

Resolution Consultants  
A Joint Venture of AECOM & EnSafe  
1500 Wells Fargo Building  
440 Monticello Avenue  
Norfolk, Virginia 23510

24 May 2016

**VIA ELECTRONIC MAIL**

Mr. Arne Olsen  
Remedial Project Manager  
Naval Facilities Engineering Command, Southeast  
IPT Gulf Coast OPUE3  
Building 135 — Naval Air Station Jacksonville  
Jacksonville, Florida 32212

**RE: Supplemental Environmental Investigation  
April 2016 Sampling Results — Naval Station Guantanamo Bay, Cuba  
Contract No. N62470-11-D-8013  
Contract Task Order JMB5**

Dear Mr. Olsen:

Resolution Consultants performed a Supplemental Environmental Investigation (EI) of the Office of Military Commissions Camp Justice, also known as Area of Operation Patriot, at United States Naval Station Guantanamo Bay (NS GTMO), Cuba. The work was conducted at the request of Naval Facilities Engineering Command Southeast (NAVFAC SE), under Comprehensive Long-term Environmental Action Navy Contract No. N62470-11-D-8013, Contract Task Order JMB5, Statement of Work Number SCSR1501 (Modification 2).

This letter identifies sample dates and locations, presents analytical laboratory results, and discusses data validation and other activities associated with the collection of mercury vapor samples for indoor air, the analysis of background soil samples for target analyte list (TAL) metals excluding mercury, collection of soil samples for target compound list (TCL) semi-volatile organic compound (SVOC) and polynuclear aromatic hydrocarbon (PAH) analysis, and the collection of wipe samples for polychlorinated biphenyl (PCB) analysis.

Resolution Consultants mobilized to NS GTMO on 15 April 2016 and conducted sampling activities through 23 April 2016. This supplemental investigation was based on results of the EI conducted 9 through 15 October 2015, as documented in the *Environmental Investigation Report* (Resolution Consultants April 2016).



## MERCURY VAPOR SAMPLING

Mercury vapor sampling was conducted in Building AV-29 because a portion of the building was historically used as a dental surgery/clinic and the potential exists for mercury (which was historically used in fillings) to have been released inside the building. Mercury vapor sampling was completed on 16, 17, and 22 April 2016.

### Sample Locations

As shown on Figures 1 and 2 in Attachment A, sorbent tubes were used to collect 19 indoor air samples to determine the presence of mercury vapor in Building AV-29.

### Sample Collection

Prior to deploying sorbent tubes, the heating, ventilating, and air conditioning systems at each location were operating at occupational levels. Prior to sample collection, each air sampling pump was calibrated to a flow rate of 0.2 liter per minute using a rotameter to measure the upstream airflow as it entered the cartridge. Once the calibration was complete, a new tube was connected to the air sampling pump and the starting time was recorded. Samples were collected for approximately 8 hours (480 minutes).

At the end of each sampling period, pumps were turned off, stop times were recorded, and caps were placed on each end of the tube. Each tube was labeled with a sample identification number and air sampling pumps were recalibrated to verify the flow rate. Three field blanks were collected in the same manner as the samples, except that no air was drawn through the tubes.

### Analytical Results

Sorbent tubes were submitted to Galson Laboratories, Inc., where they were analyzed using modified National Institute for Occupational Safety and Health Method 6009. Table 1 lists sample identification numbers, sample locations, and analytical results. The Galson Laboratories analytical report is included in Attachment B.

**Table 1**  
**Mercury Vapor Analytical Results**  
**Naval Station Guantanamo Bay, Cuba**

Sample ID	Building AV-29 Room	Sample Date	Result (mg/m <sup>3</sup> )
AV29IAHG16-5	16	4-16-2016	<0.00031
AV29IAHG17-5	17	4-16-2016	<0.00031
AV29IAHG18-5	18	4-16-2016	<0.00031
AV29IAHG15-5	15	4-16-2016	<0.00031
AV29IAHG14-5	14	4-16-2016	<0.00031
AV29IAHG13-5	13	4-16-2016	<0.00031
AV29IAHG12-5	12	4-16-2016	<0.00031
AV29IAHG11-5	11	4-16-2016	<0.00031
AV29IAHGDV-5	DV	4-16-2016	<0.00031
AV29IAHG22-5	22	4-17-2016	<0.00031
AV29IAHG5-5	5	4-17-2016	<0.00031
AV29IAHG23-5	23	4-17-2016	<0.00031
AV29IAHG4-5	4	4-17-2016	<0.00031
AV29IAHG3-5	3	4-17-2016	<0.00031
AV29IAHG24-5	24	4-17-2016	<0.00031
AV29IAHG2-5	2	4-17-2016	<0.00031
AV29IAHGBLK-1	Field Blank	4-17-2016	<0.00031
AV29IAHGLB-2	Lobby	4-22-2016	<0.00031
AV29IAHGBLK-2	Field Blank	4-22-2016	<0.00031
AV29IAHGBLK-3	Field Blank	4-22-2016	<0.00031
AV29IAHG27-5	27	4-22-2016	<0.00031
AV29IAHG10-2	10	4-22-2016	<0.00031

**Note:**

mg/m<sup>3</sup> = milligrams per cubic meter

## SOIL SAMPLING

### Background Sample Locations

Background surface soil samples were collected on 15 October 2015 from 14 locations shown on Figure 3.<sup>1</sup> These locations were randomly selected in an area believed to be representative of NS GTMO background conditions. These points were spatially located using a hand-held global positioning system device (Trimble).

<sup>1</sup> The background samples were collected during the EI and were held by NS GTMO Public Works Division pending analysis of Camp Justice soil samples.

## Supplemental Sample Locations

Supplemental surface soil samples were collected on 21 April 2016 from 9 locations shown on Figure 4. These supplemental soil samples were collected to confirm the SVOC/PAH concentrations detected in samples collected from locations M2 and M3 during the October 2015 EI.

## Sample Collection

Soil samples were collected using stainless steel hand implements (spoon, trowel, and rake). Collected soil was first sieved and homogenized through a stainless steel colander or screen, then accumulated in a stainless-steel bowl. This process facilitated removal of pebbles, rock fragments, plant material, and some asphalt pieces. The soil sieving process resulted in a brown granular sample matrix for analyses.

During sampling, the soil in the bowl was inspected by visual and olfactory observations and the resulting descriptions were recorded on sampling data sheets or field log book. Descriptions of the soils sampled are included in Table 2. Following inspection, the soil in the bowl was then transferred to the sample jars. Each sample jar was labeled with the alphanumeric sample numbering system, time, date, and requested analysis. Once collected, samples for SVOC/PAH analysis were immediately processed and preserved by maintaining the samples at a maximum temperature of 4 degrees centigrade.

Table 2  
Soil Sampling Summary  
Naval Station Guantanamo Bay, Cuba

Sample Node	Sample Date	DUP	MS/MSD	Soil Description
BS01	15 Oct 15			Brown silty clay with pebbles, dry.
BS02	15 Oct 15			Brown silty clay with pebbles, dry.
BS03	15 Oct 15	X		Brown silty clay with pebbles, dry.
BS04	15 Oct 15			Brown silty clay with pebbles, moist to slightly moist.
BS05	15 Oct 15			Brown silty clay with pebbles, slightly moist to moist.
BS06	15 Oct 15			Brown silty clay with pebbles, dry.
BS07	15 Oct 15			Brown silty clay with some pebbles, moist to slightly moist.
BS08	15 Oct 15			Brown silty clay, with some pebbles, dry.
BS09	15 Oct 15		X	Brown silty clay with some gravel and pebbles, dry.

Table 2  
Soil Sampling Summary  
Naval Station Guantanamo Bay, Cuba

Sample Node	Sample Date	DUP	MS/ MSD	Soil Description
BS10	15 Oct 15			Brown silty clay with pebbles and gravel, slightly moist.
BS11	15 Oct 15			Brown silty clay with pebbles, dry.
BS12	15 Oct 15			Brown clayey silty with gravel and pebbles, dry.
BS13	15 Oct 15			Brown silty clay with pebbles, dry.
BS14	15 Oct 15	X		Brown silt with trace of sand and clay with gravel and pebbles, dry.
M2-1	21 Apr 16			Brown silty clay with gravel fragments, dry.
M2-2	21 Apr 16			Brown silty sand with pebbles, dry.
M2-3	21 Apr 16	X		Gray sand mixed with crushed limestone aggregate and coral fragments, dry.
M2-4	21 Apr 16			Brown silty sand with crushed limestone aggregate and some coral fragments, dry.
M2-5	21 Apr 16			Reddish brown silty sand with pebbles and cobbles, dry.
M3-1	21 Apr 16			Brown silty sand with pebbles, dry.
M3-2	21 Apr 16			Reddish brown silty sand with gravel and asphalt fragments, dry.
M3-3	21 Apr 16			Brown silty sand with pebbles, dry.
M3-4	21 Apr 16			Light brown silty sandy clay with crushed limestone aggregate, dry.

**Notes:**

DUP = Duplicate Sample

MS/MSD = Matrix Spike/Matrix Spike Duplicate Sample

### Equipment Decontamination

Prior to and between sampling locations, stainless steel soil sampling equipment was decontaminated according to previously submitted standard operating procedures. Decontamination was performed in plastic 5-gallon buckets, with investigation-derived waste solutions discharged to the NS GTMO sanitary sewer system.

### Quality Control Samples

Quality Assurance (QA)/Quality Control (QC) samples were collected according to the frequency specified in the previously submitted *Final Work/Sampling Plan* (Resolution Consultants October 2015), which resulted in three field duplicate samples and two matrix spike/matrix spike duplicate samples submitted for analysis.

## **Analytical Results**

Each primary and QA/QC soil sample was shipped to Test America Laboratories, Inc., for analysis. Background surface soil samples were analyzed for TAL metals (Method 6020A) excluding mercury, and the supplemental surface soil samples were analyzed for TCL SVOCs and PAHs (Method 8270D). Laboratory data reports are in Attachment B and summary tables for soil results are in Attachment C.

## **PCB WIPE SAMPLING**

PCB wipe sampling was conducted in the two transformer rooms in Hangar AV-32 and in the transformer building adjacent to Hangar AV-32. PCB wipe sampling was completed on 18 April 2016.

### **Sample Locations**

As shown on Figure 5 in Attachment A, 9 wipe samples and 1 field duplicate were collected to determine the presence of PCBs.

### **Sample Collection**

Prior to sample collection, a 10-centimeter by 10-centimeter template was placed on the surface to delineate the area to be sampled. The delineated area was then blotted horizontally with one side of a hexane-soaked swab, then vertically blotted with the other side. The swab was then rolled into a tube and placed back into the sampling vial. Each vial was labeled with a sample identification number.

## **Analytical Results**

The wipe samples were submitted to Test America Laboratories, where they were analyzed for PCBs (Method 8082A). Table 3 lists sample identification numbers and sample locations. Laboratory data reports are included in Attachment B and a summary table for wipe sampling results is in Attachment C.



**Table 3**  
**Polychlorinated Biphenyl Wipe Sample Summary**  
**Naval Station Guantanamo Bay, Cuba**

Sample ID	Hangar AV-32 Room	Sample Location
AV32WSWTR-1	West Transformer Room	East Wall
AV32WSWTR-2		North Wall
AV32WSWTR-3		Floor/East End
AV32WSTB-1	Transformer Building	South Wall
AV32WSTB-2		North Wall
AV32WSTB-3		Floor/North End
AV32WSETR-1	East Transformer Room	West Wall
AV32WSETR-2		North Wall
AV32WSETR-3		Floor/West End
AV32WSETR-3D		Duplicate/Floor/West End

## **DATA VERIFICATION AND VALIDATION**

Data verification was performed to assess the completeness of laboratory data by reviewing chain-of-custody forms, laboratory sample logs, receipt condition reports, and laboratory deliverables. Data verification was performed on laboratory analytical data; 10 percent of the raw data (including instrument printouts) was manually validated. Laboratory data, provided in electronic format, was verified for accuracy prior to use and during the data validation process.

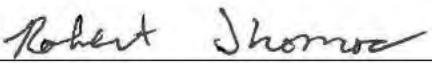
After receipt of the full data package and electronic deliverables, results were validated independently from the laboratory to assess data quality against criteria established in the analytical methods, United States Environmental Protection Agency (U.S. EPA) data validation guidelines (U.S. EPA August 2014), and *Department of Defense (DoD) Quality Systems Manual (QSM) for Environmental Laboratories Version 5.0* (DoD July 2013), where applicable. All results are considered usable by the project, according to U.S. EPA and DoD guidelines.

An electronic version of this report has been electronically mailed to the NAVFAC SE Contracting Officers Technical Representative.

Sincerely,

Resolution Consultants

  
By: Paul V. Stoddard, PG  
*Task Order Manager*

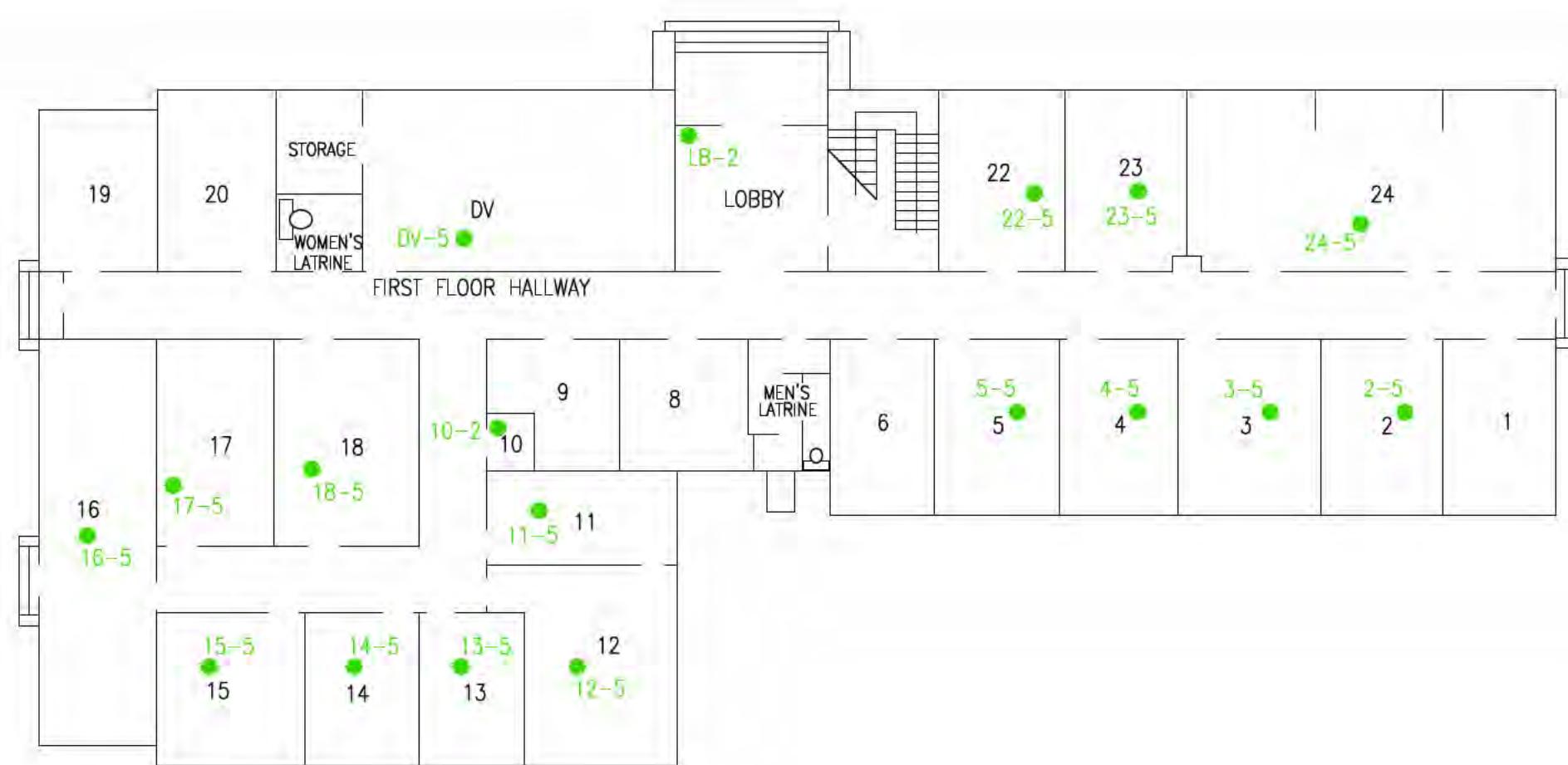


Robert Thomas, CHMM  
*Environmental Scientist*

Attachment A      Figures  
Attachment B      Analytical Results  
Attachment C      Analytical Results Tables



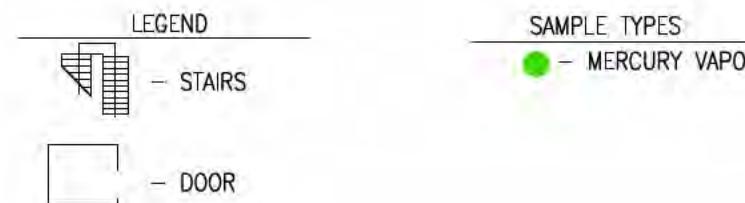
**Attachment A**  
**Figures**



**AV29 FIRST FLOOR**

NOTE:

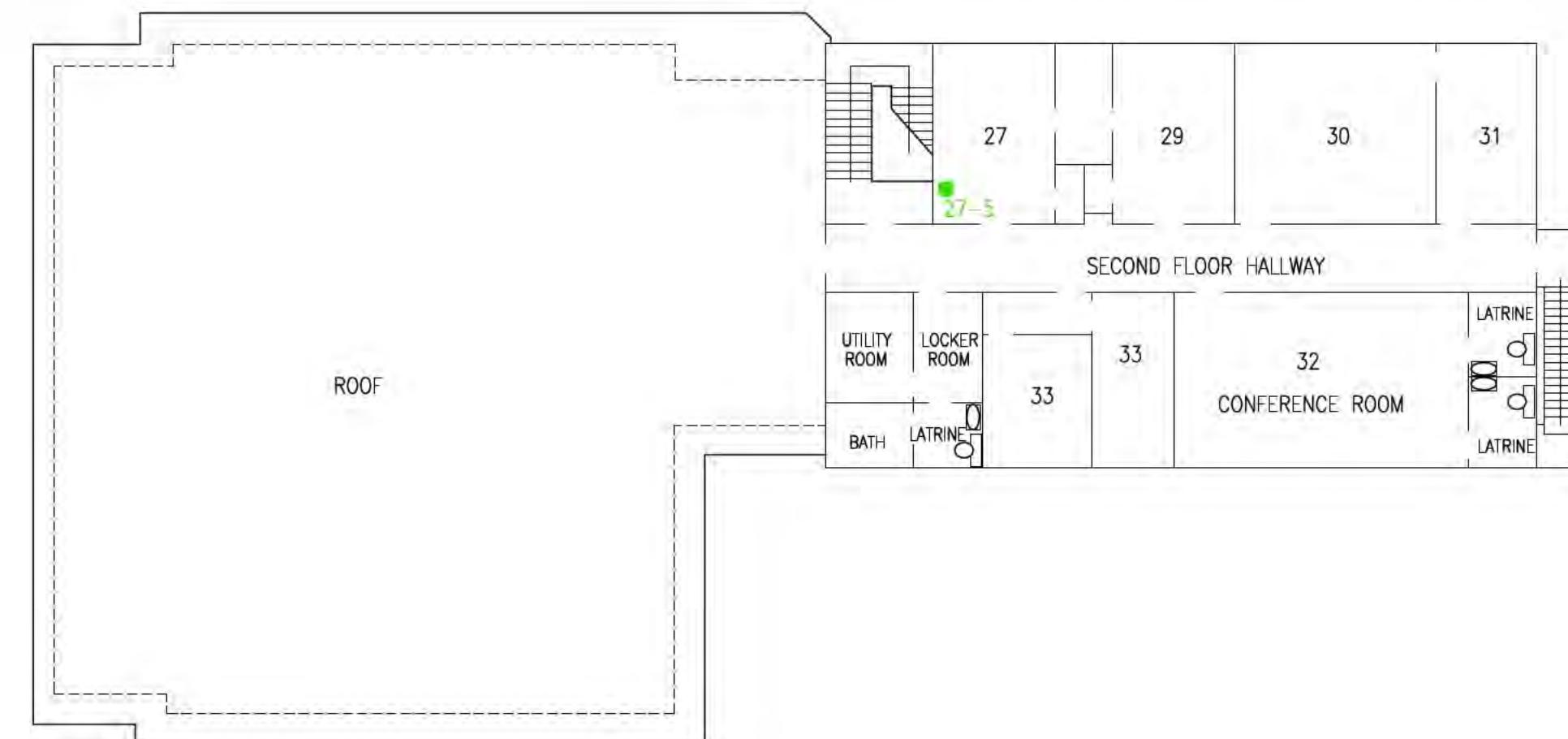
ALL SAMPLE IDENTIFICATION NUMBERS BEGIN WITH AV29IAHG. THE FIGURE ONLY SHOWS THE LAST CHARACTERS OF THE SAMPLE IDENTIFICATION NUMBER FOR EACH LOCATION. FOR EXAMPLE, THE COMPLETE SAMPLE IDENTIFICATION NUMBER FOR SAMPLE 16-5 IS AV29IAHG16-5.



NOT TO SCALE

**FIGURE 1**  
AV29 (FIRST FLOOR) FLOOR PLAN  
ENVIRONMENTAL INVESTIGATION  
NS GTMO – CAMP JUSTICE  
GUANTANAMO BAY, CUBA

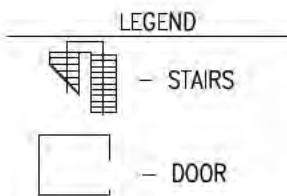
	<b>NAVFAC</b> Naval Facilities Engineering Command	
		<b>RESOLUTION</b> CONSULTANTS
REQUESTED BY: H.BRAUER	DATE: 05/23/16	DRAWN BY: BRONSON
DWG NAME: 17816_B004		DWG NAME: 17816_B004



AV29 SECOND FLOOR

NOTE:

ALL SAMPLE IDENTIFICATION NUMBERS BEGIN WITH AV29IAHG. THE FIGURE ONLY SHOWS THE LAST CHARACTERS OF THE SAMPLE IDENTIFICATION NUMBER FOR EACH LOCATION. FOR EXAMPLE, THE COMPLETE SAMPLE IDENTIFICATION NUMBER FOR SAMPLE 16-5 IS AV29IAHC16-5.



NOT TO SCALE

FIGURE 2  
AV29 (SECOND FLOOR) FLOOR PLAN  
ENVIRONMENTAL INVESTIGATION  
NS GTMO - CAMP JUSTICE  
GUANTANAMO BAY, CUBA

	<b>NAVFAC</b> Naval Facilities Engineering Command	
REQUESTED BY: H.BRAUER	DATE: 05/23/16	DRAWN BY: BRONSON
DWG NAME: 17816_B004		





Legend

- October 2015 Soil Sampling Locations
- Offset Soil Sampling Locations

1 inch = 80 feet

0 80 160 Feet

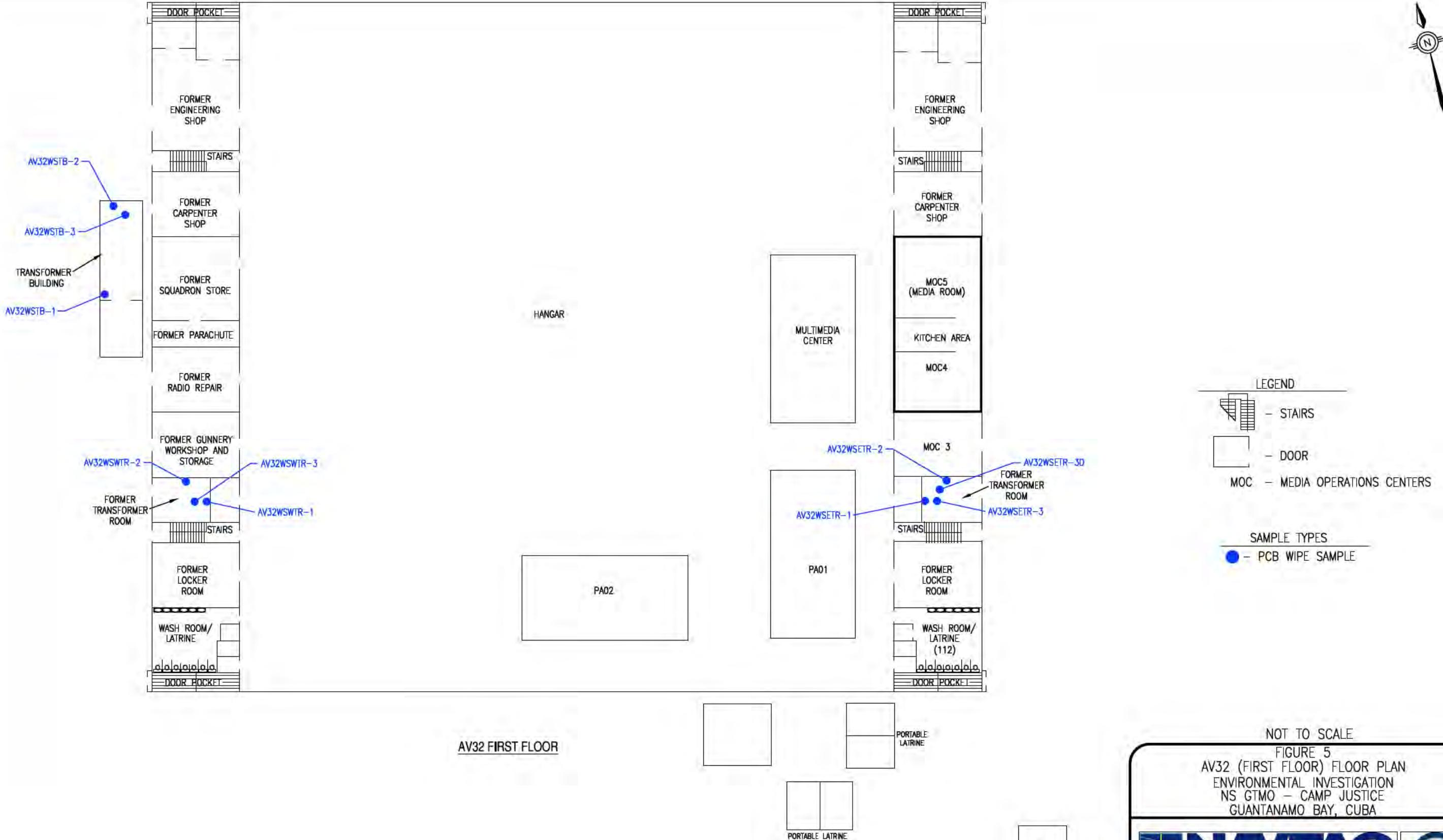
FIGURE 4  
SUPPLEMENTAL SOIL SAMPLING  
ENVIRONMENTAL INVESTIGATION  
OFFICE OF MILITARY COMMISSIONS - CAMP JUSTICE  
NAVAL STATION GUANTANAMO BAY, CUBA



REQUESTED BY: R. THOMAS DATE: 5/20/2016

DRAWN BY: N. R NEHART

TASK ORDER NUMBER: JMB5



NOT TO SCALE  
**FIGURE 5**  
**AV32 (FIRST FLOOR) FLOOR PLAN**  
 ENVIRONMENTAL INVESTIGATION  
 NS GTMO - CAMP JUSTICE  
 GUANTANAMO BAY, CUBA



REQUESTED BY: H.BRAUER	DATE: 05/20/16
DRAWN BY: BRONSON	DWG NAME: 17816_B005

**Attachment B**  
**Analytical Results**

**B-1**  
**Mercury Vapor**

# SGS Galson Data Package

Client : EnSafe-MEMPHIS, TN  
Project : Site Investigation  
SDG : L373533

Data package for samples received:  
04/27/16



Ms. Tina Cantwell  
EnSafe, Inc.  
5724 Summer Trees Drive  
Memphis, TN 38134

May 04, 2016

DOH ELAP #11626  
AIHA-LAP #100324

Account# 13497

Login# L373533

Dear Ms. Cantwell:

Enclosed are the analytical results for the samples received by our laboratory on April 27, 2016. All test results meet the quality control requirements of AIHA-LAP and NELAC unless otherwise stated in this report. All samples on the chain of custody were received in good condition unless otherwise noted.

