

Lab Sample ID: 240-58678-13

Date Collected: 12/03/15 10:55

Matrix: Solid

Date Received: 12/05/15 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

Client Sample ID: SS-J6 (1-2)

Lab Sample ID: 240-58678-13

Date Collected: 12/03/15 10:55

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 79.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		2	209994	12/08/15 14:56	KLC	TAL CAN

Client Sample ID: SS-J6 (2-3)

Lab Sample ID: 240-58678-14

Date Collected: 12/03/15 10:55

Matrix: Solid

Date Received: 12/05/15 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

Client Sample ID: SS-J6 (2-3)

Lab Sample ID: 240-58678-14

Date Collected: 12/03/15 10:55

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		1	209994	12/08/15 14:02	KLC	TAL CAN

Client Sample ID: SED_1

Lab Sample ID: 240-58678-15

Date Collected: 12/03/15 11:25

Matrix: Solid

Date Received: 12/05/15 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

Client Sample ID: SED_1

Lab Sample ID: 240-58678-15

Date Collected: 12/03/15 11:25

Matrix: Solid

Date Received: 12/05/15 10:10

Percent Solids: 37.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		1	209994	12/08/15 14:06	KLC	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: POND_1

Date Collected: 12/03/15 11:20

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			209745	12/07/15 12:00	WKD	TAL CAN
Total Recoverable	Analysis	6010C		1	209994	12/08/15 12:18	KLC	TAL CAN

Client Sample ID: SS-J9 (0-1)

Date Collected: 12/03/15 12:30

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-17

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

Client Sample ID: SS-J9 (0-1)

Date Collected: 12/03/15 12:30

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-17

Matrix: Solid

Percent Solids: 81.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		1	209994	12/08/15 14:10	KLC	TAL CAN

Client Sample ID: SS-J8 (0-1)

Date Collected: 12/03/15 12:35

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-18

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

Client Sample ID: SS-J8 (0-1)

Date Collected: 12/03/15 12:35

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-18

Matrix: Solid

Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		1	209994	12/08/15 14:23	KLC	TAL CAN

Client Sample ID: SS-J8 (1-2)

Date Collected: 12/03/15 12:35

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-19

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: SS-J8 (1-2)

Date Collected: 12/03/15 12:35

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-19

Matrix: Solid

Percent Solids: 83.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		1	209994	12/08/15 14:27	KLC	TAL CAN

Client Sample ID: SS-J8 (2-3)

Date Collected: 12/03/15 12:35

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-20

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

Client Sample ID: SS-J8 (2-3)

Date Collected: 12/03/15 12:35

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-20

Matrix: Solid

Percent Solids: 81.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		1	209994	12/08/15 14:31	KLC	TAL CAN

Client Sample ID: SS-J7 (0-1)

Date Collected: 12/03/15 12:40

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-21

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

Client Sample ID: SS-J7 (0-1)

Date Collected: 12/03/15 12:40

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-21

Matrix: Solid

Percent Solids: 85.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209731	12/07/15 10:28	DEE	TAL CAN
Total/NA	Analysis	6010C		1	209994	12/08/15 14:35	KLC	TAL CAN

Client Sample ID: DUP_1

Date Collected: 12/03/15 00:00

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-22

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	209668	12/07/15 07:05	TPH	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Client Sample ID: DUP_1

Date Collected: 12/03/15 00:00

Date Received: 12/05/15 10:10

Lab Sample ID: 240-58678-22

Matrix: Solid

Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			209736	12/07/15 11:06	DEE	TAL CAN
Total/NA	Analysis	6010C		2	209994	12/08/15 15:33	KLC	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

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Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Berkeley Lake

TestAmerica Job ID: 240-58678-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-15
Illinois	NELAP	5	200004	07-31-16
Kansas	NELAP	7	E-10336	01-31-16 *
Kentucky (UST)	State Program	4	58	02-26-16
Kentucky (WW)	State Program	4	98016	12-31-15
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-15
Nevada	State Program	9	OH-000482008A	07-31-16
New Jersey	NELAP	2	OH001	11-30-15 *
New York	NELAP	2	10975	03-31-16
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-16
Pennsylvania	NELAP	3	68-00340	08-31-16
Texas	NELAP	6	T104704517-15-5	08-31-16
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-16
Washington	State Program	10	C971	01-12-16
West Virginia DEP	State Program	3	210	12-31-15
Wisconsin	State Program	5	999518190	08-31-16

* Certification renewal pending - certification considered valid.

TestAmerica Canton

**CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS**



240-58678 Chain of Custody

153471101 110 1011101
 4101 Shuffel Street, N. W.
 North Canton, OH 44720
 Phone: 330.497.9396 Fax: 330.497.0772

Chain of Custody Record

106753

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING
 TestAmerica Laboratories, Inc.
 TAL-8210 (0713)

Regulatory Program: DW NPDES RCRA Other:

Company Name: Geosyntec Consultants		Project Manager: Cristina Krachen		COC No. _____ of _____ COCs			
Address: 1755 Roberts Blvd Ste 200		Tel/Fax: 404-869-3057		Date: _____			
City/State/Zip: Kennesaw, GA, 30144		Analysis Turnaround Time		Carrier: _____			
Phone: 678-207-9900		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS		Sampler: _____			
Fax: _____		TAT if different from below		For Lab Use Only: _____			
Project Name: Berkely Lake		<input type="checkbox"/> 2 weeks		Walk-in Client: _____			
Site: _____		<input checked="" type="checkbox"/> 1 week		Lab Sampling: _____			
P O # _____		<input type="checkbox"/> 2 days		Job / SDG No.: _____			
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sample Specific Notes:
SS-51 (0-1)	12/2/15	0915	6	S	S	1	
SS-51 (1-2)		0915		S	S	1	
SS-51 (2-3)		0915		S	S	1	
SS-52 (0-1)		0915		S	S	1	
SS-52 (1-2)		0915		S	S	1	
SS-52 (2-3)		0915		S	S	1	
SS-53 (0-1)		1005		S	S	1	
SS-54 (0-1)		1020		S	S	1	
SS-55 (0-1)		1035		S	S	1	
SS-55 (1-2)		1035		S	S	1	
SS-55 (2-3)		1035		S	S	1	
SS-56 (0-1)		1055		S	S	1	

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 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.