Results in this report are based on the sampling data provided by the client and refer only to the samples as they were received at the laboratory. Unless otherwise requested, all samples will be discarded 14 days from the date of this report, with the exception of IOMs, which will be cleaned and disposed of after seven calendar days.

Current Scopes of Accreditation can be viewed at [www.galsonlabs.com](http://www.galsonlabs.com) in the accreditations section under the "about Galson" tab.

Please contact Tonya Lancaster at (888) 432-5227, if you would like any additional information regarding this report. Thank you for using SGS Galson Laboratories.

Sincerely,

SGS Galson Laboratories



Lisa Swab  
Laboratory Director

Enclosure(s)

Galson Laboratories, Inc. is now a part of SGS, the world's leading inspection, verification, testing, and certification company. As part of our transition to SGS, you will begin to see some formatting changes with reports that will improve the presentation of data and allow for the transition to the new logo.



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## LABORATORY ANALYSIS REPORT



Client : EnSafe-MEMPHIS, TN	Account No.: 13497
Site : GTMO, Cuba	Login No. : L373533
Project No. : Site Investigation	
Date Sampled : 16-APR-16 - 22-APR-16	Date Analyzed : 28-APR-16
Date Received : 27-APR-16	Report ID : 934483

**Mercury**

<u>Sample ID</u>	<u>Lab ID</u>	Air Vol liter	Total ug	Conc mg/m3
AV29IAHG16-5	L373533-1	96	<0.030	<0.00031
AV29IAHG17-5	L373533-2	96	<0.030	<0.00031
AV29IAHG18-5	L373533-3	96	<0.030	<0.00031
AV29IAHG15-5	L373533-4	96	<0.030	<0.00031
AV29IAHG14-5	L373533-5	96	<0.030	<0.00031
AV29IAHG13-5	L373533-6	96	<0.030	<0.00031
AV29IAHG12-5	L373533-7	96	<0.030	<0.00031
AV29IAHG11-5	L373533-8	96	<0.030	<0.00031
AV29IAHGDV-5	L373533-9	96	<0.030	<0.00031
AV29IAHG22-5	L373533-10	96	<0.030	<0.00031
AV29IAHG5-5	L373533-11	96	<0.030	<0.00031
AV29IAHG23-5	L373533-12	96	<0.030	<0.00031
AV29IAHG4-5	L373533-13	96	<0.030	<0.00031
AV29IAHG3-5	L373533-14	96	<0.030	<0.00031
AV29IAHG24-5	L373533-15	96	<0.030	<0.00031
AV29IAHG2-5	L373533-16	96	<0.030	<0.00031

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of quantitation: 0.030 ug

Analytical Method : mod. NIOSH 6009; CVAA TUBE

OSHA PEL : 0.1 mg/m3

Collection Media : 226-17-1A

Submitted by: pwl/keg

Approved by : keg

Date : 29-APR-16 NYS DOH # : 11626

Supervisor: KEG QC by: CRD

< -Less Than	mg -Milligrams	m3 -Cubic Meters	kg -Kilograms	NA -Not Applicable	ND -Not Detected
> -Greater Than	ug -Micrograms	l -Liters	NS -Not Specified	ppm -Parts per Million	



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## LABORATORY ANALYSIS REPORT



Client	:	EnSafe-MEMPHIS, TN	Account No.:	13497
Site	:	GTMO, Cuba	Login No.:	L373533
Project No.	:	Site Investigation		
Date Sampled	:	16-APR-16 - 22-APR-16	Date Analyzed:	28-APR-16
Date Received	:	27-APR-16	Report ID:	934483

**Mercury**

<u>Sample ID</u>	<u>Lab ID</u>	Air Vol liter	Total ug	Conc mg/m3
AV29IAHGBLK-1	L373533-17	NA	<0.030	NA
AV29IAHGLB-2	L373533-18	96	<0.030	<0.00031
AV29IAHGBLK-2	L373533-19	NA	<0.030	NA
AV29IAHGBLK-3	L373533-20	NA	<0.030	NA
AV29IAHG27-5	L373533-21	96	<0.030	<0.00031
AV29IAHG10-2	L373533-22	96	<0.030	<0.00031

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of quantitation: 0.030 ug	Submitted by: pwl/keg
Analytical Method : mod. NIOSH 6009; CVAA TUBE	Approved by : keg
OSHA PEL : 0.1 mg/m3	Date : 29-APR-16 NYS DOH # : 11626
Collection Media : 226-17-1A	Supervisor: KEG QC by: CRD

< -Less Than	mg -Milligrams	m3 -Cubic Meters	kg -Kilograms	NA -Not Applicable	ND -Not Detected
> -Greater Than	ug -Micrograms	l -Liters	NS -Not Specified	ppm -Parts per Million	



GALSON

LABORATORY FOOTNOTE REPORT

6601 Kirkville Road  
East Syracuse, NY 13057  
(315) 432-5227  
FAX: (315) 437-0571  
[www.galsonlabs.com](http://www.galsonlabs.com)

Client Name : EnSafe-MEMPHIS, TN  
Site : GTMO, Cuba  
Project No. : Site Investigation

Date Sampled : 16-APR-16 - 22-APR-16 Account No.: 13497  
Date Received: 27-APR-16 Login No. : L373533  
Date Analyzed: 28-APR-16

This document is issued by the Company under its General Conditions of Service accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>.  
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Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Unless otherwise noted below, all quality control results associated with the samples were within established control limits or did not impact reported results.

Note: The findings recorded within this report were drawn from analysis of the sample(s) provided to the laboratory by the Client (or a third party acting at the Client's direction). The laboratory does not have control over the sampling process. The findings herein constitute no warranty of the samples' representativeness of any sampled environment and strictly relate to the samples as they were presented to the laboratory.

Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceding the final result column may have been rounded and therefore, if carried through the calculations, may not yield an identical final result to the one reported.

The stated LOQs for each analyte represent the demonstrated LOQ concentrations prior to correction for desorption efficiency (if applicable).

Unless otherwise noted below, reported results have not been blank corrected for any field blank or method blank.

L373533 (Report ID: 934483):

Reported results reflect elemental analysis of the requested metals. Certain compounds may not be solubilized during digestion, resulting in data that is biased low.

SOPs: MT-SOP-20(6), MT-SOP-8(14)

L373533 (Report ID: 934483):

Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated uncertainty applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process.

Parameter	Accuracy	Mean Recovery
Mercury	+/-13.3%	100%

---

< -Less Than mg -Milligrams m3 -Cubic Meters kg -Kilograms ppm -Parts per Million  
> -Greater Than ug -Micrograms l -Liters NS -Not Specified ND -Not Detected NA -Not Applicable

---

610423697947  
Date: 04/27/16  
Shipper: FEDEX  
Initials: SK  
Barcode  
Prep: UNKNOWN

L373533

GALSON

# CHAIN OF CUSTODY

96

Turnaround Time (AT) <small>(surcharge)</small>	You may edit and complete this COC electronically by logging in to your Client Portal account at <a href="https://portal.galsonlabs.com/">https://portal.galsonlabs.com/</a>							
<input checked="" type="checkbox"/> Standard 0%								
<input type="checkbox"/> 4 Business Days 35%	Client Acct No.: <b>13497</b>	Report To: <b>Paul Stoddard</b>	Invoice To: <b>Accounts Payable</b>					
<input type="checkbox"/> 3 Business Days 50%	Company Name: <b>EnSafe</b>	Address 1: <b>5724 Summer Trees Drive</b>	Company Name: <b>EnSafe-MEMPHIS, TN</b>					
<input type="checkbox"/> 2 Business Days 75%	Original Prep No.: <b>PSY377862</b>	Address 2:	Address 1: <b>5724 Summer Trees Drive</b>					
<input type="checkbox"/> Next Day by 6pm 100%	City, State Zip: <b>Memphis, TN 38134</b>	Address 2:	Address 2:					
<input type="checkbox"/> Next Day by Noon 150%	Phone No.: <b>(901) 372-7962</b>	City, State Zip: <b>Memphis, TN 38134</b>	City, State Zip:					
<input type="checkbox"/> Same Day 200%	Cell No.:	Phone No.: <b>901 - 372 - 7962</b>	Phone No.:					
<input checked="" type="checkbox"/> Samples submitted using the FreePumpLoan™ Program		Email reports to: <b>p.stoddard@ensafe.com</b>	Comments:	Comments:				
<input type="checkbox"/> Samples submitted using the FreeSamplingBadges™ Program		Online COC No.: <b>106022</b>	Comments: <b>CC: rthomas@ensafe.com</b>	P.O. No.:				
<p>Comments: <b>Shaw prep needed for vapor samples.</b></p> <p>State Sampled:</p> <p>Please indicate which OEL(s) this data will be used for:</p> <p><input type="checkbox"/> OSHA PEL <input type="checkbox"/> ACGIH TLV <input type="checkbox"/> MSHA <input type="checkbox"/> Cal OSHA</p> <p><input type="checkbox"/> IAQ: _____ <input type="checkbox"/> Other: _____</p> <p>Specify Limit(s) <input type="checkbox"/> Specify Other</p>								

Site Name: <b>GTMO, Cuba</b>	Project: <b>Site Investigation</b>	Sampled By: <b>Robbie Thomas</b>	List description of industry or Process/interferences present in sampling area:				
Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in <sup>2</sup> , cm <sup>2</sup> , ft <sup>2</sup> *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
AV29IAHG16-5	4/16/16	226-17-1A	96 16:03	Lit. 155	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG17-5	4/16/16	226-17-1A	96 16:03	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG18-5	4/16/16	226-17-1A	96 16:08	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	

^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature			Date	Time	Print Name / Signature	Date	Time
Relinquished By:	Robbie Thomas	Zachary King	4/16/16	09:50	Received By:	Zachary King	4/27/16	9:43
Relinquished By:					Received By:			

\* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

Online COC No.: 106022  
Prep No.: PSY377862  
Account No.: 13497  
Draft : 4/14/2016 1:21:12 PM



GALSON

## CHAIN OF CUSTODY

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in <sup>2</sup> , cm <sup>2</sup> , ft <sup>2</sup> *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
AV29IAHG15-5	4/16/16	226-17-1A	96 16:14	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG14-5	4/16/16	226-17-1A	96 16:20	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG13-5	4/16/16	226-17-1A	96 16:24	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG12-5	4/16/16	226-17-1A	96 16:29	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG11-5	4/16/16	226-17-1A	96 16:35	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHGDV-5	4/16/16	226-17-1A	96 16:48	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG22-5	4/17/16	226-17-1A	96 16:07	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG5-5	4/17/16	226-17-1A	96 16:11	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG23-5	4/17/16	226-17-1A	96 16:16	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG4-5	4/17/16	226-17-1A	96 16:19	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG3-5	4/17/16	226-17-1A	96 16:24	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	

^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature	Date	Time
Relinquished By:	Robbie Thomas	Zachary King	4/25/16	0950	Received By:	Zachary King	4/27/16	0433
Relinquished By:					Received By:			

\* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

Online COC No. : 106022

Prep No. : PSY377862

Account No. : 13497

Draft : 4/14/2016 1:21:12 PM

# SGS

## GALSON

# CHAIN OF CUSTODY

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in <sup>2</sup> , cm <sup>2</sup> , ft <sup>2</sup> *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
AV29IAHG24-5	4/17/16	226-17-1A	96 16:29	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG2-5	4/17/16	226-17-1A	96 16:32	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHGBLK-1	4/17/16	226-17-1A	0 16:35	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHGBL10-2	4/22/16	226-17-1A	96 16:08	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHGLB-2	4/22/16	226-17-1A	96 15:54	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHGBLK-2	4/22/16	226-17-1A	0	Lit.			
AV29IAHGBLK-3	4/22/16	226-17-1A	0	Lit.			
AV29IAHGBLK-5	4/22/16	226-17-1A	96 16:03	Lit.			

^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature	Date	Time		Print Name / Signature	Date	Time
Relinquished By:				Received By:	Zachary King		4/27/16 9:42
Relinquished By:	Robbi Thomas	4/25/16	0950	Received By:			

\* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

Online COC No. : 106022

Prep No. : PSY377862

Account No. : 13497

Draft : 4/14/2016 1:21:12 PM

**INVOICE****SGS Galson**

Login No : L373533  
 Project : STANDARD  
 PO No : 20989  
 Site : GTMO, Cuba

Invoice No : 440532  
 Invoice Date : 04-MAY-16  
 Account No : 13497  
 Client Project : Site Investigation

Bill To : Accounts Payable  
 EnSafe-MEMPHIS, TN  
 5724 Summer Trees Drive  
 Memphis TN 38134

Report To : Ms. Tina Cantwell

TERMS: NET 60 DAYS  
 Finance charges will be  
 applied based on the terms  
 and conditions of sale.

<b>Sample #</b>	<b>Client ID</b>	<b>Media</b>	<b>Analysis</b>	<b>Unit Price</b>
L373533-1	AV29IAHG16-5	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-1	AV29IAHG16-5	OPTIONS	IM-DELIVERABLES/Deliverables	\$ 0.00
L373533-2	AV29IAHG17-5	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-3	AV29IAHG18-5	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-4	AV29IAHG15-5	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-5	AV29IAHG14-5	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-6	AV29IAHG13-5	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-7	AV29IAHG12-5	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-8	AV29IAHG11-5	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-9	AV29IAHGDV-5	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-10	AV29IAHG22-5	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-11	AV29IAHG5-5	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-12	AV29IAHG23-5	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-13	AV29IAHG4-5	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-14	AV29IAHG3-5	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-15	AV29IAHG24-5	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-16	AV29IAHG2-5	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-17	AV29IAHGLB-1	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-18	AV29IAHGLB-2	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-19	AV29IAHGLB-2	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-20	AV29IAHGLB-3	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-21	AV29IAHG27-5	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
L373533-22	AV29IAHG10-2	226-17-1A	IM-SHAWHG/Mercury	\$ 61.00
Total Analytical :				\$ 1,342.00
Total Login Charges --->				\$ 1,342.00

(Charges are displayed in US Dollars)

Please Remit To: SGS Galson Laboratories, Inc., P.O. Box 8000, Dept 684, Buffalo, NY 14267  
 Phone: 888-432-5227

**INVOICE**

**SGS Galson**

Login No : L373533  
Project : STANDARD  
PO No : 20989  
Site : GTMO, Cuba

Invoice No : 440532  
Invoice Date : 04-MAY-16  
Account No : 13497  
Client Project : Site Investigation

Bill To : Accounts Payable  
EnSafe-MEMPHIS, TN  
5724 Summer Trees Drive  
Memphis TN 38134

Report To : Ms. Tina Cantwell

TERMS: NET 60 DAYS  
Finance charges will be  
applied based on the terms  
and conditions of sale.

<b>Sample #</b>	<b>Client ID</b>	<b>Media</b>	<b>Analysis</b>	<b>Unit Price</b>
Electronic Payments: SGS Galson Laboratories *UPDATED				
		M&T Bank		
		M&T Plaza		
		Buffalo, NY USA		
		Swift Code: MANTUS33		
		Routing Number: 022000046		
		Account Number: 16069486 (*NEW ACCT)		

---

Please Remit To: SGS Galson Laboratories, Inc., P.O. Box 8000, Dept 684, Buffalo, NY 14267  
Phone: 888-432-5227

---

**INVOICE**

**SGS Galson**

Login No : L373533  
Project : STANDARD  
PO No : 20989  
Site : GTMO, Cuba

Invoice No : 440532  
Invoice Date : 04-MAY-16  
Account No : 13497  
Client Project : Site Investigation

Bill To : Accounts Payable  
EnSafe-MEMPHIS, TN  
5724 Summer Trees Drive  
Memphis TN 38134

Report To : Ms. Tina Cantwell

TERMS: NET 60 DAYS  
Finance charges will be  
applied based on the terms  
and conditions of sale.

<b>Sample #</b>	<b>Client ID</b>	<b>Media</b>	<b>Analysis</b>	<b>Unit Price</b>
				Total Login Charges : \$ 1,342.00
				Sample Discount : - \$ 134.20
				Amount Due ---> \$ 1,207.80

(Charges are displayed in US Dollars)

---

Please Remit To: SGS Galson Laboratories, Inc., P.O. Box 8000, Dept 684, Buffalo, NY 14267  
Phone: 888-432-5227

---

610423697947  
Date: 04/27/16  
Shipper: FEDEX  
Initials: SK  
Barcode  
Prep: UNKNOWN

L373533

GALSON

# CHAIN OF CUSTODY

96

Turnaround Time (AT) <small>(surcharge)</small>	You may edit and complete this COC electronically by logging in to your Client Portal account at <a href="https://portal.galsonlabs.com/">https://portal.galsonlabs.com/</a>							
<input checked="" type="checkbox"/> Standard 0%								
<input type="checkbox"/> 4 Business Days 35%	Client Acct No.: <b>13497</b>	Report To: <b>Paul Stoddard</b>	Invoice To: <b>Accounts Payable</b>					
<input type="checkbox"/> 3 Business Days 50%	Company Name: <b>EnSafe</b>	Address 1: <b>5724 Summer Trees Drive</b>	Company Name: <b>EnSafe-MEMPHIS, TN</b>					
<input type="checkbox"/> 2 Business Days 75%	Original Prep No.: <b>PSY377862</b>	Address 2:	Address 1: <b>5724 Summer Trees Drive</b>					
<input type="checkbox"/> Next Day by 6pm 100%	City, State Zip: <b>Memphis, TN 38134</b>	Address 2:	Address 2:					
<input type="checkbox"/> Next Day by Noon 150%	Phone No.: <b>(901) 372-7962</b>	City, State Zip: <b>Memphis, TN 38134</b>	City, State Zip:					
<input type="checkbox"/> Same Day 200%	Cell No.:	Phone No.: <b>901 - 372 - 7962</b>	Phone No.:					
<input checked="" type="checkbox"/> Samples submitted using the FreePumpLoan™ Program		Email reports to: <b>p.stoddard@ensafe.com</b>	Comments:	Comments:				
<input type="checkbox"/> Samples submitted using the FreeSamplingBadges™ Program		Online COC No.: <b>106022</b>	Comments: <b>CC: rthomas@ensafe.com</b>	P.O. No.:				
				Payment info.: <input type="checkbox"/> I will call SGS Galson to provide credit card info <input type="checkbox"/> Card on File (enter the last five digits on the line below)				

Comments:  
Shaw prep needed for vapor samples.

State Sampled: Please indicate which OEL(s) this data will be used for:  
 OSHA PEL  ACGIH TLV  MSHA  Cal OSHA  
 IAQ:  Other: Specify Limit(s) Specify Other

Site Name: <b>GTMO, Cuba</b>	Project: <b>Site Investigation</b>	Sampled By: <b>Robbie Thomas</b>	List description of industry or Process/interferences present in sampling area:				
Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in <sup>2</sup> , cm <sup>2</sup> , ft <sup>2</sup> *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
AV29IAHG16-5	4/16/16	226-17-1A	96 16:03	Lit. 155 ft <sup>2</sup>	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG17-5	4/16/16	226-17-1A	96 16:03	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG18-5	4/16/16	226-17-1A	96 16:08	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	

^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature			Date	Time	Print Name / Signature	Date	Time
Relinquished By: Robbie Thomas	Kohlie Stoddard	4/16/16	09:50	Received By: Zachary King	Zachary King	4/27/16	9:43	
Relinquished By:				Received By:				

\* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

Online COC No.: 106022  
Prep No.: PSY377862  
Account No.: 13497  
Draft: 4/14/2016 1:21:12 PM



# GALSON CHAIN OF CUSTODY

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in <sup>2</sup> , cm <sup>2</sup> , ft <sup>2</sup> *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
AV29IAHG15-5	4/16/16	226-17-1A	96 16:14	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG14-5	4/16/16	226-17-1A	96 16:20	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG13-5	4/16/16	226-17-1A	96 16:24	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG12-5	4/16/16	226-17-1A	96 16:29	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG11-5	4/16/16	226-17-1A	96 16:35	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHGDV-5	4/16/16	226-17-1A	96 16:48	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG22-5	4/17/16	226-17-1A	96 16:07	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG5-5	4/17/16	226-17-1A	96 16:11	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG23-5	4/17/16	226-17-1A	96 16:16	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG4-5	4/17/16	226-17-1A	96 16:19	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG3-5	4/17/16	226-17-1A	96 16:24	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	

^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature	Date	Time
Relinquished By:	Robbie Thomas	Zachary King	4/25/16	0950	Received By:	Zachary King	4/27/16	0433
Relinquished By:					Received By:			

\* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

Online COC No. : 106022

Prep No. : PSY377862

Account No. : 13497

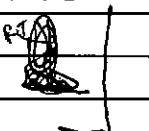
Draft : 4/14/2016 1:21:12 PM

# SGS

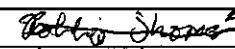
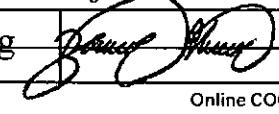
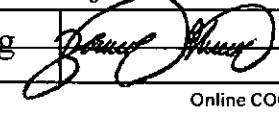
## GALSON

## CHAIN OF CUSTODY

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in <sup>2</sup> , cm <sup>2</sup> , ft <sup>2</sup> *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
AV29IAHG24-5	4/17/16	226-17-1A	96 16:29	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHG2-5	4/17/16	226-17-1A	96 16:32	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHGBLK-1	4/17/16	226-17-1A	0 16:35	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHGB10-2	4/22/16	226-17-1A	96 16:08	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHGLB-2	4/22/16	226-17-1A	96 15:54	Lit.	Mercury, vapor (low LOQ)	mod. NIOSH 6009; CVAA TUBE	
AV29IAHGBLK-2	4/22/16	226-17-1A	0	Lit.			
AV29IAHGBLK-3	4/22/16	226-17-1A	0	Lit.			
AV29IAHGB10-5	4/22/16	226-17-1A	96 16:03	Lit.			

^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature	Date	Time		Print Name / Signature	Date	Time
Relinquished By:				Received By:	Zachary King 	4/27/16	9:43
Relinquished By:	Robbie Thomas	Robbie Thomas	4/25/16 0950	Received By:			

\* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

Online COC No. : 106022

Prep No. : PSY377862

Account No. : 13497

Draft : 4/14/2016 1:21:12 PM

## Sample Receipt Documentation

## **Internal Chain of Custody**

## SGC GALSON INTERNAL CHAIN OF CUSTODY

PAGE 1 of 6

Login #	Client Name			Acct/Job #	VTSR	Debulk Date			
L373533		EnSafe-MEMPHIS, TN		13497	27-APR-16				
Lab ID.	Client ID	Matrix	Storage	Sequence No.	Date/Time	Action	Tech. Name	Department	
L373533-1	AV29IAHG16-5	226-17-1A	Freezer 5						
				1	04/27/2016 16:18	Check Out	MGROTH	Login	
				2	04/27/2016 16:30	Check In	KMURRAY	Login	
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep	
L373533-1	AV29IAHG16-5	OPTIONS	Cabinet 1						
				1	04/27/2016 16:18	Check Out	MGROTH	Login	
				2	04/27/2016 16:30	Check In	KMURRAY	Login	
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep	
L373533-2	AV29IAHG17-5	226-17-1A	Freezer 5						
				1	04/27/2016 16:18	Check Out	MGROTH	Login	
				2	04/27/2016 16:30	Check In	KMURRAY	Login	
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep	
L373533-3	AV29IAHG18-5	226-17-1A	Freezer 5						
				1	04/27/2016 16:18	Check Out	MGROTH	Login	
				2	04/27/2016 16:30	Check In	KMURRAY	Login	
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep	

## SGC GALSON INTERNAL CHAIN OF CUSTODY

PAGE 2 of 6

Login #	Client Name	Acct/Job #	VTSR	Debulk Date						
L373533	EnSafe-MEMPHIS, TN	13497	27-APR-16							
Lab ID.	Client ID	Matrix	Storage	Sequence No.	Date/Time	Action	Tech. Name	Department		
L373533-4	AV29IAHG15-5	226-17-1A	Freezer 5							
				1	04/27/2016 16:18	Check Out	MGROTH	Login		
				2	04/27/2016 16:30	Check In	KMURRAY	Login		
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep		
L373533-5	AV29IAHG14-5	226-17-1A	Freezer 5							
				1	04/27/2016 16:18	Check Out	MGROTH	Login		
				2	04/27/2016 16:30	Check In	KMURRAY	Login		
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep		
L373533-6	AV29IAHG13-5	226-17-1A	Freezer 5							
				1	04/27/2016 16:18	Check Out	MGROTH	Login		
				2	04/27/2016 16:30	Check In	KMURRAY	Login		
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep		
L373533-7	AV29IAHG12-5	226-17-1A	Freezer 5							
				1	04/27/2016 16:18	Check Out	MGROTH	Login		
				2	04/27/2016 16:30	Check In	KMURRAY	Login		
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep		

## SGC GALSON INTERNAL CHAIN OF CUSTODY

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Login #	Client Name	Acct/Job #	VTSR	Debulk Date						
L373533	EnSafe-MEMPHIS, TN	13497	27-APR-16							
Lab ID.	Client ID	Matrix	Storage	Sequence No.	Date/Time	Action	Tech. Name	Department		
L373533-8	AV29IAHG11-5	226-17-1A	Freezer 5							
				1	04/27/2016 16:18	Check Out	MGROTH	Login		
				2	04/27/2016 16:30	Check In	KMURRAY	Login		
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep		
L373533-9	AV29IAHGDV-5	226-17-1A	Freezer 5							
				1	04/27/2016 16:18	Check Out	MGROTH	Login		
				2	04/27/2016 16:30	Check In	KMURRAY	Login		
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep		
L373533-10	AV29IAHG22-5	226-17-1A	Freezer 5							
				1	04/27/2016 16:18	Check Out	MGROTH	Login		
				2	04/27/2016 16:30	Check In	KMURRAY	Login		
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep		
L373533-11	AV29IAHG5-5	226-17-1A	Freezer 5							
				1	04/27/2016 16:18	Check Out	MGROTH	Login		
				2	04/27/2016 16:30	Check In	KMURRAY	Login		
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep		

## SGC GALSON INTERNAL CHAIN OF CUSTODY

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Login #	Client Name	Acct/Job #	VTSR	Debulk Date						
L373533	EnSafe-MEMPHIS, TN	13497	27-APR-16							
Lab ID.	Client ID	Matrix	Storage	Sequence No.	Date/Time	Action	Tech. Name	Department		
L373533-12	AV29IAHG23-5	226-17-1A	Freezer 5							
				1	04/27/2016 16:18	Check Out	MGROTH	Login		
				2	04/27/2016 16:30	Check In	KMURRAY	Login		
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep		
L373533-13	AV29IAHG4-5	226-17-1A	Freezer 5							
				1	04/27/2016 16:18	Check Out	MGROTH	Login		
				2	04/27/2016 16:30	Check In	KMURRAY	Login		
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep		
L373533-14	AV29IAHG3-5	226-17-1A	Freezer 5							
				1	04/27/2016 16:18	Check Out	MGROTH	Login		
				2	04/27/2016 16:30	Check In	KMURRAY	Login		
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep		
L373533-15	AV29IAHG24-5	226-17-1A	Freezer 5							
				1	04/27/2016 16:18	Check Out	MGROTH	Login		
				2	04/27/2016 16:30	Check In	KMURRAY	Login		
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep		

## SGC GALSON INTERNAL CHAIN OF CUSTODY

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Login #	Client Name	Acct/Job #	VTSR	Debulk Date						
L373533	EnSafe-MEMPHIS, TN	13497	27-APR-16							
Lab ID.	Client ID	Matrix	Storage	Sequence No.	Date/Time	Action	Tech. Name	Department		
L373533-16	AV29IAHG2-5	226-17-1A	Freezer 5							
				1	04/27/2016 16:18	Check Out	MGROTH	Login		
				2	04/27/2016 16:30	Check In	KMURRAY	Login		
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep		
L373533-17	AV29IAHGBLK-1	226-17-1A	Freezer 5							
				1	04/27/2016 16:18	Check Out	MGROTH	Login		
				2	04/27/2016 16:30	Check In	KMURRAY	Login		
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep		
L373533-18	AV29IAHGLB-2	226-17-1A	Freezer 5							
				1	04/27/2016 16:18	Check Out	MGROTH	Login		
				2	04/27/2016 16:30	Check In	KMURRAY	Login		
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep		
L373533-19	AV29IAHGBLK-2	226-17-1A	Freezer 5							
				1	04/27/2016 16:18	Check Out	MGROTH	Login		
				2	04/27/2016 16:30	Check In	KMURRAY	Login		
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep		

## SGC GALSON INTERNAL CHAIN OF CUSTODY

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Login #	Client Name	Acct/Job #	VTSR	Debulk Date						
L373533	EnSafe-MEMPHIS, TN	13497	27-APR-16							
Lab ID.	Client ID	Matrix	Storage	Sequence No.	Date/Time	Action	Tech. Name	Department		
L373533-20	AV29IAHGBLK-3	226-17-1A	Freezer 5							
				1	04/27/2016 16:18	Check Out	MGROTH	Login		
				2	04/27/2016 16:30	Check In	KMURRAY	Login		
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep		
L373533-21	AV29IAHG27-5	226-17-1A	Freezer 5							
				1	04/27/2016 16:18	Check Out	MGROTH	Login		
				2	04/27/2016 16:30	Check In	KMURRAY	Login		
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep		
L373533-22	AV29IAHG10-2	226-17-1A	Freezer 5							
				1	04/27/2016 16:18	Check Out	MGROTH	Login		
				2	04/27/2016 16:30	Check In	KMURRAY	Login		
				3	04/27/2016 19:08	Check Out	ASPARANO	Metals Prep		

## Inorganic Metals

SGS Galson Laboratories received 22 samples for Metals analysis on April 27, 2016. The samples were assigned to SGS Galson Login: L373533. Samples were analyzed for Mercury by HGC following method mod. NIOSH 6009 CVAA.

Sample ID	Date Sampled	Date Analyzed
L373533-1 (AV29IAHG16-5)	April 16, 2016	April 28, 2016
L373533-2 (AV29IAHG17-5)	April 16, 2016	April 28, 2016
L373533-3 (AV29IAHG18-5)	April 16, 2016	April 28, 2016
L373533-4 (AV29IAHG15-5)	April 16, 2016	April 28, 2016
L373533-5 (AV29IAHG14-5)	April 16, 2016	April 28, 2016
L373533-6 (AV29IAHG13-5)	April 16, 2016	April 28, 2016
L373533-7 (AV29IAHG12-5)	April 16, 2016	April 28, 2016
L373533-8 (AV29IAHG11-5)	April 16, 2016	April 28, 2016
L373533-9 (AV29IAHGDV-5)	April 16, 2016	April 28, 2016
L373533-10 (AV29IAHG22-5)	April 17, 2016	April 28, 2016
L373533-11 (AV29IAHG5-5)	April 17, 2016	April 28, 2016
L373533-12 (AV29IAHG23-5)	April 17, 2016	April 28, 2016
L373533-13 (AV29IAHG4-5)	April 17, 2016	April 28, 2016
L373533-14 (AV29IAHG3-5)	April 17, 2016	April 28, 2016
L373533-15 (AV29IAHG24-5)	April 17, 2016	April 28, 2016
L373533-16 (AV29IAHG2-5)	April 17, 2016	April 28, 2016
L373533-17 (AV29IAHGBLK-1)	April 17, 2016	April 28, 2016
L373533-18 (AV29IAHGLB-2)	April 22, 2016	April 28, 2016
L373533-19 (AV29IAHGBLK-2)	April 22, 2016	April 28, 2016
L373533-20 (AV29IAHGBLK-3)	April 22, 2016	April 28, 2016
L373533-21 (AV29IAHG27-5)	April 22, 2016	April 28, 2016
L373533-22 (AV29IAHG10-2)	April 22, 2016	April 28, 2016

### Analysis Narrative

All samples were prepared on April 27, 2016 and were associated with analytical workgroup WG345621 and preparation workgroup WG345579. All ICV/CCV, ICB/CCB, DLS and blank spikes were within control limits.

Line through login number L373533 in raw data and on sequence denotes correction to a typo. Cross out does not represent erroneous or invalid data.

The samples were analyzed on HGC. The calibration for HGC was performed on April 28, 2016.

All method modifications are listed in the current revision of the following SOPs: MT-SOP-20 and MT-SOP-8.

### **Summary of Quality Control Measures**

- The initial calibration verification (ICV) and continuing calibration verification (CCV) standards are prepared from a separate source as the initial calibration. The control limits are 90 to 110%.
- Blanks consist of the reagent blank (ICB/CCB) and media blanks obtained from the laboratory supply.
- The detection limit standard is prepared from a separate source than the initial calibration. The control limits are 80 to 120%.
- Blank spikes are prepared in-house; the media is spiked with the analyte(s) of interest, then prepared and analyzed with the associated samples. The control limits for blank spikes are 80 to 120%.
- Matrix spikes are prepared in-house; the media is spiked with the analyte(s) of interest, then prepared and analyzed with the associated samples. The control limits for blank spikes are 75 to 125%.
- The control limits for Relative Percent Difference (RPD) between Spikes and Spike Duplicates is plus or minus 20%.
- The method blank, blank spike and blank spike duplicate recoveries are reported on the corresponding summary forms.

**Note:** The analysis narrative only addresses those nonconformances which may potentially impact sample data. An example of an issue that would not be addressed is a potential high bias for an analyte when all samples are below the reporting level. Another example would be a relative percent difference (RPD) for a set of laboratory spikes that is outside control limits, where the related recoveries are otherwise within limits.



GALSON

## Metals Preparation Summary/Custody Report

Work Group: WG345579Run ID: R390755Temp: 33 °CSOP ID: MT-SOP-8Time: 60 minTimer Used: 140650701Method: Mod. NIOSH 6009Acid Lot: 26983/26992

Sample	Matrix	Initial Wt.	Final Volume	Spike Lot #	Spike Amt	Pipette	Prep Date	Analyst
L373533-1	109	-	100 ml				04/27/16	AS
L373533-2	109	-	100 ml				04/27/16	AS
L373533-3	109	-	100 ml				04/27/16	AS
L373533-4	109	-	100 ml				04/27/16	AS
L373533-5	109	-	100 ml				04/27/16	AS
L373533-6	109	-	100 ml				04/27/16	AS
L373533-7	109	-	100 ml				04/27/16	AS
L373533-8	109	-	100 ml				04/27/16	AS
L373533-9	109	-	100 ml				04/27/16	AS
L373533-10	109	-	100 ml				04/27/16	AS
L373533-11	109	-	100 ml				04/27/16	AS
L373533-12	109	-	100 ml				04/27/16	AS
L373533-13	109	-	100 ml				04/27/16	AS
L373533-14	109	-	100 ml				04/27/16	AS
L373533-15	109	-	100 ml				04/27/16	AS
L373533-16	109	-	100 ml				04/27/16	AS
L373533-17	109	-	100 ml				04/27/16	AS
L373533-18	109	-	100 ml				04/27/16	AS
L373533-19	109	-	100 ml				04/27/16	AS
L373533-20	109	-	100 ml				04/27/16	AS



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## Metals Preparation Summary/Custody Report

Work Group: WG345579Run ID: R390755Temp: 33 °CSOP ID: MT-SOP-8Time: 60 minTimer Used: 140650701Method: Mod. NIOSH 6009Acid Lot: 26983/26992

Sample	Matrix	Initial Wt.	Final Volume	Spike Lot #	Spike Amt	Pipette	Date	Prep Analyst
L373533-21	109	-	100 ml				04/27/16	AS
L373533-22	109	-	100 ml				04/27/16	AS
WG345579-1	109	-	100 ml				04/27/16	AS
MBLANK								
WG345579-2 BS	109	-	100 ml	25289	.0001 ml	18	04/27/16	AS
WG345579-3 BSD	109	-	100 ml	25289	.0001 ml	18	04/27/16	AS
WG345579-4	109	-	100 ml				04/27/16	AS
MBLANK								
WG345579-5 BS	109	-	100 ml	25289	.0001 ml	18	04/27/16	AS
WG345579-6 BSD	109	-	100 ml	25289	.0001 ml	18	04/27/16	AS

## Prep Comments:

WG345579-4 RP #'s used: IM-R14, IM-R13, and IM-R5

WG345579-5 For pre-dilution information of 1000ppm Hg stock traceability, see "MT-FORM-2"

WG345579-6 BS/BSD Intermed. Used IH627782

Galson Laboratories

## List of Acronyms and Acceptable Limits for Metals - ICP, ICPMS, CVAA

ACRONYM	DEFINITION	LIMITS
MB	Method Blank	<LOQ
BS	Blank Spike	80-120%
BSD	Blank Spike Duplicate	80-120%
DLS	Detection Limit Standard	+/- 20%
WGXXXXX-XS	Matrix Spike	+/- 25%
WGXXXXX-XD	Matrix Spike Duplicate	+/- 25%
LXXXXX-XA	Analytical Post Spike	+/- 20%
LXXXXX-XL	Serial Dilution at 5x	+/- 10%
ICSA	Interelement Correction Standards	<LOQ
ICSAB	Interelement Correction Standards	+/- 20%
DLOQ	Level of Quantitation	20%
ICV	Initial Calibration Verification	10%
CCV	Continuing Calibration Verification	10%
ICB	Initial Calibration Blank	<LOQ
CCB	Continuing Calibration Blank	<LOQ
LRS	Linear Range Standard	10%
RLC-F	Regulatory Limit Check - Filter	10%
RLC-P	Regulatory Limit Check - Paint	10%
RLC-50W	Regulatory Limit Check - Wipe	10%

Outliers from the 80-120% limits are footnoted on the applicable reports.

CVAA	FILTER LOQ-ppb	TUBE LOQ-ppb	WIPE LOQ-ppb	BADGE LOQ-ppb
	Hg	0.2	0.3	0.2

**Inorganic Metals  
Quality Control Data**

## METHOD BLANK REPORT

Client EnSafe-MEMPHIS, TN  
Account No:13497  
Login No. L373533

Lab Sample ID		WG345579-1	WG345579-4						
Type		MBLANK	MBLANK						
Instrument		HGC	HGC						
Analysis Date		04/28/16	04/28/16						
Analysis Time		11:59	12:04						
LOQ (ug)	0.030	<0.030	<0.030						
Found (ug)		Found (ug)							
Mercury									

## BLANK SPIKE/BLANK SPIKE DUPLICATE REPORT

Client : EnSafe-MEMPHIS, TN  
 Account No: 13497  
 Login No. : L373533

Lab Sample ID Type Spike Lot # Instrument Analysis Date	Limits (%)	WG345579-2			WG345579-3			RPD	RPD Limits
		True Value (ug/sample)	Found (ug/sample)	Recovery (%)	True Value (ug/sample)	Found (ug/sample)	Recovery (%)		
Mercury	80.0 to 120.	0.100	0.0934	93.2	0.100	0.0921	91.9	1.40	-20.0 to 20.0

## BLANK SPIKE/BLANK SPIKE DUPLICATE REPORT

Client : EnSafe-MEMPHIS, TN  
 Account No: 13497  
 Login No. : L373533

Lab Sample ID Type Spike Lot # Instrument Analysis Date	Limits (%)	WG345579-5			WG345579-6			RPD	RPD Limits
		True Value (ug/sample)	Found (ug/sample)	Recovery (%)	True Value (ug/sample)	Found (ug/sample)	Recovery (%)		
Mercury	80.0 to 120.	0.100	0.0950	94.8	0.100	0.0932	93.0	1.92	-20.0 to 20.0

INITIAL/CONTINUING CALIBRATION REPORT

Client : EnSafe-MEMPHIS, TN  
Account No: 13497  
Login No. : L373533

Lab Sample ID Type Spike Lot # Instrument Analysis Date	Limits (%)	R390808-1								
		True Value (ppb)	Found (ppb)	Recovery (%)	True Value ( )	Found ( )	Recovery (%)	True Value ( )	Found ( )	Recovery (%)
Mercury	90.0 to 110.	3.00	3.03	101.						

## INITIAL/CONTINUING CALIBRATION REPORT

Client : EnSafe-MEMPHIS, TN  
 Account No: 13497  
 Login No. : L373533

Lab Sample ID Type Spike Lot # Instrument Analysis Date	Limits (%)	R390808-4			R390808-6			R390808-8		
		True Value (ppb)	Found (ppb)	Recovery (%)	True Value (ppb)	Found (ppb)	Recovery (%)	True Value (ppb)	Found (ppb)	Recovery (%)
Mercury	90.0 to 110.	3.00	3.07	102.	3.00	3.00	100.	3.00	3.01	100.

## INITIAL/CONTINUING CALIBRATION REPORT

Client : EnSafe-MEMPHIS, TN  
 Account No: 13497  
 Login No. : L373533

Lab Sample ID Type Spike Lot # Instrument Analysis Date	Limits (%)	R390808-10 CCV HGCV HGC Apr 28, 2016 12:31			R390808-12 CCV HGCV HGC Apr 28, 2016 12:49					
		True Value (ppb)	Found (ppb)	Recovery (%)	True Value (ppb)	Found (ppb)	Recovery (%)	True Value (ppb)	Found (ppb)	Recovery (%)
Mercury	90.0 to 110.	3.00	2.97	98.9	3.00	3.00	100.			

INITIAL/CONTINUING BLANK REPORT

Client EnSafe-MEMPHIS, TN  
Account No:13497  
Login No. L373533

Lab Sample ID Type Instrument Analysis Date Analysis Time		R390808-2 ICB HGC 04/28/16 11:08	R390808-5 CCB HGC 04/28/16 11:36	R390808-7 CCB HGC 04/28/16 11:54	R390808-9 CCB HGC 04/28/16 12:13	R390808-11 CCB HGC 04/28/16 12:32	R390808-13 CCB HGC 04/28/16 12:51	R390808-15 CCB HGC 04/28/16 13:02	
LOQ ppb	Found (ppb)	Found (ppb)	Found (ppb)	Found (ppb)	Found (ppb)	Found (ppb)	Found (ppb)	Found (ppb)	
Mercury	0.2	<.2	<.2	<.2	<.2	<.2	<.2	<.2	

DETECTION LIMIT STANDARD RECOVERY REPORT

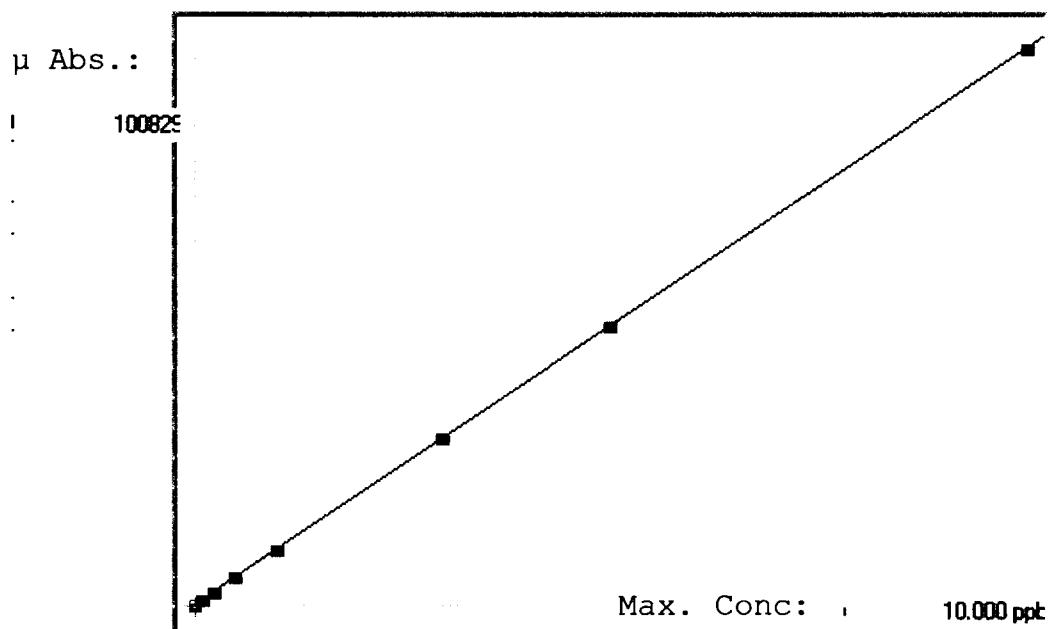
Client : EnSafe-MEMPHIS, TN  
Account No: 13497  
Login No. : L373533

Lab Sample ID Type Spike Lot # Instrument Analysis Date	Limits (%)	R390808-3								
		True Value (ppb)	Found (ppb)	Recovery (%)	True Value (ppb)	Found (ppb)	Recovery (%)	True Value (ppb)	Found (ppb)	Recovery (%)
Mercury	80.0 to 120.	0.200	0.186	92.8						

## **Metals Raw Data**

IH C042816

Linear



A= 0.0000e+000  
 B= 9.9255e-005  
 C= -2.3078e-002  
 Rho= 0.9999919  
 Accept=Accepted

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
Blank	0.000	-0.014	-0.014	88	0.000	88				
0.1	0.100	0.087	-0.013	1114	0.0 %	1114				
0.25	0.250	0.245	-0.005	2702	0.0 %	2702				
0.5	0.500	0.502	0.002	5289	0.0 %	5289				
1.0	1.000	1.014	0.014	10444	0.0 %	10444				
3.0	3.000	3.009	0.009	30551	0.0 %	30551				
5.0	5.000	5.022	0.022	50833	0.0 %	50833				
10.0	10.000	9.985	-0.015	100829	0.0 %	100829				

K&L 4/28/16  
 ac  
 4/28/16

## C042816

Method: IH	Operator: Admin	Date of Analysis: 28 Apr 2016 10:18:27					
Sample ID	Wt.	Mean	Stats Data	Units	Extended ID	Seq ID	Date
Blank	1.000	88		ppb		11301	28 Apr 2016 10:54:41
0.1	1.000	1114		ppb		11302	28 Apr 2016 10:56:14
0.25	1.000	2702		ppb		11303	28 Apr 2016 10:57:48
0.5	1.000	5289		ppb		11304	28 Apr 2016 10:59:22
1.0	1.000	10444		ppb		11305	28 Apr 2016 11:00:56
3.0	1.000	30551		ppb		11306	28 Apr 2016 11:02:30
5.0	1.000	50833		ppb		11307	28 Apr 2016 11:04:04
10.0	1.000	100829		ppb		11308	28 Apr 2016 11:05:37
CCV	1.000	3.0335	3.0231, 3.0439,	ppb		11309	28 Apr 2016 11:07:13
CCB	1.000	-0.0567	-0.0567, -0.0567,	ppb		11310	28 Apr 2016 11:08:57
DLS	1.000	0.1856	0.1854, 0.1858,	ppb	WG345533-1 WG345533-2 WG345533-3 L373441-1 L373110-1 L373110-2 L373110-3 L373110-4 L373110-5 CCV	11311	28 Apr 2016 11:10:31
WG345533-1	1.000	-0.0174	-0.0175, -0.0172,	ppb		11312	28 Apr 2016 11:20:26
WG345533-2	1.000	0.9883	0.9827, 0.9939,	ppb		11313	28 Apr 2016 11:21:59
WG345533-3	1.000	1.0027	0.9933, 1.0122,	ppb		11314	28 Apr 2016 11:23:32
L373441-1	1.000	0.2751	0.2701, 0.2801,	ppb		11315	28 Apr 2016 11:25:06
L373110-1	1.000	1.2747	1.2690, 1.2804,	ppb		11316	28 Apr 2016 11:26:40
L373110-2	1.000	0.2165	0.2156, 0.2174,	ppb		11317	28 Apr 2016 11:28:14
L373110-3	1.000	4.4801	4.4500, 4.5102,	ppb		11318	28 Apr 2016 11:29:49
L373110-4	1.000	1.6305	1.6216, 1.6394,	ppb		11319	28 Apr 2016 11:31:23
L373110-5	1.000	-0.0353	-0.0352, -0.0355,	ppb		11320	28 Apr 2016 11:32:59
CCV	1.000	3.0701	3.0395, 3.1007,	ppb		11321	28 Apr 2016 11:34:35
CCB	1.000	-0.0534	-0.0535, -0.0532,	ppb		11322	28 Apr 2016 11:36:09
L373298-2	1.000	-0.0138	-0.0143, -0.0134,	ppb		11323	28 Apr 2016 11:37:43
L373298-4	1.000	0.3303	0.3286, 0.3321,	ppb		11324	28 Apr 2016 11:39:18
L373298-5	1.000	-0.0220	-0.0221, -0.0219,	ppb		11325	28 Apr 2016 11:40:53
L373298-6	1.000	-0.0198	-0.0193, -0.0202,	ppb		11326	28 Apr 2016 11:42:27
L373298-7	1.000	-0.0229	-0.0229, -0.0229,	ppb		11327	28 Apr 2016 11:44:01
L373298-8	1.000	-0.0231	-0.0231, -0.0231,	ppb		11328	28 Apr 2016 11:45:34
L373298-9	1.000	-0.0175	-0.0178, -0.0171,	ppb		11329	28 Apr 2016 11:47:06
L373298-10	1.000	-0.0175	-0.0177, -0.0172,	ppb		11330	28 Apr 2016 11:48:40
L373434-1	1.000	0.0108	0.0106, 0.0110,	ppb		11331	28 Apr 2016 11:50:13
L373434-2	1.000	0.1156	0.1141, 0.1171,	ppb		11332	28 Apr 2016 11:51:47
CCV	1.000	3.0028	2.9950, 3.0107,	ppb		11333	28 Apr 2016 11:53:21
CCB	1.000	-0.0540	-0.0537, -0.0542,	ppb		11334	28 Apr 2016 11:54:55
L373434-3	1.000	0.0085	0.0088, 0.0083,	ppb		11335	28 Apr 2016 11:56:30
L373434-4	1.000	-0.0217	-0.0221, -0.0213,	ppb		11336	28 Apr 2016 11:58:03
WG345579-1	1.000	-0.0147	-0.0148, -0.0146,	ppb		11337	28 Apr 2016 11:59:38
WG345579-2	1.000	0.9336	0.9305, 0.9367,	ppb		11338	28 Apr 2016 12:01:13
WG345579-3	1.000	0.9205	0.9125, 0.9286,	ppb		11339	28 Apr 2016 12:02:49
WG345579-4	1.000	-0.0273	-0.0277, -0.0268,	ppb		11340	28 Apr 2016 12:04:23
WG345579-5	1.000	0.9495	0.9486, 0.9504,	ppb		11341	28 Apr 2016 12:05:58
WG345579-6	1.000	0.9317	0.9306, 0.9328,	ppb		11342	28 Apr 2016 12:07:32
L343533-1	1.000	-0.0061	-0.0061, -0.0061,	ppb		11343	28 Apr 2016 12:09:06
L343533-2	1.000	0.0115	0.0109, 0.0121,	ppb		11344	28 Apr 2016 12:10:41
CCV	1.000	3.0096	3.0006, 3.0186,	ppb		11345	28 Apr 2016 12:12:14
CCB	1.000	-0.0537	-0.0536, -0.0537,	ppb		11346	28 Apr 2016 12:13:49
L343533-3	1.000	0.0115	0.0117, 0.0113,	ppb		11347	28 Apr 2016 12:15:23
L343533-4	1.000	0.0093	0.0094, 0.0092,	ppb		11348	28 Apr 2016 12:16:57
L343533-5	1.000	0.0077	0.0075, 0.0080,	ppb		11349	28 Apr 2016 12:18:31
L343533-6	1.000	0.0072	0.0072, 0.0072,	ppb		11350	28 Apr 2016 12:20:05
L343533-7	1.000	0.0073	0.0073, 0.0073,	ppb		11351	28 Apr 2016 12:21:40
L343533-8	1.000	0.0068	0.0065, 0.0072,	ppb		11352	28 Apr 2016 12:23:15
L343533-9	1.000	0.0044	0.0044, 0.0043,	ppb		11353	28 Apr 2016 12:24:50
L343533-10	1.000	0.0132	0.0129, 0.0134,	ppb		11354	28 Apr 2016 12:26:24
L343533-11	1.000	0.0087	0.0085, 0.0089,	ppb		11355	28 Apr 2016 12:27:58
L343533-12	1.000	0.0098	0.0093, 0.0103,	ppb		11356	28 Apr 2016 12:29:32
CCV	1.000	2.9674	2.9448, 2.9899,	ppb		11357	28 Apr 2016 12:31:05
CCB	1.000	-0.0579	-0.0578, -0.0580,	ppb		11358	28 Apr 2016 12:32:39
L343533-13	1.000	0.0079	0.0079, 0.0080,	ppb		11359	28 Apr 2016 12:34:14
L343533-14	1.000	0.0064	0.0061, 0.0066,	ppb		11360	28 Apr 2016 12:35:48
L343533-15	1.000	0.0073	0.0073, 0.0074,	ppb		11361	28 Apr 2016 12:37:22
L343533-16	1.000	0.0061	0.0059, 0.0063,	ppb		11362	28 Apr 2016 12:38:56
L343533-17	1.000	-0.0142	-0.0145, -0.0139,	ppb		11363	28 Apr 2016 12:40:30
L343533-18	1.000	0.0067	0.0063, 0.0072,	ppb		11364	28 Apr 2016 12:42:04
L343533-19	1.000	-0.0150	-0.0151, -0.0148,	ppb		11365	28 Apr 2016 12:43:39
L343533-20	1.000	-0.0142	-0.0144, -0.0140,	ppb		11366	28 Apr 2016 12:45:14
L343533-21	1.000	0.0145	0.0144, 0.0145,	ppb		11367	28 Apr 2016 12:46:49
L343533-22	1.000	0.0015	0.0012, 0.0018,	ppb		11368	28 Apr 2016 12:48:23
CCV	1.000	3.0003	2.9726, 3.0279,	ppb		11369	28 Apr 2016 12:49:57
CCB	1.000	-0.0527	-0.0526, -0.0529,	ppb		11370	28 Apr 2016 12:51:31
WG345580-1	1.000	-0.0083	-0.0086, -0.0080,	ppb		11371	28 Apr 2016 12:53:06
WG345580-2	1.000	0.9757	0.9713, 0.9801,	ppb		11372	28 Apr 2016 12:54:39
WG345580-3	1.000	0.9569	0.9537, 0.9601,	ppb		11373	28 Apr 2016 12:56:13
L373539-1	1.000	-0.0150	-0.0151, -0.0149,	ppb		11374	28 Apr 2016 12:57:48