Non-hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return to Client Disposal by Lab Archive for _____ Months

Custody Seal No.: _____

Relinquished by: **Andrew Spake** Date/Time: _____

Relinquished by: **Geosyntec** Date/Time: _____

Relinquished by: _____ Date/Time: _____

Relinquished by: _____ Date/Time: _____

Received in Laboratory by: **Paquelin Genel PANC** Date/Time: **12/5/15 1010**



125 MILLER LANE
4101 SHUFFEL STREET, N.W.

North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

Chain of Custody Record

106754

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (07/13)

Regulatory Program: DW NPDES RCRA Other

Company Name: Geosyntec Consultants		Project Manager: Cristina Kradol		COC No. _____ of _____ COCs			
Address: 1255 Roberts Blvd Ste 200		Tel/Fax: 404-808-3057		Date: _____			
City/State/Zip: Kennesaw GA, 30144		Analysis Turnaround Time		Carrier: _____			
Phone: 678-202-9500		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS		Sampler: _____			
Fax: _____		TAT if different from Below		For Lab Use Only: _____			
Project Name: Berkeley Lake		<input type="checkbox"/> 2 weeks		Walk-in Client: _____			
Site: _____		<input checked="" type="checkbox"/> 1 week		Lab Sampling: _____			
P O # _____		<input type="checkbox"/> 2 days		Job / SDG No.: _____			
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Sample Specific Notes:
SS-J6 (1-2)	12/2/15	1055	6	S	S	1	
SS-J6 (2-3)		1055		S	S	1	
SED-1		1125		S	S	1	
POND-1		1120		W	W	1	
AAV01-120315		1140		W	W	1	
AAV01-120315-F		1140		W	W	1	
SS-59 (0-1)		1230		S	S	1	
SS-58 (0-1)		1235		S	S	1	
SS-58 (1-2)		1235		S	S	1	
SS-58 (2-3)		1235		S	S	1	
SS-57 (0-1)		1240		S	S	1	
DUP-1				S	S	1	

Filtered Sample (Y/N) **Metals (As Only)**
Perform MS/MSD (Y/N)

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 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.

Non-Hazard Flammable Skin Irritant Poison B Unknown

Special Instructions/QC Requirements & Comments:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return to Client Disposal by Lab Archive for _____ Months

Custody Seal No.: _____
Cooler Temp. (°C): Obs'd: _____
Received by: **Geosyntec** Date/Time: _____
Company: _____
Received by: _____ Date/Time: _____
Company: _____
Received in Laboratory by: **Jacquelyn Smel ANC** Date/Time: **12/5/15 1010**
Company: _____



TestAmerica Canton Sample Receipt Form/Narrative Login # 63018
 Canton Facility _____
 Client GEOSYNTEC Site Name _____ Cooler unpacked by: 9. Sewel
 Cooler Received on 12/5/15 Opened on 12/5/15
 FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____
 Receipt After-hours: Drop-off Date/Time _____ Storage Location _____
 TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____
 Packing material used: Bubble Wrap Foam Plastic Bag None Other _____
 COOLANT: Wet Ice Blue Ice Dry Ice Water None _____
 1. Cooler temperature upon receipt
 IR GUN# 53 (CF +0.1 °C) Observed Cooler Temp. 2.3 °C Corrected Cooler Temp. 2.4 °C
 IR GUN# 48 (CF -0.3 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C See Multiple
 IR GUN# 5 (CF +0.4 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C Cooler Form
 IR GUN# 8 (CF -0.5 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
 2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 2 Yes No
 -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
 -Were custody seals on the bottle(s) or bottle-kits (LLHg/MeHg)? Yes No
 3. Shippers' packing slip attached to the cooler(s)? Yes No
 4. Did custody papers accompany the sample(s)? Yes No
 5. Were the custody papers relinquished & signed in the appropriate place? Yes No
 6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
 7. Did all bottles arrive in good condition (Unbroken)? Yes No
 8. Could all bottle labels be reconciled with the COC? Yes No
 9. Were correct bottle(s) used for the test(s) indicated? Yes No
 10. Sufficient quantity received to perform indicated analyses? Yes No
 11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC559158
 12. Were VOAs on the COC? Yes No
 13. Were air bubbles >6 mm in any VOA vials? Yes No NA
 14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
 15. Was a LL Hg or Me Hg trip blank present? Yes No
 Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____
 Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: _____

15. SAMPLE CONDITION
 Sample(s) _____ were received after the recommended holding time had expired.
 Sample(s) _____ were received in a broken container.
 Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION
 Sample(s) _____ were further preserved in the laboratory.
 Time preserved: _____ Preservative(s) added/Lot number(s): _____

Temperature readings: _____

<u>Client Sample ID</u>	<u>Lab ID</u>	<u>Container Type</u>	<u>Container pH</u>	<u>Preservative Added (mls)</u>	<u>Lot #</u>
POND-1	240-58678-A-16	Plastic 250ml - with Nitric Acid	_____	_____	_____

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