4/16/2016

C042816

Method: IH Operator: Admin

Date of Analysis: 28 Apr 2016 10:18:27

Sample ID	Wt.	Mean	Stats Data	Units	Extended ID	Seq ID	Date
L373539-2	1.000	-0.0058	-0.0055, -0.0061,	ppb		11375	28 Apr 2016 12:59:23
CCV	1.000	2.8759	2.8739, 2.8778,	ppb		11376	28 Apr 2016 13:00:57
CCB	1.000	-0.0533	-0.0534,	ppb		11377	28 Apr 2016 13:02:31

4/28/16  
PAC

COY28/16

Rack	Cup	Sample ID	Extended ID	Wt.	Vol.	Cup Action
1	1	DLS	WG345621	1.0000	1.0000	
1	2	WG345533-1		1.0000	1.0000	
1	3	WG345533-2		1.0000	1.0000	
1	4	WG345533-3		1.0000	1.0000	
1	5	L373441-1		1.0000	1.0000	
1	6	L373110-1		1.0000	1.0000	
1	7	L373110-2		1.0000	1.0000	
1	8	L373110-3		1.0000	1.0000	
1	9	L373110-4		1.0000	1.0000	
1	10	L373110-5		1.0000	1.0000	
1	11	L373298-2		1.0000	1.0000	
1	12	L373298-4		1.0000	1.0000	
1	13	L373298-5		1.0000	1.0000	
1	14	L373298-6		1.0000	1.0000	
1	15	L373289-7		1.0000	1.0000	
1	16	L373289-8		1.0000	1.0000	
1	17	L373289-9		1.0000	1.0000	
1	18	L373289-10		1.0000	1.0000	
1	19	L373434-1		1.0000	1.0000	
1	20	L373434-2		1.0000	1.0000	
1	21	L373434-3		1.0000	1.0000	
1	22	L373434-4		1.0000	1.0000	
1	23	WG345579-1		1.0000	1.0000	
1	24	WG345579-2		1.0000	1.0000	
1	25	WG345579-3		1.0000	1.0000	
1	26	WG345579-4		1.0000	1.0000	
1	27	WG345579-5		1.0000	1.0000	
1	28	WG345579-6		1.0000	1.0000	
1	29	L343533-1		1.0000	1.0000	
1	30	L343533-2		1.0000	1.0000	
1	31	L343533-3		1.0000	1.0000	
1	32	L343533-4		1.0000	1.0000	
1	33	L343533-5		1.0000	1.0000	
1	34	L343533-6		1.0000	1.0000	
1	35	L343533-7		1.0000	1.0000	
1	36	L343533-8		1.0000	1.0000	
1	37	L343533-9		1.0000	1.0000	
1	38	L343533-10		1.0000	1.0000	
1	39	L343533-11		1.0000	1.0000	
1	40	L343533-12		1.0000	1.0000	

kg 4/28/16  
L373533-\*

Rack	Cup	Sample ID	Extended ID	Wt.	Vol.	Cup Action
1	41	L343533-13		1.0000	1.0000	
1	42	L343533-14		1.0000	1.0000	
1	43	L343533-15		1.0000	1.0000	
1	44	L343533-16		1.0000	1.0000	
1	45	L343533-17		1.0000	1.0000	
1	46	L343533-18		1.0000	1.0000	
1	47	L343533-19		1.0000	1.0000	
1	48	L343533-20		1.0000	1.0000	
1	49	L343533-21	164407	1.0000	1.0000	
1	50	L343533-22		1.0000	1.0000	
1	51	WG345580-1		1.0000	1.0000	
1	52	WG345580-2		1.0000	1.0000	
1	53	WG345580-3		1.0000	1.0000	
1	54	L373539-1		1.0000	1.0000	
1	55	L373539-2		1.0000	1.0000	
1	56			1.0000	1.0000	
1	57			1.0000	1.0000	
1	58			1.0000	1.0000	
1	59			1.0000	1.0000	
1	60			1.0000	1.0000	
2	1			1.0000	1.0000	
2	2			1.0000	1.0000	
2	3			1.0000	1.0000	
2	4			1.0000	1.0000	
2	5			1.0000	1.0000	
2	6			1.0000	1.0000	
2	7			1.0000	1.0000	
2	8			1.0000	1.0000	
2	9			1.0000	1.0000	
2	10			1.0000	1.0000	
2	11			1.0000	1.0000	
2	12			1.0000	1.0000	
2	13			1.0000	1.0000	
2	14			1.0000	1.0000	
2	15			1.0000	1.0000	
2	16			1.0000	1.0000	
2	17			1.0000	1.0000	
2	18			1.0000	1.0000	
2	19			1.0000	1.0000	
2	20			1.0000	1.0000	

04/28/16 12:30:39

2/5 282  
Paw/Heather

## Standards Prep Logs





**Hg DLS Standard**

Working std. matrix: 1% HNO<sub>3</sub>  
 (0.5ml of HNO<sub>3</sub> to 50ml final vol.)

Page # \_\_\_\_\_

ID	Element	Stk. conc.	Vol.	Stock Soln	
				Final Vol.	Final conc.
Working Std.	Hg	1000 ppm	50 ul (1)	50 ml	1 ppm

Final matrix: 2.5% HNO<sub>3</sub>, 2.5% HCl(2.5ml HNO<sub>3</sub>; 2.5ml HCl to 100ml final vol.)

ID	Volume of Working Std.	Working Std. Conc.	Final Vol.	Final conc.
DLS	20 ul (1)	1 ppm	100 ml	0.2 ppb

HNO <sub>3</sub> Acid ID #	HCl Acid ID #	PREP DATE	ANALYST INITIALS	Hg Stock #
26791	267105	3/25/16	PML	25289
26758	26694	3/31/16	PML	25289
26701	26696	4/15/16	PML	25289
26907	26766	4/11/16	PML	25289
26792	26695	4/13/16	PML	25289
267601	26795	4/18/16	PML	25289
26987	26767	4/22/16	PML	25289
26988	26992	4/26/16	COM/PML	25289

( # ) : # = pipette number used

**ALL STANDARDS ARE MADE FRESH DAILY**

## Hg Blank Spike

Intermediate matrix: 1% HNO<sub>3</sub>  
(0.5ml of HNO<sub>3</sub> to a 50ml final vol.)

Page # \_\_\_\_\_

ID	Element	Stk. conc.	Vol.	Stock Soln	
				Final Vol.	Final Conc
BS Intermediate Std.	Hg	1000 ppm	50 ul (1)	50 ml	1 ppm

ID	Volume of BS Intermediate Std.	Int. Conc.	Final Conc	Final ug
BS	100 ul / 100 ml final volume (4) 200 ul / 200 ml final volume (4)	1 ppm	1.0 ppb	0.2 ug

HNO <sub>3</sub> Acid ID #	PREP DATE	ANALYST INITIALS	HG Stock #	HNO <sub>3</sub> Acid ID #	PREP DATE	ANALYST INITIALS	HG Stock #
26338	1/11/16	PML/MSD	25289	26701	4/5/16	PML	25289
26338	1/12/16	JAR	25289	26907	4/10/16	PML	25289
26400	1/13/16	AS	25289	26792	4/13/16	PML	25289
26401	1/15/16	AS	25289	26761	4/18/16	PML	25289
26339	1/21/16	PML	25289	26987	4/22/16	PML	25289
26322	1/26/16	MJD	25289	26988	4/26/16	GSM/PML	25289
26325	1/29/16	JAR	25289				
26326	2/3/16	PML	25289				
260539	2/9/16	PML	25289				
260581	2/15/16	AS	25289				
260581	2/17/16	PML	25289				
260584	2/19/16	JAR	25289				
260584	2/23/16	MSD	25289				
26601	2/25/16	PML	25289				
26600	2/26/16	PML	25289				
26604	3/1/16	PML	25289				
26603	3/3/16	JAR	25289				
26603	3/7/16	MSD/PML	25289				
26605	3/8/16	PML	25289				
26617	3/10/16	MJD	25289				
26697	3/11/16	PML	25289				
26763	3/12/16	JAR	25289				
26791	3/25/16	PML	25289				
26758	3/31/16	PML	25289				

ALL STANDARDS ARE MADE FRESH DAILY

( # ) : # = pipette used.

NOTE: 100 ml final volume; 0.03 ug LOQ  
200 ml final volume; 0.06 ug LOQ

## STANNOUS CHLORIDE

Weigh out 50 grams of SnCl<sub>2</sub>, transfer to a 500mL volumetric flask, add 50 mls of 18.2MOHM water, add 50 ml of concentrated HCl, dilute to volume with 18.2MOHM water.  
Heat solution on a hot plate and stir until completely dissolved.

UNIQUE ID#	PREP DATE	INITIALS	SnCl <sub>2</sub> ID#	HCL ID#	EXPIRATION DATE
0153-081-1	1-11-16	PW	25427	26309	1-12-16
0153-081-2	1/12/16	JAR	25427	26309	1/13/16
0153-081-3	1/13/16	PW	25427	26309	1/14/16
0153-081-4	1/15/16	AS	25427	26309	1/16/16
0153-081-5	1/21/16	PW	25427	26407	1/22/16
0153-081-6	1/26/16	PW	25427	26408	1/27/16
0153-081-7	1/29/16	PW	25427	26311	1/30/16
0153-081-8	2/3/16	PW	25428	26311	2/4/16
0153-081-9	2/9/16	PW	25428	26347	2/9/16
0153-081-10	2/15/16	AS	25427	263410	2/16/16
0153-081-11	2/17/16	PW	25428	25948	2/18/16
0153-081-12	2/19/16	JAR	25428	25948	2/20/16
0153-081-13	2/23/16	PW	25428	25948	2/24/16
0153-081-14	2/25/16	PW	25428	25948	2/26/16
0153-081-15	2/26/16	PW	25428	26542	2/27/16
0153-081-16	3/1/16	PW	25428	26542	3/2/16
0153-081-17	3/3/16	JAR	25428	26578	3/3/16
0153-081-18	3/7/16	PW	25428	26578	3/8/16
0153-081-19	3/8/16	PW	25429	26578	3/9/16
0153-081-20	3/10/16	PW	25429	26578	3/11/16
0153-081-21	3/11/16	PW	25429	26578	3/12/16
0153-081-22	3/17/16	PW	25429	26541	3/18/16
0153-081-23	3/25/16	PW	25429	268765	3/26/16
0153-081-24	3/31/16	PW	25429	266696	4/1/16
0153-081-25	4/5/16	PW	25429	266696	4/6/16
0153-081-26	4/11/16	PW	25429	26766	4/12/16
0153-081-27	4/13/16	PW	25429	266695	4/14/16
0153-081-28	4/18/16	PW	25430	26796	4/19/16
0153-081-29	4/22/16	PW	26767	254130 / 26764	4/23/16
0153-081-30	4/26/16	PW/OSM	25430	26992	4/29/16

SnCl<sub>2</sub> is prepared fresh daily.





GALSON

## Galson Chemical Inventory Report

05/12/2016 11:47

Ref	Description	Location	Dept	Date Received	Expire Date	Dispose Date	D
26988	NITRIC ACID	METALS ACID CABI	14MT	04/20/2016	11/19/2017	04/28/2016	
	<b>Vendor</b> Fisher	<b>Manufacturer</b> FISHER	<b>Lot No</b> 1115110				
	<b>Comments</b>						
Cas Num	Chemical Name	% Purity	Conc(ug/mL)				
7697-37-2	NITRIC ACID	69					



GALSON

## Galson Chemical Inventory Report

05/11/2016 11:03

Ref	Description	Location	Dept	Date Received	Expire Date	Dispose Date	D
26992	HYDROCHLORIC ACID	METALS ACID CABI	14MT	04/20/2016	01/27/2019	04/28/2016	
<b>Vendor</b>	Fisher	<b>Manufacturer</b>	FISHER	<b>Lot No</b>	4115120		
<b>Comments</b>							
	Cas Num	Chemical Name		% Purity	Conc(ug/mL)		
	7647-01-0	HYDROCHLORIC ACID		35			



GALSON

## Galson Chemical Inventory Report

05/09/2016 11:22

Ref	Description	Location	Dept	Date Received	Expire Date	Dispose Date	D
25289	MERCURY	METALS STD CABIN	14MT	06/19/2015	06/19/2016		
<i>Vendor</i>	Inorganic	<i>Manufacturer</i>	INORGANIC	<i>Lot No</i>	J2-HG02133		
<b>Comments</b>							
	Cas Num	Chemical Name		% Purity	Conc(ug/mL)		
	7439-97-6	MERCURY			1002		



GALSON

## Galson Chemical Inventory Report

05/09/2016 11:22

Ref	Description	Location	Dept	Date Received	Expire Date	Dispose Date	D
25286	MERCURY	METALS STD CABIN	14MT	06/19/2015	06/19/2016		
<i>Vendor</i>	Spex	<i>Manufacturer</i>	SPEX	<i>Lot No</i>	CL7-180HGY		
<i>Comments</i>							
	Cas Num	Chemical Name		% Purity	Conc(ug/mL)		
	7439-97-6	MERCURY			1003		

## Galson Chemical Inventory Report

05/09/2016 11:22

Ref	Description	Location	Dept	Date Received	Expire Date	Dispose Date	D
25430	TIN (II) CHLORIDE	METALS	14MT	07/13/2015	07/13/2020		
<b>Vendor</b>	Fisher	<b>Manufacturer</b>	ACROS	<b>Lot No</b>	A0346250		
<b>Comments</b>							
	<b>Cas Num</b>		<b>Chemical Name</b>	<b>% Purity</b>	<b>Conc(ug/mL)</b>		
	7772-99-8		STANNOUS CHLORIDE	99.5			



GALSON

## Galson Chemical Inventory Report

05/09/2016 11:22

Ref	Description	Location	Dept	Date Received	Expire Date	Dispose Date	D								
26695	HYDROCHLORIC ACID	METALS ACID CABI	14MT	03/01/2016	11/16/2018	04/13/2016									
<b>Vendor</b> Fisher <b>Manufacturer</b> FISHER <b>Lot No</b> 4115100															
<b>Comments</b>															
<table><thead><tr><th>Cas Num</th><th>Chemical Name</th><th>% Purity</th><th>Conc(ug/mL)</th></tr></thead><tbody><tr><td>7647-01-0</td><td>HYDROCHLORIC ACID</td><td>36</td><td></td></tr></tbody></table>								Cas Num	Chemical Name	% Purity	Conc(ug/mL)	7647-01-0	HYDROCHLORIC ACID	36	
Cas Num	Chemical Name	% Purity	Conc(ug/mL)												
7647-01-0	HYDROCHLORIC ACID	36													

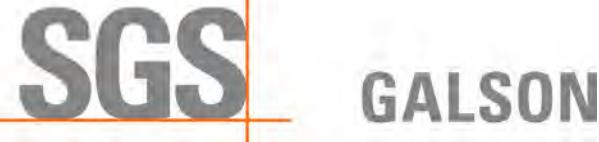


GALSON

## Galson Chemical Inventory Report

05/12/2016 11:47

Ref	Description	Location	Dept	Date Received	Expire Date	Dispose Date	D
26983	NITRIC ACID	METALS ACID CABI	14MT	04/20/2016	11/19/2017	04/27/2016	
	<b>Vendor</b> Fisher	<b>Manufacturer</b> FISHER	<b>Lot No</b> 1115110				
	<b>Comments</b>						
Cas Num	Chemical Name	% Purity	Conc(ug/mL)				
7697-37-2	NITRIC ACID	69					



## Galson Laboratories - Standards Report

Lot: IH628043

05/09/2016

Derivatizing Agent: N/A

<u>Standard ID:</u>	<u>Description:</u>	<u>Final Volume:</u>	<u>Analyst:</u>	<u>Prep. Date:</u>	<u>Expiration Date:</u>
IH628043	Hg @ 1ppm - BS/BSD/ - Curve	50.0000 mL	PLISZEWSKI	04/28/2016	04/29/2016

<u>Component ID(s)</u>		<u>Initial Vol.</u>	<u>Analyst</u>	<u>Expiration Date</u>
17975	MILLIQ WATER	49.4500 ml	NA	03/25/2035

<u>CAS #</u>	<u>Description</u>	<u>Initial Conc.</u>	<u>Initial Weight</u>	<u>Final Conc.</u>
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7732-18-5	Water			
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<u>Component ID(s)</u>		<u>Initial Vol.</u>	<u>Analyst</u>	<u>Expiration Date</u>
25289	MERCURY	0.0500 ml	NA	06/19/2016

<u>CAS #</u>	<u>Description</u>	<u>Initial Conc.</u>	<u>Initial Weight</u>	<u>Final Conc.</u>
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7439-97-6	MERCURY	1,002.0000 ug/mL		1.0020 ug/mL
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<u>Component ID(s)</u>		<u>Initial Vol.</u>	<u>Analyst</u>	<u>Expiration Date</u>
26988	NITRIC ACID	0.5000 ml	NA	11/19/2017

<u>CAS #</u>	<u>Description</u>	<u>Initial Conc.</u>	<u>Initial Weight</u>	<u>Final Conc.</u>
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7697-37-2	NITRIC ACID			
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## Galson Laboratories - Standards Report

Lot: IH628062

05/09/2016

Derivatizing Agent: N/A

<u>Standard ID:</u>	<u>Description:</u>	<u>Final Volume:</u>	<u>Analyst:</u>	<u>Prep. Date:</u>	<u>Expiration Date:</u>
IH628062	Hg @ 1ppm - CCV	50.0000 mL	PLISZEWSKI	04/28/2016	04/29/2016

<u>Component ID(s)</u>		<u>Initial Vol.</u>	<u>Analyst</u>	<u>Expiration Date</u>
17975	MILLIQ WATER	49.4500 ml	NA	03/25/2035

<u>CAS #</u>	<u>Description</u>	<u>Initial Conc.</u>	<u>Initial Weight</u>	<u>Final Conc.</u>
7732-18-5	Water			

<u>Component ID(s)</u>		<u>Initial Vol.</u>	<u>Analyst</u>	<u>Expiration Date</u>
25286	MERCURY	0.0500 ml	NA	06/19/2016

<u>CAS #</u>	<u>Description</u>	<u>Initial Conc.</u>	<u>Initial Weight</u>	<u>Final Conc.</u>
7439-97-6	MERCURY	1,003.0000 ug/mL		1.0030 ug/mL

<u>Component ID(s)</u>		<u>Initial Vol.</u>	<u>Analyst</u>	<u>Expiration Date</u>
26988	NITRIC ACID	0.5000 ml	NA	11/19/2017

<u>CAS #</u>	<u>Description</u>	<u>Initial Conc.</u>	<u>Initial Weight</u>	<u>Final Conc.</u>
7697-37-2	NITRIC ACID			



## Galson Laboratories - Standards Report

Lot: IH627782

05/10/2016

Derivatizing Agent: N/A

Standard ID:	Description:	Final Volume:	Analyst:	Prep. Date:	Expiration Date:
IH627782	Hg BS BSD	50.0000 mL	ASPARANO	04/27/2016	04/28/2016

<u>Component ID(s)</u>			<u>Initial Vol.</u>	<u>Analyst</u>	<u>Expiration Date</u>
17975		MILLIQ WATER	49.4500	ML	NA 03/25/2035

<u>CAS #</u>	<u>Description</u>	<u>Initial Conc.</u>	<u>Initial Weight</u>	<u>Final Conc.</u>
7732-18-5	Water			

<u>Component ID(s)</u>			<u>Initial Vol.</u>	<u>Analyst</u>	<u>Expiration Date</u>
25289		MERCURY	0.0500	ML	NA 06/19/2016

<u>CAS #</u>	<u>Description</u>	<u>Initial Conc.</u>	<u>Initial Weight</u>	<u>Final Conc.</u>
7439-97-6	MERCURY	1,002.0000	ug/mL	1.0020 ug/mL

<u>Component ID(s)</u>			<u>Initial Vol.</u>	<u>Analyst</u>	<u>Expiration Date</u>
26983		NITRIC ACID	0.5000	ML	NA 11/19/2017

<u>CAS #</u>	<u>Description</u>	<u>Initial Conc.</u>	<u>Initial Weight</u>	<u>Final Conc.</u>
7697-37-2	NITRIC ACID			

**B-2**  
**Soil**

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-124511-1

Client Project/Site: Site Investigation/JMB5

Revision: 1

For:

Earth Toxics, Inc

PO BOX 3382

Logan, Utah 84321

Attn: Mike Dryden



Authorized for release by:

5/13/2016 6:29:52 PM

Robert Bearden, Project Manager I

(912)354-7858

[robert.bearden@testamericainc.com](mailto:robert.bearden@testamericainc.com)

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### LINKS

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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.

## Definitions/Glossary

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

### Qualifiers

#### Metals

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
B	Blank contamination: The analyte was detected above one-half the reporting limit in an associated blank.
D	The reported value is from a dilution.
Q	One or more quality control criteria failed.
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.

### Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

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## Sample Summary

Client: Earth Toxics, Inc  
 Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-124511-1	AOP SB S01	Solid	10/15/15 10:05	04/26/16 10:00
680-124511-2	AOP SB S02	Solid	10/15/15 10:10	04/26/16 10:00
680-124511-3	AOP SB S03	Solid	10/15/15 10:15	04/26/16 10:00
680-124511-4	AOP CB S03	Solid	10/15/15 10:15	04/26/16 10:00
680-124511-5	AOP SB S04	Solid	10/15/15 10:20	04/26/16 10:00
680-124511-6	AOP SB S05	Solid	10/15/15 10:25	04/26/16 10:00
680-124511-7	AOP SB S06	Solid	10/15/15 10:30	04/26/16 10:00
680-124511-8	AOP SB S07	Solid	10/15/15 10:40	04/26/16 10:00
680-124511-9	AOP SB S08	Solid	10/15/15 10:45	04/26/16 10:00
680-124511-10	AOP SB S09	Solid	10/15/15 11:10	04/26/16 10:00
680-124511-11	AOP SB S10	Solid	10/15/15 11:05	04/26/16 10:00
680-124511-12	AOP SB S11	Solid	10/15/15 11:20	04/26/16 10:00
680-124511-13	AOP SB S12	Solid	10/15/15 11:25	04/26/16 10:00
680-124511-14	AOP SB S13	Solid	10/15/15 11:30	04/26/16 10:00
680-124511-15	AOP SB S14	Solid	10/15/15 11:35	04/26/16 10:00
680-124511-16	AOP CB S14	Solid	10/15/15 11:35	04/26/16 10:00

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# Case Narrative

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

**Job ID: 680-124511-1**

**Laboratory: TestAmerica Savannah**

Narrative

## CASE NARRATIVE

**Client: Earth Toxics, Inc**

**Project: Site Investigation/JMB5**

**Report Number: 680-124511-1**

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 the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

### **REVISED REPORT**

This report constitutes a revised report. The original report was re-issued to incorporate dry weight correction for soils and edits to the Case Narrative text.

### **RECEIPT**

The samples were received on 4/26/2016 10:00 AM. The samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.9° C and 4.4° C.

### **Receipt Exceptions**

The following samples was received outside of holding time: AOP SB S01 (680-124511-1), AOP SB S02 (680-124511-2), AOP SB S03 (680-124511-3), AOP CB S03 (680-124511-4), AOP SB S04 (680-124511-5), AOP SB S05 (680-124511-6), AOP SB S06 (680-124511-7), AOP SB S07 (680-124511-8), AOP SB S08 (680-124511-9), AOP SB S09 (680-124511-10), AOP SB S09 (680-124511-10[MS]), AOP SB S09 (680-124511-10[MSD]), AOP SB S10 (680-124511-11), AOP SB S11 (680-124511-12), AOP SB S12 (680-124511-13), AOP SB S13 (680-124511-14), AOP SB S14 (680-124511-15) and AOP CB S14 (680-124511-16).

The client was contacted on 4/26/16 and advised to proceed with metals analysis minus mercury.

### **METALS (ICP-MS)**

Samples AOP SB S01 (680-124511-1), AOP SB S02 (680-124511-2), AOP SB S03 (680-124511-3), AOP CB S03 (680-124511-4), AOP SB S04 (680-124511-5), AOP SB S05 (680-124511-6), AOP SB S06 (680-124511-7), AOP SB S07 (680-124511-8), AOP SB S08 (680-124511-9), AOP SB S09 (680-124511-10), AOP SB S10 (680-124511-11), AOP SB S11 (680-124511-12), AOP SB S12 (680-124511-13), AOP SB S13 (680-124511-14), and AOP SB S14 (680-124511-15) and AOP CB S14 (680-124511-16) were analyzed for Metals (ICP-MS) in accordance with EPA SW-846 Method 6020A. The samples were prepared on 04/27/2016 and analyzed on 04/28/2016, 05/05/2016 and 05/07/2016.

The interference check standard solutions (ICSA) (ICSA 680-432053/20 and ICSA 680-432423/19) associated with the following samples showed results for chromium at a level greater than the limit of detection (LOD): 680-124511-1, 680-124511-2, 680-124511-3, 680-124511-4, 680-124511-5, 680-124511-6, 680-124511-7, 680-124511-8, 680-124511-9, 680-124511-10, 680-124511-11, 680-124511-12, 680-124511-13, 680-124511-14, 680-124511-15, and 680-124511-16.

Several analytes were detected in method blank MB 680-430812/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Samples AOP SB S01 (680-124511-1)[10X], AOP SB S01 (680-124511-1)[2X], AOP SB S02 (680-124511-2)[2X], AOP SB S03 (680-124511-3)[10X], AOP SB S03 (680-124511-3)[2X], AOP CB S03 (680-124511-4)[2X], AOP SB S04 (680-124511-5)[2X], AOP SB S05 (680-124511-6)[2X], AOP SB S06 (680-124511-7)[2X], AOP SB S07 (680-124511-8)[10X], AOP SB S07 (680-124511-8)[2X], AOP SB S08

## Case Narrative

Client: Earth Toxics, Inc

Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

### Job ID: 680-124511-1 (Continued)

#### Laboratory: TestAmerica Savannah (Continued)

(680-124511-9)[2X], AOP SB S09 (680-124511-10)[10X], AOP SB S09 (680-124511-10)[2X], AOP SB S10 (680-124511-11)[10X], AOP SB S11 (680-124511-12)[10X], AOP SB S11 (680-124511-12)[2X], AOP SB S12 (680-124511-13)[2X], AOP SB S13 (680-124511-14)[2X], AOP SB S14 (680-124511-15)[10X], AOP SB S14 (680-124511-15)[2X] and AOP CB S14 (680-124511-16)[10X] 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.

# Client Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

## Client Sample ID: AOP SB S01

Date Collected: 10/15/15 10:05

Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124511-1

Matrix: Solid

Percent Solids: 90.2

### Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10000	H	9.7	2.0	mg/Kg	☀	04/27/16 07:31	04/28/16 17:38	1
Antimony	0.29	U H	0.97	0.097	mg/Kg	☀	04/27/16 07:31	04/28/16 17:38	1
Arsenic	1.4	H	0.29	0.097	mg/Kg	☀	04/27/16 07:31	04/28/16 17:38	1
Barium	26	H	0.49	0.058	mg/Kg	☀	04/27/16 07:31	04/28/16 17:38	1
Beryllium	0.17	H D	0.097	0.029	mg/Kg	☀	04/27/16 07:31	05/05/16 02:20	2
Cadmium	0.23	H	0.049	0.015	mg/Kg	☀	04/27/16 07:31	04/28/16 17:38	1
Calcium	5900	H	49	6.1	mg/Kg	☀	04/27/16 07:31	04/28/16 17:38	1
Chromium	740	H D Q	9.7	1.1	mg/Kg	☀	04/27/16 07:31	05/05/16 02:25	10
Cobalt	81	H D	0.097	0.019	mg/Kg	☀	04/27/16 07:31	05/05/16 02:20	2
Copper	38	H D	0.97	0.25	mg/Kg	☀	04/27/16 07:31	05/05/16 02:20	2
Iron	34000	H	24	3.4	mg/Kg	☀	04/27/16 07:31	04/28/16 17:38	1
Lead	7.3	H	0.19	0.049	mg/Kg	☀	04/27/16 07:31	04/28/16 17:38	1
Magnesium	98000	H D	240	32	mg/Kg	☀	04/27/16 07:31	05/05/16 02:25	10
Manganese	850	H D	1.9	0.23	mg/Kg	☀	04/27/16 07:31	05/05/16 02:20	2
Nickel	1400	H	0.97	0.25	mg/Kg	☀	04/27/16 07:31	04/28/16 17:38	1
Potassium	1700	H	24	8.8	mg/Kg	☀	04/27/16 07:31	04/28/16 17:38	1
Selenium	0.18	J H	0.49	0.097	mg/Kg	☀	04/27/16 07:31	04/28/16 17:38	1
Silver	0.038	J H	0.097	0.0097	mg/Kg	☀	04/27/16 07:31	04/28/16 17:38	1
Sodium	63	H	39	9.7	mg/Kg	☀	04/27/16 07:31	04/28/16 17:38	1
Thallium	0.097	U H	0.097	0.049	mg/Kg	☀	04/27/16 07:31	04/28/16 17:38	1
Vanadium	64	H	0.49	0.26	mg/Kg	☀	04/27/16 07:31	04/28/16 17:38	1
Zinc	49	H B	1.9	0.97	mg/Kg	☀	04/27/16 07:31	04/28/16 17:38	1

## Client Sample ID: AOP SB S02

Date Collected: 10/15/15 10:10

Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124511-2

Matrix: Solid

Percent Solids: 85.5

### Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11000	H	10	2.1	mg/Kg	☀	04/27/16 07:31	04/28/16 16:45	1
Antimony	0.29	J H	1.0	0.10	mg/Kg	☀	04/27/16 07:31	04/28/16 16:45	1
Arsenic	1.2	H	0.30	0.10	mg/Kg	☀	04/27/16 07:31	04/28/16 16:45	1
Barium	40	H	0.50	0.060	mg/Kg	☀	04/27/16 07:31	04/28/16 16:45	1
Beryllium	0.26	H	0.050	0.015	mg/Kg	☀	04/27/16 07:31	04/28/16 16:45	1
Cadmium	0.66	H	0.050	0.015	mg/Kg	☀	04/27/16 07:31	04/28/16 16:45	1
Calcium	4700	H	50	6.3	mg/Kg	☀	04/27/16 07:31	04/28/16 16:45	1
Chromium	820	H D Q	2.0	0.22	mg/Kg	☀	04/27/16 07:31	05/07/16 15:38	2
Cobalt	93	H D	0.10	0.020	mg/Kg	☀	04/27/16 07:31	05/07/16 15:38	2
Copper	45	H D Q	1.0	0.26	mg/Kg	☀	04/27/16 07:31	05/07/16 15:38	2
Iron	35000	H	25	3.5	mg/Kg	☀	04/27/16 07:31	04/28/16 16:45	1
Lead	6.2	H	0.20	0.050	mg/Kg	☀	04/27/16 07:31	04/28/16 16:45	1
Magnesium	51000	H	25	3.3	mg/Kg	☀	04/27/16 07:31	04/28/16 16:45	1
Manganese	1100	H D	2.0	0.24	mg/Kg	☀	04/27/16 07:31	05/07/16 15:38	2
Nickel	1500	H	1.0	0.26	mg/Kg	☀	04/27/16 07:31	04/28/16 16:45	1
Potassium	1900	H	25	9.1	mg/Kg	☀	04/27/16 07:31	04/28/16 16:45	1
Selenium	0.23	J H	0.50	0.10	mg/Kg	☀	04/27/16 07:31	04/28/16 16:45	1
Silver	0.046	J H	0.10	0.010	mg/Kg	☀	04/27/16 07:31	04/28/16 16:45	1
Sodium	67	H	40	10	mg/Kg	☀	04/27/16 07:31	04/28/16 16:45	1
Thallium	0.054	J H	0.10	0.050	mg/Kg	☀	04/27/16 07:31	04/28/16 16:45	1

TestAmerica Savannah

# Client Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

## Client Sample ID: AOP SB S02

Date Collected: 10/15/15 10:10  
Date Received: 04/26/16 10:00

Lab Sample ID: 680-124511-2

Matrix: Solid

Percent Solids: 85.5

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	73	H	0.50	0.27	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:45	1
Zinc	60	H B	2.0	1.0	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:45	1

## Client Sample ID: AOP SB S03

Date Collected: 10/15/15 10:15  
Date Received: 04/26/16 10:00

Lab Sample ID: 680-124511-3

Matrix: Solid

Percent Solids: 86.0

### Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11000	H	10	2.1	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:18	1
Antimony	0.42	J H	1.0	0.10	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:18	1
Arsenic	1.3	H D	0.60	0.20	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:16	2
Barium	38	H	0.50	0.060	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:18	1
Beryllium	0.22	H D	0.10	0.030	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:16	2
Cadmium	1.4	H	0.050	0.015	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:18	1
Calcium	5700	H	50	6.3	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:18	1
Chromium	790	H D Q	10	1.1	mg/Kg	⊗	04/27/16 07:31	05/07/16 16:03	10
Cobalt	77	H D	0.10	0.020	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:16	2
Copper	39	H D	1.0	0.26	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:16	2
Iron	35000	H	25	3.5	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:18	1
Lead	8.5	H	0.20	0.050	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:18	1
Magnesium	92000	H D	250	33	mg/Kg	⊗	04/27/16 07:31	05/07/16 16:03	10
Manganese	960	H D	2.0	0.24	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:16	2
Nickel	1400	H D	2.0	0.52	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:16	2
Potassium	1700	H D	50	18	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:16	2
Selenium	0.20	J H	0.50	0.10	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:18	1
Silver	0.051	J H	0.10	0.010	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:18	1
Sodium	80	H	40	10	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:18	1
Thallium	0.10	U H	0.10	0.050	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:18	1
Vanadium	68	H D	1.0	0.54	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:16	2
Zinc	91	H B	2.0	1.0	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:18	1

## Client Sample ID: AOP CB S03

Date Collected: 10/15/15 10:15  
Date Received: 04/26/16 10:00

Lab Sample ID: 680-124511-4

Matrix: Solid

Percent Solids: 85.9

### Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11000	H	10	2.1	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:58	1
Antimony	0.41	J H	1.0	0.10	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:58	1
Arsenic	1.2	H	0.31	0.10	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:58	1
Barium	37	H	0.51	0.061	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:58	1
Beryllium	0.26	H	0.051	0.015	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:58	1
Cadmium	1.5	H	0.051	0.015	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:58	1
Calcium	5700	H	51	6.4	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:58	1
Chromium	800	H D Q	2.0	0.22	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:47	2
Cobalt	84	H D	0.10	0.020	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:47	2
Copper	41	H D Q	1.0	0.27	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:47	2
Iron	35000	H	26	3.6	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:58	1
Lead	8.7	H	0.20	0.051	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:58	1

TestAmerica Savannah

# Client Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

## Client Sample ID: AOP CB S03

Date Collected: 10/15/15 10:15  
Date Received: 04/26/16 10:00

Lab Sample ID: 680-124511-4

Matrix: Solid

Percent Solids: 85.9

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	48000	H	26	3.4	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:58	1
Manganese	1000	H D	2.0	0.24	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:47	2
Nickel	1400	H	1.0	0.27	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:58	1
Potassium	1700	H	26	9.3	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:58	1
Selenium	0.16	J H	0.51	0.10	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:58	1
Silver	0.040	J H	0.10	0.010	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:58	1
Sodium	97	H	41	10	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:58	1
Thallium	0.10	U H	0.10	0.051	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:58	1
Vanadium	70	H	0.51	0.28	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:58	1
Zinc	92	H B	2.0	1.0	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:58	1

## Client Sample ID: AOP SB S04

Date Collected: 10/15/15 10:20  
Date Received: 04/26/16 10:00

Lab Sample ID: 680-124511-5

Matrix: Solid

Percent Solids: 76.0

### Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12000	H	11	2.4	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:58	1
Antimony	1.3	H	1.1	0.11	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:58	1
Arsenic	1.9	H	0.34	0.11	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:58	1
Barium	45	H	0.57	0.069	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:58	1
Beryllium	0.18	H D	0.11	0.034	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:45	2
Cadmium	0.53	H	0.057	0.017	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:58	1
Calcium	4800	H	57	7.2	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:58	1
Chromium	810	H D Q	2.3	0.25	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:45	2
Cobalt	79	H D	0.11	0.023	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:45	2
Copper	42	H D	1.1	0.30	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:45	2
Iron	40000	H	29	4.0	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:58	1
Lead	6.6	H	0.23	0.057	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:58	1
Magnesium	88000	H D	57	7.5	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:45	2
Manganese	950	H D	2.3	0.27	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:45	2
Nickel	1700	H	1.1	0.30	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:58	1
Potassium	2100	H	29	10	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:58	1
Selenium	0.29	J H	0.57	0.11	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:58	1
Silver	0.052	J H	0.11	0.011	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:58	1
Sodium	94	H	46	11	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:58	1
Thallium	0.11	U H	0.11	0.057	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:58	1
Vanadium	77	H	0.57	0.31	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:58	1
Zinc	58	H B	2.3	1.1	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:58	1

## Client Sample ID: AOP SB S05

Date Collected: 10/15/15 10:25  
Date Received: 04/26/16 10:00

Lab Sample ID: 680-124511-6

Matrix: Solid

Percent Solids: 83.7

### Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12000	H	10	2.2	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:38	1
Antimony	0.20	J H	1.0	0.10	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:38	1
Arsenic	1.8	H	0.31	0.10	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:38	1
Barium	46	H	0.51	0.062	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:38	1

TestAmerica Savannah

# Client Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

**Client Sample ID: AOP SB S05**  
Date Collected: 10/15/15 10:25  
Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124511-6**  
Matrix: Solid  
Percent Solids: 83.7

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.26	H D	0.10	0.031	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:21	2
Cadmium	0.15	H	0.051	0.015	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:38	1
Calcium	6200	H	51	6.5	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:38	1
Chromium	790	H D Q	2.1	0.23	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:21	2
Cobalt	78	H D	0.10	0.021	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:21	2
Copper	37	H D	1.0	0.27	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:21	2
Iron	55000	H D	51	7.2	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:21	2
Lead	5.6	H	0.21	0.051	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:38	1
Magnesium	87000	H D	51	6.8	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:21	2
Manganese	1000	H D	2.1	0.25	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:21	2
Nickel	1500	H	1.0	0.27	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:38	1
Potassium	1900	H	26	9.4	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:38	1
Selenium	0.19	J H	0.51	0.10	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:38	1
Silver	0.053	J H	0.10	0.010	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:38	1
Sodium	84	H	41	10	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:38	1
Thallium	0.10	U H	0.10	0.051	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:38	1
Vanadium	80	H	0.51	0.28	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:38	1
Zinc	55	H B	2.1	1.0	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:38	1

**Client Sample ID: AOP SB S06**

Date Collected: 10/15/15 10:30  
Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124511-7**  
Matrix: Solid  
Percent Solids: 89.8

**Method: 6020A - Metals (ICP/MS)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10000	H	9.7	2.0	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:52	1
Antimony	0.35	J H	0.97	0.097	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:52	1
Arsenic	2.0	H	0.29	0.097	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:52	1
Barium	48	H	0.48	0.058	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:52	1
Beryllium	0.21	H D	0.097	0.029	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:40	2
Cadmium	0.40	H	0.048	0.015	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:52	1
Calcium	7600	H	48	6.1	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:52	1
Chromium	710	H D Q	1.9	0.21	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:40	2
Cobalt	79	H D	0.097	0.019	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:40	2
Copper	38	H D	0.97	0.25	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:40	2
Iron	32000	H	24	3.4	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:52	1
Lead	15	H	0.19	0.048	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:52	1
Magnesium	87000	H D	48	6.4	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:40	2
Manganese	950	H D	1.9	0.23	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:40	2
Nickel	1300	H	0.97	0.25	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:52	1
Potassium	2200	H	24	8.8	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:52	1
Selenium	0.18	J H	0.48	0.097	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:52	1
Silver	0.045	J H	0.097	0.0097	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:52	1
Sodium	77	H	39	9.7	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:52	1
Thallium	0.097	U H	0.097	0.048	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:52	1
Vanadium	72	H	0.48	0.26	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:52	1
Zinc	72	H B	1.9	0.97	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:52	1

TestAmerica Savannah

# Client Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

## Client Sample ID: AOP SB S07

Date Collected: 10/15/15 10:40  
Date Received: 04/26/16 10:00

Lab Sample ID: 680-124511-8

Matrix: Solid

Percent Solids: 87.0

### Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12000	H	9.7	2.0	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:11	1
Antimony	0.36	J H	0.97	0.097	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:11	1
Arsenic	1.5	H	0.29	0.097	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:11	1
Barium	32	H	0.49	0.058	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:11	1
Beryllium	0.20	H D	0.097	0.029	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:55	2
Cadmium	0.21	H	0.049	0.015	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:11	1
Calcium	12000	H	49	6.1	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:11	1
Chromium	680	H D Q	9.7	1.1	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:11	10
Cobalt	83	H D	0.097	0.019	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:55	2
Copper	42	H D	0.97	0.25	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:55	2
Iron	37000	H	24	3.4	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:11	1
Lead	14	H	0.19	0.049	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:11	1
Magnesium	100000	H D	240	32	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:11	10
Manganese	980	H D	1.9	0.23	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:55	2
Nickel	1500	H	0.97	0.25	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:11	1
Potassium	1900	H	24	8.9	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:11	1
Selenium	0.15	J H	0.49	0.097	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:11	1
Silver	0.049	J H	0.097	0.0097	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:11	1
Sodium	86	H	39	9.7	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:11	1
Thallium	0.097	U H	0.097	0.049	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:11	1
Vanadium	68	H	0.49	0.26	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:11	1
Zinc	80	H B	1.9	0.97	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:11	1

## Client Sample ID: AOP SB S08

Date Collected: 10/15/15 10:45  
Date Received: 04/26/16 10:00

Lab Sample ID: 680-124511-9

Matrix: Solid

Percent Solids: 81.4

### Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12000	H	10	2.2	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:45	1
Antimony	0.23	J H	1.0	0.10	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:45	1
Arsenic	1.6	H	0.31	0.10	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:45	1
Barium	40	H	0.52	0.062	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:45	1
Beryllium	0.21	H D	0.10	0.031	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:26	2
Cadmium	0.22	H	0.052	0.016	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:45	1
Calcium	8800	H	52	6.6	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:45	1
Chromium	660	H D Q	2.1	0.23	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:26	2
Cobalt	76	H D	0.10	0.021	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:26	2
Copper	38	H D	1.0	0.27	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:26	2
Iron	52000	H D	52	7.3	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:26	2
Lead	11	H	0.21	0.052	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:45	1
Magnesium	91000	H D	52	6.9	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:26	2
Manganese	950	H D	2.1	0.25	mg/Kg	⊗	04/27/16 07:31	05/05/16 03:26	2
Nickel	1400	H	1.0	0.27	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:45	1
Potassium	2700	H	26	9.5	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:45	1
Selenium	0.25	J H	0.52	0.10	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:45	1
Silver	0.043	J H	0.10	0.010	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:45	1
Sodium	210	H	42	10	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:45	1
Thallium	0.10	U H	0.10	0.052	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:45	1
Vanadium	66	H	0.52	0.28	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:45	1

TestAmerica Savannah

# Client Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

## Client Sample ID: AOP SB S08

Date Collected: 10/15/15 10:45  
Date Received: 04/26/16 10:00

Lab Sample ID: 680-124511-9

Matrix: Solid

Percent Solids: 81.4

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	79	H B	2.1	1.0	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:45	1

## Client Sample ID: AOP SB S09

Date Collected: 10/15/15 11:10  
Date Received: 04/26/16 10:00

Lab Sample ID: 680-124511-10

Matrix: Solid

Percent Solids: 85.5

### Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	18000	H D J	20	4.2	mg/Kg	⊗	04/27/16 07:31	05/07/16 14:37	2
Antimony	0.59	H J	1.0	0.10	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:11	1
Arsenic	1.7	H J	0.30	0.10	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:11	1
Barium	23	H J	0.50	0.060	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:11	1
Beryllium	0.21	H J	0.050	0.015	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:11	1
Cadmium	0.33	H J	0.050	0.015	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:11	1
Calcium	14000	H D J	100	13	mg/Kg	⊗	04/27/16 07:31	05/07/16 14:37	2
Chromium	680	H D J Q	2.0	0.22	mg/Kg	⊗	04/27/16 07:31	05/07/16 14:37	2
Cobalt	69	H D J	0.10	0.020	mg/Kg	⊗	04/27/16 07:31	05/07/16 14:37	2
Copper	50	H D J Q	1.0	0.26	mg/Kg	⊗	04/27/16 07:31	05/07/16 14:37	2
Iron	53000	H D J	50	7.0	mg/Kg	⊗	04/27/16 07:31	05/07/16 14:37	2
Lead	26	H J	0.20	0.050	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:11	1
Magnesium	100000	H D J	250	33	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:02	10
Manganese	780	H D J	2.0	0.24	mg/Kg	⊗	04/27/16 07:31	05/07/16 14:37	2
Nickel	1200	H J	1.0	0.26	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:11	1
Potassium	1000	H J	25	9.1	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:11	1
Selenium	0.14	H J	0.50	0.10	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:11	1
Silver	0.036	H J	0.10	0.010	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:11	1
Sodium	250	H D	80	20	mg/Kg	⊗	04/27/16 07:31	05/07/16 14:37	2
Thallium	0.10	U H J	0.10	0.050	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:11	1
Vanadium	70	H J	0.50	0.27	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:11	1
Zinc	74	H B J	2.0	1.0	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:11	1

## Client Sample ID: AOP SB S10

Date Collected: 10/15/15 11:05  
Date Received: 04/26/16 10:00

Lab Sample ID: 680-124511-11

Matrix: Solid

Percent Solids: 86.8

### Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10000	H	9.9	2.1	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:25	1
Antimony	0.64	J H	0.99	0.099	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:25	1
Arsenic	2.7	H	0.30	0.099	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:25	1
Barium	40	H	0.50	0.060	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:25	1
Beryllium	0.24	J H D	0.50	0.15	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:58	10
Cadmium	0.29	H	0.050	0.015	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:25	1
Calcium	11000	H	50	6.3	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:25	1
Chromium	690	H D Q	9.9	1.1	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:58	10
Cobalt	75	H D	0.50	0.099	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:58	10
Copper	60	H D Q	5.0	1.3	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:58	10
Iron	32000	H	25	3.5	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:25	1
Lead	42	H	0.20	0.050	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:25	1
Magnesium	88000	H D	250	33	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:58	10

TestAmerica Savannah

# Client Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

## Client Sample ID: AOP SB S10

Date Collected: 10/15/15 11:05  
Date Received: 04/26/16 10:00

Lab Sample ID: 680-124511-11

Matrix: Solid

Percent Solids: 86.8

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	900	H D	9.9	1.2	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:58	10
Nickel	1200	H	0.99	0.26	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:25	1
Potassium	1400	H	25	9.0	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:25	1
Selenium	0.18	J H	0.50	0.099	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:25	1
Silver	0.049	J H	0.099	0.0099	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:25	1
Sodium	270	H	40	9.9	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:25	1
Thallium	0.099	U H	0.099	0.050	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:25	1
Vanadium	71	H	0.50	0.27	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:25	1
Zinc	89	H B	2.0	0.99	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:25	1

## Client Sample ID: AOP SB S11

Date Collected: 10/15/15 11:20  
Date Received: 04/26/16 10:00

Lab Sample ID: 680-124511-12

Matrix: Solid

Percent Solids: 81.0

### Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12000	H	11	2.3	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:32	1
Antimony	0.32	U H	1.1	0.11	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:32	1
Arsenic	1.1	H	0.32	0.11	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:32	1
Barium	32	H	0.54	0.064	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:32	1
Beryllium	0.14	H D	0.11	0.032	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:10	2
Cadmium	0.11	H	0.054	0.016	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:32	1
Calcium	11000	H	54	6.8	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:32	1
Chromium	620	H D Q	11	1.2	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:15	10
Cobalt	75	H D	0.11	0.021	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:10	2
Copper	34	H D	1.1	0.28	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:10	2
Iron	32000	H	27	3.8	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:32	1
Lead	17	H	0.21	0.054	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:32	1
Magnesium	100000	H D	270	35	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:15	10
Manganese	800	H D	2.1	0.26	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:10	2
Nickel	1500	H	1.1	0.28	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:32	1
Potassium	1400	H	27	9.8	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:32	1
Selenium	0.13	J H	0.54	0.11	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:32	1
Silver	0.029	J H	0.11	0.011	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:32	1
Sodium	91	H	43	11	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:32	1
Thallium	0.11	U H	0.11	0.054	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:32	1
Vanadium	68	H	0.54	0.29	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:32	1
Zinc	55	H B	2.1	1.1	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:32	1

## Client Sample ID: AOP SB S12

Date Collected: 10/15/15 11:25  
Date Received: 04/26/16 10:00

Lab Sample ID: 680-124511-13

Matrix: Solid

Percent Solids: 90.8

### Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11000	H	9.5	2.0	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:51	1
Antimony	0.28	U H	0.95	0.095	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:51	1
Arsenic	1.4	H	0.28	0.095	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:51	1
Barium	28	H	0.47	0.057	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:51	1
Beryllium	0.20	H	0.047	0.014	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:51	1

TestAmerica Savannah

# Client Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

## Client Sample ID: AOP SB S12

Date Collected: 10/15/15 11:25

Date Received: 04/26/16 10:00

Lab Sample ID: 680-124511-13

Matrix: Solid

Percent Solids: 90.8

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.15	H	0.047	0.014	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:51	1
Calcium	30000	H	47	6.0	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:51	1
Chromium	620	H D Q	1.9	0.21	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:43	2
Cobalt	77	H D	0.095	0.019	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:43	2
Copper	34	H D Q	0.95	0.25	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:43	2
Iron	30000	H	24	3.3	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:51	1
Lead	30	H	0.19	0.047	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:51	1
Magnesium	52000	H	24	3.1	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:51	1
Manganese	790	H D	1.9	0.23	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:43	2
Nickel	1400	H	0.95	0.25	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:51	1
Potassium	1500	H	24	8.6	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:51	1
Selenium	0.17	J H	0.47	0.095	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:51	1
Silver	0.028	J H	0.095	0.0095	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:51	1
Sodium	180	H	38	9.5	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:51	1
Thallium	0.095	U H	0.095	0.047	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:51	1
Vanadium	65	H	0.47	0.26	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:51	1
Zinc	58	H B	1.9	0.95	mg/Kg	⊗	04/27/16 07:31	04/28/16 16:51	1

## Client Sample ID: AOP SB S13

Date Collected: 10/15/15 11:30

Date Received: 04/26/16 10:00

Lab Sample ID: 680-124511-14

Matrix: Solid

Percent Solids: 87.0

### Method: 6020A - Metals (ICP/MS)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12000	H	10	2.1	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:05	1
Antimony	0.11	J H	1.0	0.10	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:05	1
Arsenic	1.6	H	0.30	0.10	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:05	1
Barium	57	H	0.50	0.061	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:05	1
Beryllium	0.22	H D	0.10	0.030	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:50	2
Cadmium	0.16	H	0.050	0.015	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:05	1
Calcium	5400	H	50	6.4	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:05	1
Chromium	850	H D Q	2.0	0.22	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:50	2
Cobalt	94	H D	0.10	0.020	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:50	2
Copper	43	H D	1.0	0.26	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:50	2
Iron	37000	H	25	3.5	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:05	1
Lead	38	H	0.20	0.050	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:05	1
Magnesium	87000	H D	50	6.7	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:50	2
Manganese	1000	H D	2.0	0.24	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:50	2
Nickel	1700	H	1.0	0.26	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:05	1
Potassium	2300	H	25	9.2	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:05	1
Selenium	0.27	J H	0.50	0.10	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:05	1
Silver	0.046	J H	0.10	0.010	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:05	1
Sodium	100	H	40	10	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:05	1
Thallium	0.10	U H	0.10	0.050	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:05	1
Vanadium	82	H	0.50	0.27	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:05	1
Zinc	72	H B	2.0	1.0	mg/Kg	⊗	04/27/16 07:31	04/28/16 18:05	1

# Client Sample Results

Client: Earth Toxics, Inc  
 Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

**Client Sample ID: AOP SB S14**  
**Date Collected: 10/15/15 11:35**  
**Date Received: 04/26/16 10:00**

**Lab Sample ID: 680-124511-15**  
**Matrix: Solid**  
**Percent Solids: 92.4**

**Method: 6020A - Metals (ICP/MS)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	10000	H	9.1	1.9	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:45	1
Antimony	0.27	U H	0.91	0.091	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:45	1
Arsenic	1.2	H	0.27	0.091	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:45	1
Barium	24	H	0.45	0.055	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:45	1
Beryllium	0.14	H D	0.091	0.027	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:30	2
Cadmium	0.17	H	0.045	0.014	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:45	1
Calcium	11000	H	45	5.7	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:45	1
Chromium	730	H D Q	9.1	1.0	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:35	10
Cobalt	83	H D	0.091	0.018	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:30	2
Copper	31	H D	0.91	0.24	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:30	2
Iron	29000	H	23	3.2	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:45	1
Lead	19	H	0.18	0.045	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:45	1
Magnesium	120000	H D	230	30	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:35	10
Manganese	790	H D	1.8	0.22	mg/Kg	⊗	04/27/16 07:31	05/05/16 02:30	2
Nickel	1700	H	0.91	0.24	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:45	1
Potassium	1100	H	23	8.3	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:45	1
Selenium	0.21	J H	0.45	0.091	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:45	1
Silver	0.034	J H	0.091	0.0091	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:45	1
Sodium	78	H	36	9.1	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:45	1
Thallium	0.091	U H	0.091	0.045	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:45	1
Vanadium	73	H	0.45	0.25	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:45	1
Zinc	85	H B	1.8	0.91	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:45	1

**Client Sample ID: AOP CB S14**

**Date Collected: 10/15/15 11:35**  
**Date Received: 04/26/16 10:00**

**Lab Sample ID: 680-124511-16**  
**Matrix: Solid**  
**Percent Solids: 92.4**

**Method: 6020A - Metals (ICP/MS)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11000	H	9.5	2.0	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:18	1
Antimony	0.28	U H	0.95	0.095	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:18	1
Arsenic	1.0	H	0.28	0.095	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:18	1
Barium	23	H	0.47	0.057	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:18	1
Beryllium	0.23	J H D	0.47	0.14	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:53	10
Cadmium	0.17	H	0.047	0.014	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:18	1
Calcium	12000	H	47	6.0	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:18	1
Chromium	760	H D Q	9.5	1.0	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:53	10
Cobalt	96	H D	0.47	0.095	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:53	10
Copper	36	H D Q	4.7	1.2	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:53	10
Iron	30000	H	24	3.3	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:18	1
Lead	19	H	0.19	0.047	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:18	1
Magnesium	120000	H D	240	31	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:53	10
Manganese	900	H D	9.5	1.1	mg/Kg	⊗	04/27/16 07:31	05/07/16 15:53	10
Nickel	1600	H	0.95	0.25	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:18	1
Potassium	1000	H	24	8.6	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:18	1
Selenium	0.22	J H	0.47	0.095	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:18	1
Silver	0.032	J H	0.095	0.0095	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:18	1
Sodium	90	H	38	9.5	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:18	1
Thallium	0.095	U H	0.095	0.047	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:18	1
Vanadium	68	H	0.47	0.26	mg/Kg	⊗	04/27/16 07:31	04/28/16 17:18	1

TestAmerica Savannah

# Client Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

**Client Sample ID: AOP CB S14**

Date Collected: 10/15/15 11:35

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124511-16**

Matrix: Solid

Percent Solids: 92.4

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

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	83	H B	1.9	0.95	mg/Kg	☀	04/27/16 07:31	04/28/16 17:18	1

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TestAmerica Savannah

# QC Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

## Method: 6020A - Metals (ICP/MS)

**Lab Sample ID: MB 680-430812/1-A**

**Matrix: Solid**

**Analysis Batch: 431271**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 430812**

Analyte	MB	MB	Dil Fac						
	Result	Qualifier		LOQ	DL	Unit	D	Prepared	Analyzed
Aluminum	4.24	J	1	9.4	2.0	mg/Kg	04/27/16 07:31	04/28/16 15:58	
Antimony	0.28	U	1	0.94	0.094	mg/Kg	04/27/16 07:31	04/28/16 15:58	
Arsenic	0.28	U	1	0.28	0.094	mg/Kg	04/27/16 07:31	04/28/16 15:58	
Barium	0.14	U	1	0.47	0.057	mg/Kg	04/27/16 07:31	04/28/16 15:58	
Beryllium	0.038	U	1	0.047	0.014	mg/Kg	04/27/16 07:31	04/28/16 15:58	
Cadmium	0.038	U	1	0.047	0.014	mg/Kg	04/27/16 07:31	04/28/16 15:58	
Calcium	6.32	J	1	47	5.9	mg/Kg	04/27/16 07:31	04/28/16 15:58	
Iron	4.67	J	1	24	3.3	mg/Kg	04/27/16 07:31	04/28/16 15:58	
Lead	0.14	U	1	0.19	0.047	mg/Kg	04/27/16 07:31	04/28/16 15:58	
Magnesium	6.43	J	1	24	3.1	mg/Kg	04/27/16 07:31	04/28/16 15:58	
Nickel	0.71	U	1	0.94	0.25	mg/Kg	04/27/16 07:31	04/28/16 15:58	
Potassium	24	U	1	24	8.6	mg/Kg	04/27/16 07:31	04/28/16 15:58	
Selenium	0.28	U	1	0.47	0.094	mg/Kg	04/27/16 07:31	04/28/16 15:58	
Silver	0.028	U	1	0.094	0.0094	mg/Kg	04/27/16 07:31	04/28/16 15:58	
Sodium	13.0	J	1	38	9.4	mg/Kg	04/27/16 07:31	04/28/16 15:58	
Thallium	0.094	U	1	0.094	0.047	mg/Kg	04/27/16 07:31	04/28/16 15:58	
Vanadium	0.47	U	1	0.47	0.25	mg/Kg	04/27/16 07:31	04/28/16 15:58	
Zinc	1.72	J	1	1.9	0.94	mg/Kg	04/27/16 07:31	04/28/16 15:58	

**Lab Sample ID: MB 680-430812/1-A**

**Matrix: Solid**

**Analysis Batch: 432423**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 430812**

Analyte	MB	MB	Dil Fac						
	Result	Qualifier		LOQ	DL	Unit	D	Prepared	Analyzed
Chromium	0.100	J Q	1	0.94	0.10	mg/Kg	04/27/16 07:31	05/07/16 14:27	
Cobalt	0.028	U	1	0.047	0.0094	mg/Kg	04/27/16 07:31	05/07/16 14:27	
Copper	0.28	U Q	1	0.47	0.12	mg/Kg	04/27/16 07:31	05/07/16 14:27	
Manganese	0.28	U	1	0.94	0.11	mg/Kg	04/27/16 07:31	05/07/16 14:27	

# QC Association Summary

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

## Metals

### Prep Batch: 430812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-124511-1	AOP SB S01	Total/NA	Solid	3050B	5
680-124511-2	AOP SB S02	Total/NA	Solid	3050B	5
680-124511-3	AOP SB S03	Total/NA	Solid	3050B	5
680-124511-4	AOP CB S03	Total/NA	Solid	3050B	6
680-124511-5	AOP SB S04	Total/NA	Solid	3050B	6
680-124511-6	AOP SB S05	Total/NA	Solid	3050B	6
680-124511-7	AOP SB S06	Total/NA	Solid	3050B	8
680-124511-8	AOP SB S07	Total/NA	Solid	3050B	8
680-124511-9	AOP SB S08	Total/NA	Solid	3050B	9
680-124511-10	AOP SB S09	Total/NA	Solid	3050B	9
680-124511-10 MS	AOP SB S09	Total/NA	Solid	3050B	10
680-124511-10 MSD	AOP SB S09	Total/NA	Solid	3050B	10
680-124511-11	AOP SB S10	Total/NA	Solid	3050B	11
680-124511-12	AOP SB S11	Total/NA	Solid	3050B	11
680-124511-13	AOP SB S12	Total/NA	Solid	3050B	12
680-124511-14	AOP SB S13	Total/NA	Solid	3050B	12
680-124511-15	AOP SB S14	Total/NA	Solid	3050B	12
680-124511-16	AOP CB S14	Total/NA	Solid	3050B	12
LCS 680-430812/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 680-430812/1-A	Method Blank	Total/NA	Solid	3050B	

### Analysis Batch: 431271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-124511-1	AOP SB S01	Total/NA	Solid	6020A	430812
680-124511-2	AOP SB S02	Total/NA	Solid	6020A	430812
680-124511-3	AOP SB S03	Total/NA	Solid	6020A	430812
680-124511-4	AOP CB S03	Total/NA	Solid	6020A	430812
680-124511-5	AOP SB S04	Total/NA	Solid	6020A	430812
680-124511-6	AOP SB S05	Total/NA	Solid	6020A	430812
680-124511-7	AOP SB S06	Total/NA	Solid	6020A	430812
680-124511-8	AOP SB S07	Total/NA	Solid	6020A	430812
680-124511-9	AOP SB S08	Total/NA	Solid	6020A	430812
680-124511-10	AOP SB S09	Total/NA	Solid	6020A	430812
680-124511-10 MS	AOP SB S09	Total/NA	Solid	6020A	430812
680-124511-10 MSD	AOP SB S09	Total/NA	Solid	6020A	430812
680-124511-11	AOP SB S10	Total/NA	Solid	6020A	430812
680-124511-12	AOP SB S11	Total/NA	Solid	6020A	430812
680-124511-13	AOP SB S12	Total/NA	Solid	6020A	430812
680-124511-14	AOP SB S13	Total/NA	Solid	6020A	430812
680-124511-15	AOP SB S14	Total/NA	Solid	6020A	430812
680-124511-16	AOP CB S14	Total/NA	Solid	6020A	430812
LCS 680-430812/2-A	Lab Control Sample	Total/NA	Solid	6020A	430812
MB 680-430812/1-A	Method Blank	Total/NA	Solid	6020A	430812

### Analysis Batch: 432053

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-124511-1	AOP SB S01	Total/NA	Solid	6020A	430812
680-124511-1	AOP SB S01	Total/NA	Solid	6020A	430812
680-124511-3	AOP SB S03	Total/NA	Solid	6020A	430812
680-124511-5	AOP SB S04	Total/NA	Solid	6020A	430812
680-124511-6	AOP SB S05	Total/NA	Solid	6020A	430812

TestAmerica Savannah

# QC Association Summary

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

## Metals (Continued)

### Analysis Batch: 432053 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-124511-7	AOP SB S06	Total/NA	Solid	6020A	430812
680-124511-8	AOP SB S07	Total/NA	Solid	6020A	430812
680-124511-8	AOP SB S07	Total/NA	Solid	6020A	430812
680-124511-9	AOP SB S08	Total/NA	Solid	6020A	430812
680-124511-12	AOP SB S11	Total/NA	Solid	6020A	430812
680-124511-12	AOP SB S11	Total/NA	Solid	6020A	430812
680-124511-14	AOP SB S13	Total/NA	Solid	6020A	430812
680-124511-15	AOP SB S14	Total/NA	Solid	6020A	430812
680-124511-15	AOP SB S14	Total/NA	Solid	6020A	430812

### Analysis Batch: 432423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-124511-2	AOP SB S02	Total/NA	Solid	6020A	430812
680-124511-3	AOP SB S03	Total/NA	Solid	6020A	430812
680-124511-4	AOP CB S03	Total/NA	Solid	6020A	430812
680-124511-10	AOP SB S09	Total/NA	Solid	6020A	430812
680-124511-10	AOP SB S09	Total/NA	Solid	6020A	430812
680-124511-10 MS	AOP SB S09	Total/NA	Solid	6020A	430812
680-124511-10 MS	AOP SB S09	Total/NA	Solid	6020A	430812
680-124511-10 MSD	AOP SB S09	Total/NA	Solid	6020A	430812
680-124511-10 MSD	AOP SB S09	Total/NA	Solid	6020A	430812
680-124511-11	AOP SB S10	Total/NA	Solid	6020A	430812
680-124511-13	AOP SB S12	Total/NA	Solid	6020A	430812
680-124511-16	AOP CB S14	Total/NA	Solid	6020A	430812
LCS 680-430812/2-A	Lab Control Sample	Total/NA	Solid	6020A	430812
MB 680-430812/1-A	Method Blank	Total/NA	Solid	6020A	430812

## General Chemistry

### Analysis Batch: 430864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-124511-1	AOP SB S01	Total/NA	Solid	Moisture	
680-124511-2	AOP SB S02	Total/NA	Solid	Moisture	
680-124511-3	AOP SB S03	Total/NA	Solid	Moisture	
680-124511-4	AOP CB S03	Total/NA	Solid	Moisture	
680-124511-5	AOP SB S04	Total/NA	Solid	Moisture	
680-124511-6	AOP SB S05	Total/NA	Solid	Moisture	
680-124511-7	AOP SB S06	Total/NA	Solid	Moisture	
680-124511-8	AOP SB S07	Total/NA	Solid	Moisture	
680-124511-9	AOP SB S08	Total/NA	Solid	Moisture	
680-124511-10	AOP SB S09	Total/NA	Solid	Moisture	
680-124511-10 MS	AOP SB S09	Total/NA	Solid	Moisture	
680-124511-10 MSD	AOP SB S09	Total/NA	Solid	Moisture	
680-124511-11	AOP SB S10	Total/NA	Solid	Moisture	
680-124511-12	AOP SB S11	Total/NA	Solid	Moisture	
680-124511-13	AOP SB S12	Total/NA	Solid	Moisture	
680-124511-14	AOP SB S13	Total/NA	Solid	Moisture	
680-124511-15	AOP SB S14	Total/NA	Solid	Moisture	
680-124511-16	AOP CB S14	Total/NA	Solid	Moisture	

## Lab Chronicle

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

### Client Sample ID: AOP SB S01

Date Collected: 10/15/15 10:05

Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV

Instrument ID: NOEQUIP

### Client Sample ID: AOP SB S01

Date Collected: 10/15/15 10:05

Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-1

Matrix: Solid

Percent Solids: 90.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.14 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		1	1.14 g	500 mL	431271	04/28/16 17:38	BJB	TAL SAV

Instrument ID: ICPMSB

Total/NA	Prep	3050B			1.14 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		2	1.14 g	500 mL	432053	05/05/16 02:20	BWR	TAL SAV
		Instrument ID: ICPMSC								

Total/NA	Prep	3050B			1.14 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		10	1.14 g	500 mL	432053	05/05/16 02:25	BWR	TAL SAV
		Instrument ID: ICPMSC								

### Client Sample ID: AOP SB S02

Date Collected: 10/15/15 10:10

Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV

Instrument ID: NOEQUIP

### Client Sample ID: AOP SB S02

Date Collected: 10/15/15 10:10

Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-2

Matrix: Solid

Percent Solids: 85.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.17 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		1	1.17 g	500 mL	431271	04/28/16 16:45	BJB	TAL SAV

Instrument ID: ICPMSB

Total/NA	Prep	3050B			1.17 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		2	1.17 g	500 mL	432423	05/07/16 15:38	BWR	TAL SAV
		Instrument ID: ICPMSC								

# Lab Chronicle

Client: Earth Toxics, Inc  
 Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

## Client Sample ID: AOP SB S03

Date Collected: 10/15/15 10:15  
 Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124511-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV
Instrument ID: NOEQUIP										

## Client Sample ID: AOP SB S03

Date Collected: 10/15/15 10:15  
 Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124511-3

Matrix: Solid

Percent Solids: 86.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.16 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		1	1.16 g	500 mL	431271	04/28/16 18:18	BJB	TAL SAV
Instrument ID: ICPMSB										
Total/NA	Prep	3050B			1.16 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		2	1.16 g	500 mL	432053	05/05/16 03:16	BWR	TAL SAV
Instrument ID: ICPMSC										
Total/NA	Prep	3050B			1.16 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		10	1.16 g	500 mL	432423	05/07/16 16:03	BWR	TAL SAV
Instrument ID: ICPMSC										

## Client Sample ID: AOP CB S03

Date Collected: 10/15/15 10:15  
 Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124511-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV
Instrument ID: NOEQUIP										

## Client Sample ID: AOP CB S03

Date Collected: 10/15/15 10:15  
 Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124511-4

Matrix: Solid

Percent Solids: 85.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.14 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		1	1.14 g	500 mL	431271	04/28/16 16:58	BJB	TAL SAV
Instrument ID: ICPMSB										
Total/NA	Prep	3050B			1.14 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		2	1.14 g	500 mL	432423	05/07/16 15:47	BWR	TAL SAV
Instrument ID: ICPMSC										

# Lab Chronicle

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

## Client Sample ID: AOP SB S04

Date Collected: 10/15/15 10:20  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124511-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV

## Client Sample ID: AOP SB S04

Date Collected: 10/15/15 10:20  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124511-5

Matrix: Solid  
Percent Solids: 76.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.15 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		1	1.15 g	500 mL	431271	04/28/16 17:58	BJB	TAL SAV

Instrument ID: ICPMSB

Total/NA	Prep	3050B			1.15 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		2	1.15 g	500 mL	432053	05/05/16 02:45	BWR	TAL SAV

Instrument ID: ICPMSC

## Client Sample ID: AOP SB S05

Date Collected: 10/15/15 10:25  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124511-6

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV

## Client Sample ID: AOP SB S05

Date Collected: 10/15/15 10:25  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124511-6

Matrix: Solid  
Percent Solids: 83.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.16 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		1	1.16 g	500 mL	431271	04/28/16 18:38	BJB	TAL SAV

Instrument ID: ICPMSB

Total/NA	Prep	3050B			1.16 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		2	1.16 g	500 mL	432053	05/05/16 03:21	BWR	TAL SAV

Instrument ID: ICPMSC

## Client Sample ID: AOP SB S06

Date Collected: 10/15/15 10:30  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124511-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV

Instrument ID: NOEQUIP

TestAmerica Savannah

# Lab Chronicle

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

## Client Sample ID: AOP SB S06

Date Collected: 10/15/15 10:30

Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124511-7

Matrix: Solid

Percent Solids: 89.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.15 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		1	1.15 g	500 mL	431271	04/28/16 17:52	BJB	TAL SAV
		Instrument ID: ICPMSB								
Total/NA	Prep	3050B			1.15 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		2	1.15 g	500 mL	432053	05/05/16 02:40	BWR	TAL SAV
		Instrument ID: ICPMSC								

## Client Sample ID: AOP SB S07

Date Collected: 10/15/15 10:40

Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124511-8

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV
		Instrument ID: NOEQUIP								

## Client Sample ID: AOP SB S07

Date Collected: 10/15/15 10:40

Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124511-8

Matrix: Solid

Percent Solids: 87.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.18 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		1	1.18 g	500 mL	431271	04/28/16 18:11	BJB	TAL SAV
		Instrument ID: ICPMSB								
Total/NA	Prep	3050B			1.18 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		2	1.18 g	500 mL	432053	05/05/16 02:55	BWR	TAL SAV
		Instrument ID: ICPMSC								
Total/NA	Prep	3050B			1.18 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		10	1.18 g	500 mL	432053	05/05/16 03:11	BWR	TAL SAV
		Instrument ID: ICPMSC								

## Client Sample ID: AOP SB S08

Date Collected: 10/15/15 10:45

Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124511-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV
		Instrument ID: NOEQUIP								

TestAmerica Savannah

## Lab Chronicle

Client: Earth Toxics, Inc  
 Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

### Client Sample ID: AOP SB S08

Date Collected: 10/15/15 10:45

Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-9

Matrix: Solid

Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.18 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		1	1.18 g	500 mL	431271	04/28/16 18:45	BJB	TAL SAV
		Instrument ID: ICPMSB								
Total/NA	Prep	3050B			1.18 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		2	1.18 g	500 mL	432053	05/05/16 03:26	BWR	TAL SAV
		Instrument ID: ICPMSC								

### Client Sample ID: AOP SB S09

Date Collected: 10/15/15 11:10

Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV
		Instrument ID: NOEQUIP								

### Client Sample ID: AOP SB S09

Date Collected: 10/15/15 11:10

Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-10

Matrix: Solid

Percent Solids: 85.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.17 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		1	1.17 g	500 mL	431271	04/28/16 16:11	BJB	TAL SAV
		Instrument ID: ICPMSB								
Total/NA	Prep	3050B			1.17 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		2	1.17 g	500 mL	432423	05/07/16 14:37	BWR	TAL SAV
		Instrument ID: ICPMSC								
Total/NA	Prep	3050B			1.17 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		10	1.17 g	500 mL	432423	05/07/16 15:02	BWR	TAL SAV
		Instrument ID: ICPMSC								

### Client Sample ID: AOP SB S10

Date Collected: 10/15/15 11:05

Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV
		Instrument ID: NOEQUIP								

TestAmerica Savannah

## Lab Chronicle

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

### Client Sample ID: AOP SB S10

Date Collected: 10/15/15 11:05  
Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-11

Matrix: Solid  
Percent Solids: 86.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.16 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		1	1.16 g	500 mL	431271	04/28/16 17:25	BJB	TAL SAV
		Instrument ID: ICPMSB								
Total/NA	Prep	3050B			1.16 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		10	1.16 g	500 mL	432423	05/07/16 15:58	BWR	TAL SAV
		Instrument ID: ICPMSC								

### Client Sample ID: AOP SB S11

Date Collected: 10/15/15 11:20  
Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV
		Instrument ID: NOEQUIP								

### Client Sample ID: AOP SB S11

Date Collected: 10/15/15 11:20  
Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-12

Matrix: Solid  
Percent Solids: 81.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.15 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		1	1.15 g	500 mL	431271	04/28/16 17:32	BJB	TAL SAV
		Instrument ID: ICPMSB								
Total/NA	Prep	3050B			1.15 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		2	1.15 g	500 mL	432053	05/05/16 02:10	BWR	TAL SAV
		Instrument ID: ICPMSC								
Total/NA	Prep	3050B			1.15 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		10	1.15 g	500 mL	432053	05/05/16 02:15	BWR	TAL SAV
		Instrument ID: ICPMSC								

### Client Sample ID: AOP SB S12

Date Collected: 10/15/15 11:25  
Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV
		Instrument ID: NOEQUIP								

TestAmerica Savannah

## Lab Chronicle

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

### Client Sample ID: AOP SB S12

Date Collected: 10/15/15 11:25  
Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-13

Matrix: Solid  
Percent Solids: 90.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.16 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		1	1.16 g	500 mL	431271	04/28/16 16:51	BJB	TAL SAV
		Instrument ID: ICPMSB								
Total/NA	Prep	3050B			1.16 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		2	1.16 g	500 mL	432423	05/07/16 15:43	BWR	TAL SAV
		Instrument ID: ICPMSC								

### Client Sample ID: AOP SB S13

Date Collected: 10/15/15 11:30  
Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV
		Instrument ID: NOEQUIP								

### Client Sample ID: AOP SB S13

Date Collected: 10/15/15 11:30  
Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-14

Matrix: Solid  
Percent Solids: 87.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.14 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		1	1.14 g	500 mL	431271	04/28/16 18:05	BJB	TAL SAV
		Instrument ID: ICPMSB								
Total/NA	Prep	3050B			1.14 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		2	1.14 g	500 mL	432053	05/05/16 02:50	BWR	TAL SAV
		Instrument ID: ICPMSC								

### Client Sample ID: AOP SB S14

Date Collected: 10/15/15 11:35  
Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-15

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV
		Instrument ID: NOEQUIP								

### Client Sample ID: AOP SB S14

Date Collected: 10/15/15 11:35  
Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-15

Matrix: Solid  
Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.19 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		1	1.19 g	500 mL	431271	04/28/16 17:45	BJB	TAL SAV

TestAmerica Savannah

## Lab Chronicle

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

### Client Sample ID: AOP SB S14

Date Collected: 10/15/15 11:35

Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-15

Matrix: Solid

Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.19 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		2	1.19 g	500 mL	432053	05/05/16 02:30	BWR	TAL SAV
		Instrument ID: ICPMSC								
Total/NA	Prep	3050B			1.19 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		10	1.19 g	500 mL	432053	05/05/16 02:35	BWR	TAL SAV
		Instrument ID: ICPMSC								

### Client Sample ID: AOP CB S14

Date Collected: 10/15/15 11:35

Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture			1		430864	04/27/16 10:55	RAB	TAL SAV
		Instrument ID: NOEQUIP								

### Client Sample ID: AOP CB S14

Date Collected: 10/15/15 11:35

Date Received: 04/26/16 10:00

### Lab Sample ID: 680-124511-16

Matrix: Solid

Percent Solids: 92.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.14 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		1	1.14 g	500 mL	431271	04/28/16 17:18	BJB	TAL SAV
		Instrument ID: ICPMSB								
Total/NA	Prep	3050B			1.14 g	500 mL	430812	04/27/16 07:31	CDD	TAL SAV
Total/NA	Analysis	6020A		10	1.14 g	500 mL	432423	05/07/16 15:53	BWR	TAL SAV
		Instrument ID: ICPMSC								

#### Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Savannah

## Certification Summary

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

### Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP	399.01	02-28-17	
USDA	Federal	SAV 3-04	06-11-17	

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## Method Summary

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124511-1

Method	Method Description	Protocol	Laboratory
6020A	Metals (ICP/MS)	SW846	TAL SAV
Moisture	Percent Moisture	EPA	TAL SAV

**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 SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

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CHAIN OF CUSTODY AND ANALYTICAL REQUEST RECORD				COC No.	Page	# of 2
Project Name:	Site Investigation			PO No.	Project No. 0388817816 SJ	
Site Location:	GTM Cuba			Sample Analysis Requested (Enter number of containers for each test)		
<b>RESOLUTION CONSULTANTS</b>	CTO No. JM B5	RC Project Manager:	Paul Stoddard	(3) Total No. of Containers		
Sampler/Site Phone#				Extra Volume for MS/MSD		
Lab Name:	Test America			Turnaround Time(specify):		
Lab ID	Sample ID (sys_samp_code)	Location ID (sys_loc_code)	Date (mm/dd/yy)	Time (Military) (hhmm)	Matrix Code (1)	Sample Type (2)
						Field Filtered (Y/N)
AOP SB S01	BS01	10/15/15	1005	SO	N	N
AOP SB S02	BS02	10/15/15	1010	SO	N	N
AOP SB S03	BS03		1015	SO	N	N
AOP SB S03	BS03		1015	SO	FB	N
AOP SB S04	BS04		1020	SO	N	D
AOP SBS05	BS05		1025	SO	N	N
AOP SBS06	BS06		1030	SO	N	N
AOP SBS07	BS07		1040	SO	N	N
AOP SBS08	BS08		1045	SO	N	N
AOP SBS09	BS09		1110	SO	N	3
AOP SBS10	BS10		1105	SO	N	N
AOP SBS11	BS11		1120	SO	N	N
Field Comments:						
Relinquished by signature	Date	Time	Received by (signature)	Date	Time	Sample Shipped:
1. Jim Breitling	10/16/15	0800	1	10/25/15	0710	Number of coolers in shipment: _____
2. Maggie Gable	10/25/2016	1500	2	10/25/2016	1450	Samples Iced? (check) Yes <input checked="" type="checkbox"/> No _____
3						Method of Shipment: _____
						Airbill No: _____
						Date Shipped: _____
Sample Shipment and Delivery Details						
Number of coolers in shipment: _____						

(1) AA=Ambient air, AQ=Air quality control, ASB=Asbestos, CK=Caulk, DS=Storm drain sediment, IC=IDW soil, IDW=IDW soil, LS=IDW Concrete, IDB=IDW Solid, SC=Soil gas, SC=Soil/Solid quality control, SSQ=Soil/Solid sediment, SSU=Subsurface sediment, SW=Swab or wipe, TA=Animal tissue, TG=Tissue quality control, WG=Ground water, WL=Sea/ground water, WP=Drinking water, WO=Ocean water, WR=Ground water effluent, WS=Storm water, WW=Waste water, MW=Surface water, EB=Ambient Blk, FB=Field Blk, ED=Equipment Blk, TB=Trip Blk

(2) Sample Type: AB=Ambient Blk, ED=Equipment Blk, FB=Field Blk, FD=Field Duplicate Sample, IDW=Normal Environmental Sample, MIS=Incremental Sampling Methodology, NI=Investigative-Derived Waste, MS=Duplicate Sample, MS=Incremental Sampling Methodology, N=Normal Environmental Sample, ST=Sodium Bisulfate, If NO preservative added leave blank

(3) Preservative added: HA=Hydrochloric Acid, NI=Nitric Acid, SH=Sulfuric Acid, ME=Methanol, SB=Sodium Bisulfite, ST=Sodium Thiosulfate

CHAIN OF CUSTODY AND ANALYTICAL REQUEST RECORD						COC No.	Page	2 of 2																																													
Project Name: Site Investigation			PO No.	Project No. 022251726 Phase S-I																																																	
Site Location: GTMO Cuba			Sample Analysis Requested (Enter number of containers for each test)																																																		
CTO No. JMB5 RC Project Manager: Paul Standard			Extra Volume for MS/MSD																																																		
Sampler/Site Phone#			HOLD																																																		
Turnaround Time(specify):  METALS																																																					
<table border="1"> <thead> <tr> <th>Lab Name:</th> <th>Location ID (sys_loc_code)</th> <th>Date (mm/dd/yy)</th> <th>Time (hhmm)</th> <th>Matrix Code (1)</th> <th>Matrix Code (2)</th> <th>Sample Type (2)</th> <th>Field Filtered (Y/N)</th> <th>Total No. of Containers</th> </tr> </thead> <tbody> <tr><td>AOP SBS12</td><td>BS12</td><td>10/15/15</td><td>1125</td><td>SO</td><td>N</td><td>N</td><td>Y</td><td></td></tr> <tr><td>AOP SBS13</td><td>BS13</td><td>10/15/15</td><td>1130</td><td>SO</td><td>N</td><td>N</td><td>Y</td><td></td></tr> <tr><td>AOP SBS14</td><td>BS14</td><td>10/15/15</td><td>1135</td><td>SO</td><td>N</td><td>N</td><td>Y</td><td></td></tr> <tr><td>AOP CBS14</td><td>BS14</td><td>10/15/15</td><td>1135</td><td>FB</td><td>N</td><td>N</td><td>Y</td><td></td></tr> </tbody> </table>									Lab Name:	Location ID (sys_loc_code)	Date (mm/dd/yy)	Time (hhmm)	Matrix Code (1)	Matrix Code (2)	Sample Type (2)	Field Filtered (Y/N)	Total No. of Containers	AOP SBS12	BS12	10/15/15	1125	SO	N	N	Y		AOP SBS13	BS13	10/15/15	1130	SO	N	N	Y		AOP SBS14	BS14	10/15/15	1135	SO	N	N	Y		AOP CBS14	BS14	10/15/15	1135	FB	N	N	Y	
Lab Name:	Location ID (sys_loc_code)	Date (mm/dd/yy)	Time (hhmm)	Matrix Code (1)	Matrix Code (2)	Sample Type (2)	Field Filtered (Y/N)	Total No. of Containers																																													
AOP SBS12	BS12	10/15/15	1125	SO	N	N	Y																																														
AOP SBS13	BS13	10/15/15	1130	SO	N	N	Y																																														
AOP SBS14	BS14	10/15/15	1135	SO	N	N	Y																																														
AOP CBS14	BS14	10/15/15	1135	FB	N	N	Y																																														
<table border="1"> <thead> <tr> <th colspan="3">Field Comments:</th> <th colspan="6">Sample Shipment and Delivery Details</th> </tr> <tr> <th colspan="3"></th> <th colspan="6">Number of coolers in shipment:</th> </tr> </thead> <tbody> <tr> <td colspan="3"></td> <td colspan="6">Samples Iced? (check) Yes _____ No _____</td> </tr> <tr> <td colspan="3"></td> <td colspan="6">Method of Shipment:</td> </tr> <tr> <td colspan="3"></td> <td colspan="6">Airtail No.: _____ Date Shipped: _____</td> </tr> </tbody> </table>									Field Comments:			Sample Shipment and Delivery Details									Number of coolers in shipment:									Samples Iced? (check) Yes _____ No _____									Method of Shipment:									Airtail No.: _____ Date Shipped: _____					
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			Airtail No.: _____ Date Shipped: _____																																																		
Relinquished by (signature) 1 Ben Standard 2 Paul Standard 3			Received by (signature) 1 <u>He</u> 2 <u>Paul Standard</u> 3 <u>Ben Standard</u>																																																		
Date 1 4/25/16 2 4/26/16 3			Date 1 4/25/16 2 4/26/16 3																																																		
Time 1 1100 2 1100 3			Time 1 1100 2 1100 3																																																		

- (1) AA=Ambient air, AQ=Air quality control, ASB=Asbestos, CK=Caustic, DS=Storm drain sediment, GS=Soil gas, IC=IDW Concrete, IDP=IDW Solid, IDW=IDW soil, LF=Free Product, MA=Mastic, PC=Paint Chips, SC=Cement/Concrete, SE=Sediment, SL=Sludge, SO=Soil, SQ=soil/Solid quality control, SSP=subsurface sediment, SU=surface soil (<6 in), SW=Swab or wipe, TA=Animal tissue, TQ=Tissue quality control, WG=Ground water, WL=Leachate, WO=Ocean water, WP=Drinking water, WR=Ground water effluent, WS=Surface water, WW=Waste water
- (2) Sample Type: AB=Ambient Blk, EB=Equipment Blk, FB=Field Blk, FD=Field Duplicate Sample, IDW=Incremental Sampling Methodology, N=Normal Environmental Sample, MIS=Investigative-Derived Waste, ST=Sodium Thiosulfate, if NO preservative added leave blank
- (3) Preservative added: HA=Hydrochloric Acid, NI=Nitric Acid, SH=Sulfuric Acid, SB=Sodium bisulfite, ST=Sodium Thiosulfate, if NO preservative added leave blank

## Login Sample Receipt Checklist

Client: Earth Toxics, Inc

Job Number: 680-124511-1

**Login Number:** 124511

**List Source:** TestAmerica Savannah

**List Number:** 1

**Creator:** Murray, Thomas J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
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?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	False	preps for 6020A & 7471A out of hold
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.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-124505-1

Client Project/Site: Site Investigation/JMB5

Revision: 1

For:

Earth Toxics, Inc

PO BOX 3382

Logan, Utah 84321

Attn: Mike Dryden



Authorized for release by:

5/13/2016 6:24:25 PM

Robert Bearden, Project Manager I

(912)354-7858

[robert.bearden@testamericainc.com](mailto:robert.bearden@testamericainc.com)

Designee for

Michele Kersey, Project Manager I

(912)354-7858

[michele.kersey@testamericainc.com](mailto:michele.kersey@testamericainc.com)

### LINKS

Review your project  
results through

Total Access

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The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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.

# Definitions/Glossary

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

## Qualifiers

### GC/MS Semi VOA

Qualifier	Qualifier Description
D	The reported value is from a dilution.
M	Manual integrated compound.
D	Sample results are obtained from a dilution; the surrogate or matrix spike recoveries reported are calculated from diluted samples.
U	Undetected at the Limit of Detection.
J	Estimated: The analyte was positively identified; the quantitation is an estimation
J	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix specific concentration; therefore, control limits are not applicable.

## Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

## Sample Summary

Client: Earth Toxics, Inc  
 Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
680-124505-1	AOPS M201-1	Solid	04/21/16 09:23	04/26/16 10:00	1
680-124505-2	AOPS M201-2	Solid	04/21/16 09:23	04/26/16 10:00	2
680-124505-3	AOPS M201-3	Solid	04/21/16 09:51	04/26/16 10:00	3
680-124505-4	AOPC M201-3	Solid	04/21/16 09:51	04/26/16 10:00	4
680-124505-5	AOPS M201-4	Solid	04/21/16 09:46	04/26/16 10:00	5
680-124505-6	AOPS M201-5	Solid	04/21/16 10:16	04/26/16 10:00	6
680-124505-7	AOPS M301-1	Solid	04/21/16 10:20	04/26/16 10:00	7
680-124505-8	AOPS M301-2	Solid	04/21/16 10:40	04/26/16 10:00	8
680-124505-9	AOPS M301-3	Solid	04/21/16 10:50	04/26/16 10:00	9
680-124505-10	AOPS M301-4	Solid	04/21/16 11:07	04/26/16 10:00	10
680-124505-11	FB042116	Water	04/21/16 11:20	04/26/16 10:00	11
680-124505-12	EB042116	Water	04/21/16 11:25	04/26/16 10:00	12

# Case Narrative

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

**Job ID: 680-124505-1**

**Laboratory: TestAmerica Savannah**

Narrative

## CASE NARRATIVE

**Client: Earth Toxics, Inc**

**Project: Site Investigation/JMB5**

**Report Number: 680-124505-1**

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 the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

### **REVISED REPORT**

This report constitutes a revised report. The original report was re-issued to incorporate dry weight correction for soils and edits to the Case Narrative text.

### **RECEIPT**

The samples were received on 4/26/2016 10:00 AM. The samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.9° C and 4.4° C.

### **SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) LOW LEVEL PAH**

Samples AOPS M201-1 (680-124505-1), AOPS M201-2 (680-124505-2), AOPS M201-3 (680-124505-3), AOPC M201-3 (680-124505-4), AOPS M201-4 (680-124505-5), AOPS M201-5 (680-124505-6), AOPS M301-1 (680-124505-7), AOPS M301-2 (680-124505-8), AOPS M301-3 (680-124505-9) and AOPS M301-4 (680-124505-10) were analyzed for Semivolatile Organic Compounds (GC/MS) Low level PAH in accordance with EPA SW-846 Method 8270D. The samples were prepared on 04/27/2016 and analyzed on 05/02/2016.

In sufficient ample volume wa available to perform a matrix spike/matrix spike duplicate/ ample duplicate (MS/MSD/DUP) associated with prep batch 430861.

The closing CCV recovered below 50% for Indeno[1,2,3-cd]pyrene. It was determined via reanalysis that the sample matrix contributed to the CCV failure. As such, additional re-analyses were not performed, and the data were qualified and reported.

Several analytes exceeded the recovery criteria low for the MS and MSD of sample AOPS M301-1 (680-124505-7) in batch 680-431370.

Samples AOPS M201-1 (680-124505-1)[25X], AOPS M201-1 (680-124505-1)[5X], AOPS M201-2 (680-124505-2)[5X], AOPS M201-2 (680-124505-2)[50X], AOPS M201-3 (680-124505-3)[5X], AOPS M201-4 (680-124505-5)[5X], AOPS M201-5 (680-124505-6)[10X], AOPS M201-5 (680-124505-6)[50X], AOPS M301-1 (680-124505-7)[5X], AOPS M301-1 (680-124505-7)[50X], AOPS M301-2 (680-124505-8)[10X], AOPS M301-3 (680-124505-9)[10X], AOPS M301-3 (680-124505-9)[50X], AOPS M301-4 (680-124505-10)[10X] and AOPS M301-4 (680-124505-10)[100X] 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.

### **SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) LOW LEVEL PAH**

Samples FB042116 (680-124505-11) and EB042116 (680-124505-12) were analyzed for Semivolatile Organic Compounds (GC/MS) Low level PAH in accordance with EPA SW-846 Method 8270D. The samples were prepared on 04/27/2016 and analyzed on 04/29/2016.

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

# Client Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

**Client Sample ID: AOPS M201-1**

Date Collected: 04/21/16 09:23

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124505-1**

Matrix: Solid

Percent Solids: 90.7

**Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	140	D	36	17	ug/Kg	✉	04/27/16 08:24	05/02/16 12:52	5
2-Methylnaphthalene	120	D	36	18	ug/Kg	✉	04/27/16 08:24	05/02/16 12:52	5
Acenaphthene	900	D	36	18	ug/Kg	✉	04/27/16 08:24	05/02/16 12:52	5
Acenaphthylene	66	D	36	18	ug/Kg	✉	04/27/16 08:24	05/02/16 12:52	5
Anthracene	1000	D	36	18	ug/Kg	✉	04/27/16 08:24	05/02/16 12:52	5
Benzo[g,h,i]perylene	2500	D	36	18	ug/Kg	✉	04/27/16 08:24	05/02/16 12:52	5
Benzo[k]fluoranthene	3100	D M	36	11	ug/Kg	✉	04/27/16 08:24	05/02/16 12:52	5
Dibenz(a,h)anthracene	1200	D	36	18	ug/Kg	✉	04/27/16 08:24	05/02/16 12:52	5
Fluorene	430	D	36	18	ug/Kg	✉	04/27/16 08:24	05/02/16 12:52	5
Indeno[1,2,3-cd]pyrene	1700	D	36	18	ug/Kg	✉	04/27/16 08:24	05/02/16 12:52	5
Naphthalene	99	D	36	18	ug/Kg	✉	04/27/16 08:24	05/02/16 12:52	5
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl (Surr)</i>	66				36 - 131		04/27/16 08:24	05/02/16 12:52	5

**Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH - DL**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	5800	D	180	89	ug/Kg	✉	04/27/16 08:24	05/02/16 13:17	25
Benzo[a]pyrene	5700	D	180	33	ug/Kg	✉	04/27/16 08:24	05/02/16 13:17	25
Benzo[b]fluoranthene	10000	D M	180	89	ug/Kg	✉	04/27/16 08:24	05/02/16 13:17	25
Chrysene	6400	D	180	89	ug/Kg	✉	04/27/16 08:24	05/02/16 13:17	25
Fluoranthene	13000	D	180	89	ug/Kg	✉	04/27/16 08:24	05/02/16 13:17	25
Phenanthrene	9200	D	180	65	ug/Kg	✉	04/27/16 08:24	05/02/16 13:17	25
Pyrene	11000	D	180	89	ug/Kg	✉	04/27/16 08:24	05/02/16 13:17	25

**Client Sample ID: AOPS M201-2**

Date Collected: 04/21/16 09:23

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124505-2**

Matrix: Solid

Percent Solids: 89.0

**Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	200	D	37	17	ug/Kg	✉	04/27/16 08:24	05/02/16 13:43	5
2-Methylnaphthalene	190	D	37	18	ug/Kg	✉	04/27/16 08:24	05/02/16 13:43	5
Acenaphthene	1300	D	37	18	ug/Kg	✉	04/27/16 08:24	05/02/16 13:43	5
Acenaphthylene	77	D	37	18	ug/Kg	✉	04/27/16 08:24	05/02/16 13:43	5
Anthracene	1600	D	37	18	ug/Kg	✉	04/27/16 08:24	05/02/16 13:43	5
Benzo[g,h,i]perylene	2900	D	37	18	ug/Kg	✉	04/27/16 08:24	05/02/16 13:43	5
Benzo[k]fluoranthene	2500	D M	37	11	ug/Kg	✉	04/27/16 08:24	05/02/16 13:43	5
Dibenz(a,h)anthracene	1300	D	37	18	ug/Kg	✉	04/27/16 08:24	05/02/16 13:43	5
Fluorene	710	D	37	18	ug/Kg	✉	04/27/16 08:24	05/02/16 13:43	5
Indeno[1,2,3-cd]pyrene	1900	D	37	18	ug/Kg	✉	04/27/16 08:24	05/02/16 13:43	5
Naphthalene	200	D	37	18	ug/Kg	✉	04/27/16 08:24	05/02/16 13:43	5
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl (Surr)</i>	66				36 - 131		04/27/16 08:24	05/02/16 13:43	5

**Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH - DL**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	10000	D	370	180	ug/Kg	✉	04/27/16 08:24	05/02/16 14:08	50
Benzo[a]pyrene	9000	D	370	67	ug/Kg	✉	04/27/16 08:24	05/02/16 14:08	50

TestAmerica Savannah

# Client Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

## Client Sample ID: AOPS M201-2

Date Collected: 04/21/16 09:23  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124505-2

Matrix: Solid

Percent Solids: 89.0

### Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH - DL (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	15000	D M	370	180	ug/Kg	✉	04/27/16 08:24	05/02/16 14:08	50
Chrysene	11000	D	370	180	ug/Kg	✉	04/27/16 08:24	05/02/16 14:08	50
Fluoranthene	20000	D	370	180	ug/Kg	✉	04/27/16 08:24	05/02/16 14:08	50
Phenanthrene	16000	D	370	130	ug/Kg	✉	04/27/16 08:24	05/02/16 14:08	50
Pyrene	20000	D	370	180	ug/Kg	✉	04/27/16 08:24	05/02/16 14:08	50

## Client Sample ID: AOPS M201-3

Date Collected: 04/21/16 09:51  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124505-3

Matrix: Solid

Percent Solids: 87.4

### Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	19	U	38	18	ug/Kg	✉	04/27/16 08:24	05/02/16 14:34	5
2-Methylnaphthalene	38	U	38	19	ug/Kg	✉	04/27/16 08:24	05/02/16 14:34	5
Acenaphthene	90	D	38	19	ug/Kg	✉	04/27/16 08:24	05/02/16 14:34	5
Acenaphthylene	38	U	38	19	ug/Kg	✉	04/27/16 08:24	05/02/16 14:34	5
Anthracene	140	D	38	19	ug/Kg	✉	04/27/16 08:24	05/02/16 14:34	5
Benzo[a]anthracene	420	D	38	19	ug/Kg	✉	04/27/16 08:24	05/02/16 14:34	5
Benzo[a]pyrene	360	D	38	6.8	ug/Kg	✉	04/27/16 08:24	05/02/16 14:34	5
Benzo[b]fluoranthene	590	D M	38	19	ug/Kg	✉	04/27/16 08:24	05/02/16 14:34	5
Benzo[g,h,i]perylene	170	D	38	19	ug/Kg	✉	04/27/16 08:24	05/02/16 14:34	5
Benzo[k]fluoranthene	290	D M	38	11	ug/Kg	✉	04/27/16 08:24	05/02/16 14:34	5
Chrysene	420	D	38	19	ug/Kg	✉	04/27/16 08:24	05/02/16 14:34	5
Dibenz(a,h)anthracene	62	D	38	19	ug/Kg	✉	04/27/16 08:24	05/02/16 14:34	5
Fluoranthene	870	D	38	19	ug/Kg	✉	04/27/16 08:24	05/02/16 14:34	5
Fluorene	61	D	38	19	ug/Kg	✉	04/27/16 08:24	05/02/16 14:34	5
Indeno[1,2,3-cd]pyrene	120	D	38	19	ug/Kg	✉	04/27/16 08:24	05/02/16 14:34	5
Naphthalene	38	U	38	19	ug/Kg	✉	04/27/16 08:24	05/02/16 14:34	5
Phenanthrene	750	D	38	14	ug/Kg	✉	04/27/16 08:24	05/02/16 14:34	5
Pyrene	760	D	38	19	ug/Kg	✉	04/27/16 08:24	05/02/16 14:34	5
<b>Surrogate</b>		%Recovery	Qualifer	Limits			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl (Surr)</i>		72		36 - 131			04/27/16 08:24	05/02/16 14:34	5

## Client Sample ID: AOPC M201-3

Date Collected: 04/21/16 09:51  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124505-4

Matrix: Solid

Percent Solids: 88.8

### Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	3.7	U	7.5	3.5	ug/Kg	✉	04/27/16 08:24	05/02/16 15:00	1
2-Methylnaphthalene	7.5	U	7.5	3.7	ug/Kg	✉	04/27/16 08:24	05/02/16 15:00	1
Acenaphthene	14		7.5	3.7	ug/Kg	✉	04/27/16 08:24	05/02/16 15:00	1
Acenaphthylene	3.9	J	7.5	3.7	ug/Kg	✉	04/27/16 08:24	05/02/16 15:00	1
Anthracene	29		7.5	3.7	ug/Kg	✉	04/27/16 08:24	05/02/16 15:00	1
Benzo[a]anthracene	120		7.5	3.7	ug/Kg	✉	04/27/16 08:24	05/02/16 15:00	1
Benzo[a]pyrene	120		7.5	1.3	ug/Kg	✉	04/27/16 08:24	05/02/16 15:00	1
Benzo[b]fluoranthene	220	M	7.5	3.7	ug/Kg	✉	04/27/16 08:24	05/02/16 15:00	1
Benzo[g,h,i]perylene	63		7.5	3.7	ug/Kg	✉	04/27/16 08:24	05/02/16 15:00	1
Benzo[k]fluoranthene	73	M	7.5	2.2	ug/Kg	✉	04/27/16 08:24	05/02/16 15:00	1

TestAmerica Savannah

# Client Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

**Client Sample ID: AOPC M201-3**  
Date Collected: 04/21/16 09:51  
Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124505-4**  
Matrix: Solid  
Percent Solids: 88.8

## Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	120		7.5	3.7	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:00	1
Dibenz(a,h)anthracene	20		7.5	3.7	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:00	1
Fluoranthene	240		7.5	3.7	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:00	1
Fluorene	9.1		7.5	3.7	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:00	1
Indeno[1,2,3-cd]pyrene	37		7.5	3.7	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:00	1
Naphthalene	4.8 J		7.5	3.7	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:00	1
Phenanthrene	150		7.5	2.7	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:00	1
Pyrene	200		7.5	3.7	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:00	1
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl (Surr)</i>	69						04/27/16 08:24	05/02/16 15:00	1

**Client Sample ID: AOPS M201-4**

Date Collected: 04/21/16 09:46  
Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124505-5**  
Matrix: Solid  
Percent Solids: 85.4

## Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	23	J D	39	18	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:26	5
2-Methylnaphthalene	25	J D	39	19	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:26	5
Acenaphthene	170	D	39	19	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:26	5
Acenaphthylene	39	U	39	19	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:26	5
Anthracene	280	D	39	19	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:26	5
Benzo[a]anthracene	1200	D	39	19	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:26	5
Benzo[a]pyrene	1200	D	39	7.0	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:26	5
Benzo[b]fluoranthene	2000	D M	39	19	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:26	5
Benzo[g,h,i]perylene	570	D	39	19	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:26	5
Benzo[k]fluoranthene	680	D M	39	12	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:26	5
Chrysene	1300	D	39	19	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:26	5
Dibenz(a,h)anthracene	180	D	39	19	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:26	5
Fluoranthene	2600	D	39	19	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:26	5
Fluorene	110	D	39	19	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:26	5
Indeno[1,2,3-cd]pyrene	330	D	39	19	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:26	5
Naphthalene	29	J D	39	19	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:26	5
Phenanthrene	1800	D	39	14	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:26	5
Pyrene	2500	D	39	19	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:26	5
<b>Surrogate</b>							<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl (Surr)</i>	96						04/27/16 08:24	05/02/16 15:26	5

**Client Sample ID: AOPS M201-5**

Date Collected: 04/21/16 10:16  
Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124505-6**  
Matrix: Solid  
Percent Solids: 93.2

## Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	140	D	71	33	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:51	10
2-Methylnaphthalene	150	D	71	35	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:51	10
Acenaphthene	940	D	71	35	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:51	10
Acenaphthylene	79	D	71	35	ug/Kg	⊗	04/27/16 08:24	05/02/16 15:51	10

TestAmerica Savannah

# Client Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

**Client Sample ID: AOPS M201-5**  
Date Collected: 04/21/16 10:16  
Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124505-6**  
Matrix: Solid  
Percent Solids: 93.2

## Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	1000	D	71	35	ug/Kg	✉	04/27/16 08:24	05/02/16 15:51	10
Benzo[a]anthracene	5700	D	71	35	ug/Kg	✉	04/27/16 08:24	05/02/16 15:51	10
Benzo[a]pyrene	5100	D	71	13	ug/Kg	✉	04/27/16 08:24	05/02/16 15:51	10
Benzo[g,h,i]perylene	2300	D	71	35	ug/Kg	✉	04/27/16 08:24	05/02/16 15:51	10
Benzo[k]fluoranthene	3200	D M	71	21	ug/Kg	✉	04/27/16 08:24	05/02/16 15:51	10
Chrysene	6400	D	71	35	ug/Kg	✉	04/27/16 08:24	05/02/16 15:51	10
Dibenz(a,h)anthracene	770	D	71	35	ug/Kg	✉	04/27/16 08:24	05/02/16 15:51	10
Fluorene	420	D	71	35	ug/Kg	✉	04/27/16 08:24	05/02/16 15:51	10
Indeno[1,2,3-cd]pyrene	1400	D	71	35	ug/Kg	✉	04/27/16 08:24	05/02/16 15:51	10
Naphthalene	140	D	71	35	ug/Kg	✉	04/27/16 08:24	05/02/16 15:51	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl (Surr)</i>	0	D	36 - 131				04/27/16 08:24	05/02/16 15:51	10

## Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	11000	D M	360	180	ug/Kg	✉	04/27/16 08:24	05/02/16 16:17	50
Fluoranthene	15000	D	360	180	ug/Kg	✉	04/27/16 08:24	05/02/16 16:17	50
Phenanthrene	12000	D	360	130	ug/Kg	✉	04/27/16 08:24	05/02/16 16:17	50
Pyrene	16000	D	360	180	ug/Kg	✉	04/27/16 08:24	05/02/16 16:17	50

**Client Sample ID: AOPS M301-1**

Date Collected: 04/21/16 10:20  
Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124505-7**  
Matrix: Solid  
Percent Solids: 96.5

## Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	350	D	35	16	ug/Kg	✉	04/27/16 08:24	05/02/16 16:43	5
2-Methylnaphthalene	420	D	35	17	ug/Kg	✉	04/27/16 08:24	05/02/16 16:43	5
Acenaphthene	1900	D J	35	17	ug/Kg	✉	04/27/16 08:24	05/02/16 16:43	5
Acenaphthylene	100	D	35	17	ug/Kg	✉	04/27/16 08:24	05/02/16 16:43	5
Anthracene	2100	D J	35	17	ug/Kg	✉	04/27/16 08:24	05/02/16 16:43	5
Dibenz(a,h)anthracene	1600	D J	35	17	ug/Kg	✉	04/27/16 08:24	05/02/16 16:43	5
Fluorene	1000	D J	35	17	ug/Kg	✉	04/27/16 08:24	05/02/16 16:43	5
Indeno[1,2,3-cd]pyrene	2200	D	35	17	ug/Kg	✉	04/27/16 08:24	05/02/16 16:43	5
Naphthalene	270	D	35	17	ug/Kg	✉	04/27/16 08:24	05/02/16 16:43	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
<i>o-Terphenyl (Surr)</i>	90		36 - 131				04/27/16 08:24	05/02/16 16:43	5

## Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	11000	D	350	170	ug/Kg	✉	04/27/16 08:24	05/02/16 17:09	50
Benzo[a]pyrene	10000	D	350	62	ug/Kg	✉	04/27/16 08:24	05/02/16 17:09	50
Benzo[b]fluoranthene	17000	D M	350	170	ug/Kg	✉	04/27/16 08:24	05/02/16 17:09	50
Benzo[g,h,i]perylene	4600	D	350	170	ug/Kg	✉	04/27/16 08:24	05/02/16 17:09	50
Benzo[k]fluoranthene	7200	D M	350	100	ug/Kg	✉	04/27/16 08:24	05/02/16 17:09	50
Chrysene	13000	D	350	170	ug/Kg	✉	04/27/16 08:24	05/02/16 17:09	50
Fluoranthene	24000	D	350	170	ug/Kg	✉	04/27/16 08:24	05/02/16 17:09	50
Phenanthrene	20000	D	350	120	ug/Kg	✉	04/27/16 08:24	05/02/16 17:09	50
Pyrene	26000	D	350	170	ug/Kg	✉	04/27/16 08:24	05/02/16 17:09	50

TestAmerica Savannah

# Client Sample Results

Client: Earth Toxics, Inc

Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

**Client Sample ID: AOPS M301-2**

Date Collected: 04/21/16 10:40

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124505-8**

Matrix: Solid

Percent Solids: 95.1

**Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	85	D	70	33	ug/Kg	✉	04/27/16 08:24	05/02/16 17:34	10
2-Methylnaphthalene	88	D	70	35	ug/Kg	✉	04/27/16 08:24	05/02/16 17:34	10
Acenaphthene	460	D	70	35	ug/Kg	✉	04/27/16 08:24	05/02/16 17:34	10
Acenaphthylene	37	J D	70	35	ug/Kg	✉	04/27/16 08:24	05/02/16 17:34	10
Anthracene	450	D	70	35	ug/Kg	✉	04/27/16 08:24	05/02/16 17:34	10
Benzo[a]anthracene	2500	D	70	35	ug/Kg	✉	04/27/16 08:24	05/02/16 17:34	10
Benzo[a]pyrene	2300	D	70	13	ug/Kg	✉	04/27/16 08:24	05/02/16 17:34	10
Benzo[b]fluoranthene	4000	D M	70	35	ug/Kg	✉	04/27/16 08:24	05/02/16 17:34	10
Benzo[g,h,i]perylene	1100	D	70	35	ug/Kg	✉	04/27/16 08:24	05/02/16 17:34	10
Benzo[k]fluoranthene	1800	D M	70	21	ug/Kg	✉	04/27/16 08:24	05/02/16 17:34	10
Chrysene	2900	D	70	35	ug/Kg	✉	04/27/16 08:24	05/02/16 17:34	10
Dibenz(a,h)anthracene	380	D	70	35	ug/Kg	✉	04/27/16 08:24	05/02/16 17:34	10
Fluoranthene	5100	D	70	35	ug/Kg	✉	04/27/16 08:24	05/02/16 17:34	10
Fluorene	200	D	70	35	ug/Kg	✉	04/27/16 08:24	05/02/16 17:34	10
Indeno[1,2,3-cd]pyrene	660	D	70	35	ug/Kg	✉	04/27/16 08:24	05/02/16 17:34	10
Naphthalene	49	J D	70	35	ug/Kg	✉	04/27/16 08:24	05/02/16 17:34	10
Phenanthrene	3900	D	70	25	ug/Kg	✉	04/27/16 08:24	05/02/16 17:34	10
Pyrene	5300	D	70	35	ug/Kg	✉	04/27/16 08:24	05/02/16 17:34	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	0	D	36 - 131				04/27/16 08:24	05/02/16 17:34	10

**Client Sample ID: AOPS M301-3**

Date Collected: 04/21/16 10:50

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124505-9**

Matrix: Solid

Percent Solids: 96.7

**Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	170	D	68	32	ug/Kg	✉	04/27/16 08:24	05/02/16 18:25	10
2-Methylnaphthalene	210	D	68	34	ug/Kg	✉	04/27/16 08:24	05/02/16 18:25	10
Acenaphthene	750	D	68	34	ug/Kg	✉	04/27/16 08:24	05/02/16 18:25	10
Acenaphthylene	46	J D	68	34	ug/Kg	✉	04/27/16 08:24	05/02/16 18:25	10
Anthracene	680	D	68	34	ug/Kg	✉	04/27/16 08:24	05/02/16 18:25	10
Benzo[a]anthracene	3700	D	68	34	ug/Kg	✉	04/27/16 08:24	05/02/16 18:25	10
Benzo[a]pyrene	3200	D	68	12	ug/Kg	✉	04/27/16 08:24	05/02/16 18:25	10
Benzo[b]fluoranthene	5300	D M	68	34	ug/Kg	✉	04/27/16 08:24	05/02/16 18:25	10
Benzo[g,h,i]perylene	1400	D	68	34	ug/Kg	✉	04/27/16 08:24	05/02/16 18:25	10
Benzo[k]fluoranthene	2500	D M	68	20	ug/Kg	✉	04/27/16 08:24	05/02/16 18:25	10
Chrysene	4200	D	68	34	ug/Kg	✉	04/27/16 08:24	05/02/16 18:25	10
Dibenz(a,h)anthracene	550	D	68	34	ug/Kg	✉	04/27/16 08:24	05/02/16 18:25	10
Fluorene	280	D	68	34	ug/Kg	✉	04/27/16 08:24	05/02/16 18:25	10
Indeno[1,2,3-cd]pyrene	920	D	68	34	ug/Kg	✉	04/27/16 08:24	05/02/16 18:25	10
Naphthalene	160	D	68	34	ug/Kg	✉	04/27/16 08:24	05/02/16 18:25	10
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
o-Terphenyl (Surr)	0	D	36 - 131				04/27/16 08:24	05/02/16 18:25	10

**Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH - DL**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	11000	D	340	170	ug/Kg	✉	04/27/16 08:24	05/02/16 18:51	50

TestAmerica Savannah

# Client Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

## Client Sample ID: AOPS M301-3

Date Collected: 04/21/16 10:50  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124505-9

Matrix: Solid

Percent Solids: 96.7

### Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH - DL (Continued)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	9000	D	340	120	ug/Kg	✉	04/27/16 08:24	05/02/16 18:51	50
Pyrene	11000	D	340	170	ug/Kg	✉	04/27/16 08:24	05/02/16 18:51	50

## Client Sample ID: AOPS M301-4

Date Collected: 04/21/16 11:07  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124505-10

Matrix: Solid

Percent Solids: 93.4

### Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	430	D	71	33	ug/Kg	✉	04/27/16 08:24	05/02/16 19:16	10
2-Methylnaphthalene	470	D	71	35	ug/Kg	✉	04/27/16 08:24	05/02/16 19:16	10
Acenaphthene	3200	D	71	35	ug/Kg	✉	04/27/16 08:24	05/02/16 19:16	10
Acenaphthylene	170	D	71	35	ug/Kg	✉	04/27/16 08:24	05/02/16 19:16	10
Anthracene	4800	D	71	35	ug/Kg	✉	04/27/16 08:24	05/02/16 19:16	10
Benzo[g,h,i]perylene	6800	D	71	35	ug/Kg	✉	04/27/16 08:24	05/02/16 19:16	10
Dibenz(a,h)anthracene	3100	D	71	35	ug/Kg	✉	04/27/16 08:24	05/02/16 19:16	10
Fluorene	1800	D	71	35	ug/Kg	✉	04/27/16 08:24	05/02/16 19:16	10
Indeno[1,2,3-cd]pyrene	4100	D	71	35	ug/Kg	✉	04/27/16 08:24	05/02/16 19:16	10
Naphthalene	590	D	71	35	ug/Kg	✉	04/27/16 08:24	05/02/16 19:16	10

### Surrogate

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	0	D	36 - 131	04/27/16 08:24	05/02/16 19:16	10

### Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH - DL

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	19000	D	710	350	ug/Kg	✉	04/27/16 08:24	05/02/16 19:42	100
Benzo[a]pyrene	16000	D	710	130	ug/Kg	✉	04/27/16 08:24	05/02/16 19:42	100
Benzo[b]fluoranthene	26000	D M	710	350	ug/Kg	✉	04/27/16 08:24	05/02/16 19:42	100
Benzo[k]fluoranthene	14000	D M	710	210	ug/Kg	✉	04/27/16 08:24	05/02/16 19:42	100
Chrysene	20000	D	710	350	ug/Kg	✉	04/27/16 08:24	05/02/16 19:42	100
Fluoranthene	40000	D	710	350	ug/Kg	✉	04/27/16 08:24	05/02/16 19:42	100
Phenanthrene	34000	D	710	260	ug/Kg	✉	04/27/16 08:24	05/02/16 19:42	100
Pyrene	41000	D	710	350	ug/Kg	✉	04/27/16 08:24	05/02/16 19:42	100

## Client Sample ID: FB042116

Date Collected: 04/21/16 11:20  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124505-11

Matrix: Water

### Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.40	U	1.0	0.40	ug/L	✉	04/27/16 16:13	04/29/16 23:05	1
2-Methylnaphthalene	0.20	U	0.20	0.10	ug/L	✉	04/27/16 16:13	04/29/16 23:05	1
Acenaphthene	0.20	U	0.20	0.10	ug/L	✉	04/27/16 16:13	04/29/16 23:05	1
Acenaphthylene	0.20	U	0.20	0.10	ug/L	✉	04/27/16 16:13	04/29/16 23:05	1
Anthracene	0.20	U	0.20	0.10	ug/L	✉	04/27/16 16:13	04/29/16 23:05	1
Benzo[a]anthracene	0.20	U	0.20	0.10	ug/L	✉	04/27/16 16:13	04/29/16 23:05	1
Benzo[a]pyrene	0.20	U	0.20	0.10	ug/L	✉	04/27/16 16:13	04/29/16 23:05	1
Benzo[b]fluoranthene	0.20	U	0.20	0.10	ug/L	✉	04/27/16 16:13	04/29/16 23:05	1
Benzo[g,h,i]perylene	0.20	U	0.20	0.10	ug/L	✉	04/27/16 16:13	04/29/16 23:05	1
Benzo[k]fluoranthene	0.20	U	0.20	0.10	ug/L	✉	04/27/16 16:13	04/29/16 23:05	1

TestAmerica Savannah

# Client Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

**Client Sample ID: FB042116**

**Lab Sample ID: 680-124505-11**

Matrix: Water

Date Collected: 04/21/16 11:20

Date Received: 04/26/16 10:00

**Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH (Continued)**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.10	U	0.20	0.045	ug/L	04/27/16 16:13	04/29/16 23:05	1	1
Dibenz(a,h)anthracene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:05	1	2
Fluoranthene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:05	1	3
Fluorene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:05	1	4
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:05	1	5
Naphthalene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:05	1	6
Phenanthrene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:05	1	7
Pyrene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:05	1	8
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
<i>o-Terphenyl</i>	64		35 - 130			04/27/16 16:13	04/29/16 23:05	1	9

**Client Sample ID: EB042116**

**Lab Sample ID: 680-124505-12**

Matrix: Water

Date Collected: 04/21/16 11:25

Date Received: 04/26/16 10:00

**Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
1-Methylnaphthalene	0.40	U	1.0	0.40	ug/L	04/27/16 16:13	04/29/16 23:27	1	1
2-Methylnaphthalene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:27	1	2
Acenaphthene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:27	1	3
Acenaphthylene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:27	1	4
Anthracene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:27	1	5
Benzo[a]anthracene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:27	1	6
Benzo[a]pyrene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:27	1	7
Benzo[b]fluoranthene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:27	1	8
Benzo[g,h,i]perylene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:27	1	9
Benzo[k]fluoranthene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:27	1	10
Chrysene	0.10	U	0.20	0.045	ug/L	04/27/16 16:13	04/29/16 23:27	1	11
Dibenz(a,h)anthracene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:27	1	12
Fluoranthene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:27	1	1
Fluorene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:27	1	2
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:27	1	3
Naphthalene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:27	1	4
Phenanthrene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:27	1	5
Pyrene	0.20	U	0.20	0.10	ug/L	04/27/16 16:13	04/29/16 23:27	1	6
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
<i>o-Terphenyl</i>	58		35 - 130			04/27/16 16:13	04/29/16 23:27	1	7

TestAmerica Savannah

# QC Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

## Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH

**Lab Sample ID: MB 680-430813/11-A**

**Matrix: Solid**

**Analysis Batch: 431370**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 430813**

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier					04/27/16 08:24	05/02/16 11:12	1
1-Methylnaphthalene	3.3	U	6.6	3.1	ug/Kg				
2-Methylnaphthalene	6.6	U	6.6	3.3	ug/Kg	04/27/16 08:24	05/02/16 11:12		1
Acenaphthene	6.6	U	6.6	3.3	ug/Kg	04/27/16 08:24	05/02/16 11:12		1
Acenaphthylene	6.6	U	6.6	3.3	ug/Kg	04/27/16 08:24	05/02/16 11:12		1
Anthracene	6.6	U	6.6	3.3	ug/Kg	04/27/16 08:24	05/02/16 11:12		1
Benzo[a]anthracene	6.6	U	6.6	3.3	ug/Kg	04/27/16 08:24	05/02/16 11:12		1
Benzo[a]pyrene	3.3	U	6.6	1.2	ug/Kg	04/27/16 08:24	05/02/16 11:12		1
Benzo[b]fluoranthene	6.6	U	6.6	3.3	ug/Kg	04/27/16 08:24	05/02/16 11:12		1
Benzo[g,h,i]perylene	6.6	U	6.6	3.3	ug/Kg	04/27/16 08:24	05/02/16 11:12		1
Benzo[k]fluoranthene	3.3	U	6.6	2.0	ug/Kg	04/27/16 08:24	05/02/16 11:12		1
Chrysene	6.6	U	6.6	3.3	ug/Kg	04/27/16 08:24	05/02/16 11:12		1
Dibenz(a,h)anthracene	6.6	U	6.6	3.3	ug/Kg	04/27/16 08:24	05/02/16 11:12		1
Fluoranthene	6.6	U	6.6	3.3	ug/Kg	04/27/16 08:24	05/02/16 11:12		1
Fluorene	6.6	U	6.6	3.3	ug/Kg	04/27/16 08:24	05/02/16 11:12		1
Indeno[1,2,3-cd]pyrene	6.6	U	6.6	3.3	ug/Kg	04/27/16 08:24	05/02/16 11:12		1
Naphthalene	6.6	U	6.6	3.3	ug/Kg	04/27/16 08:24	05/02/16 11:12		1
Phenanthrene	3.3	U	6.6	2.4	ug/Kg	04/27/16 08:24	05/02/16 11:12		1
Pyrene	6.6	U	6.6	3.3	ug/Kg	04/27/16 08:24	05/02/16 11:12		1
Surrogate	MB	MB	Limits	%Rec.	Prepared	Analyzed	Dil Fac		
	%Recovery	Qualifier							
<i>o-Terphenyl (Surr)</i>	72		36 - 131		04/27/16 08:24	05/02/16 11:12	1		

**Lab Sample ID: LCS 680-430813/12-A**

**Matrix: Solid**

**Analysis Batch: 431370**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 430813**

Analyte	Spike	LCS	LCS	Unit	D	%Rec	Limits	%Rec.	
	Added	Result	Qualifier						
1-Methylnaphthalene	333	230		ug/Kg		69	40 - 119		
2-Methylnaphthalene	333	228		ug/Kg		68	38 - 122		
Acenaphthene	333	234		ug/Kg		70	40 - 123		
Acenaphthylene	333	233		ug/Kg		70	32 - 132		
Anthracene	333	238		ug/Kg		72	47 - 123		
Benzo[a]anthracene	333	245		ug/Kg		74	49 - 126		
Benzo[a]pyrene	333	263		ug/Kg		79	45 - 129		
Benzo[b]fluoranthene	333	257		ug/Kg		77	45 - 132		
Benzo[g,h,i]perylene	333	276		ug/Kg		83	43 - 134		
Benzo[k]fluoranthene	333	233		ug/Kg		70	47 - 132		
Chrysene	333	231		ug/Kg		69	50 - 124		
Dibenz(a,h)anthracene	333	272		ug/Kg		82	45 - 134		
Fluoranthene	333	254		ug/Kg		76	50 - 127		
Fluorene	333	236		ug/Kg		71	43 - 125		
Indeno[1,2,3-cd]pyrene	333	264		ug/Kg		79	45 - 133		
Naphthalene	333	223		ug/Kg		67	35 - 123		
Phenanthrene	333	261		ug/Kg		78	50 - 121		
Pyrene	333	230		ug/Kg		69	47 - 127		

TestAmerica Savannah

# QC Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

## Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH (Continued)

**Lab Sample ID: LCS 680-430813/12-A**

**Matrix: Solid**

**Analysis Batch: 431370**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 430813**

Surrogate	LCS %Recovery	LCS Qualifier	Limits
<i>o-Terphenyl (Surr)</i>	74		36 - 131

**Lab Sample ID: 680-124505-7 MS**

**Matrix: Solid**

**Analysis Batch: 431370**

**Client Sample ID: AOPS M301-1**

**Prep Type: Total/NA**

**Prep Batch: 430813**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	Limits
1-Methylnaphthalene	350	D	346	530	D	ug/Kg	⊗	52	40 - 119	
2-Methylnaphthalene	420	D	346	592	D	ug/Kg	⊗	49	38 - 122	
Acenaphthene	1900	D J	346	1470	D 4	ug/Kg	⊗	-116	40 - 123	
Acenaphthylene	100	D	346	345	D	ug/Kg	⊗	70	32 - 132	
Anthracene	2100	D J	346	1670	D 4	ug/Kg	⊗	-134	47 - 123	
Benzo[a]anthracene	8900	J D	346	6900	J D 4	ug/Kg	⊗	-564	49 - 126	
Benzo[a]pyrene	7600	J D	346	5850	J D 4	ug/Kg	⊗	-513	45 - 129	
Benzo[b]fluoranthene	14000	J D M	346	10800	J D M 4	ug/Kg	⊗	-953	45 - 132	
Benzo[g,h,i]perylene	3500	J D	346	2780	D 4	ug/Kg	⊗	-207	43 - 134	
Benzo[k]fluoranthene	3600	J D M	346	2380	D M 4	ug/Kg	⊗	-357	47 - 132	
Chrysene	8500	J D	346	5550	J D 4	ug/Kg	⊗	-844	50 - 124	
Dibenz(a,h)anthracene	1600	D J	346	1360	D 4	ug/Kg	⊗	-71	45 - 134	
Fluoranthene	17000	J D	346	13900	J D 4	ug/Kg	⊗	-972	50 - 127	
Fluorene	1000	D J	346	847	D J	ug/Kg	⊗	-47	43 - 125	
Indeno[1,2,3-cd]pyrene	2200	D	346	2410	D 4	ug/Kg	⊗	70	45 - 133	
Naphthalene	270	D	346	474	D	ug/Kg	⊗	60	35 - 123	
Phenanthrene	15000	J D	346	11000	J D 4	ug/Kg	⊗	-1026	50 - 121	
Pyrene	17000	J D	346	9400	J D 4	ug/Kg	⊗	-2064	47 - 127	

Surrogate	MS %Recovery	MS Qualifier	Limits
<i>o-Terphenyl (Surr)</i>	72		36 - 131

**Lab Sample ID: 680-124505-7 MSD**

**Matrix: Solid**

**Analysis Batch: 431370**

**Client Sample ID: AOPS M301-1**

**Prep Type: Total/NA**

**Prep Batch: 430813**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	RPD	Limit
1-Methylnaphthalene	350	D	341	553	D	ug/Kg	⊗	59	40 - 119	4	20
2-Methylnaphthalene	420	D	341	576	D	ug/Kg	⊗	45	38 - 122	3	20
Acenaphthene	1900	D J	341	1700	D 4	ug/Kg	⊗	-52	40 - 123	14	20
Acenaphthylene	100	D	341	322	D	ug/Kg	⊗	64	32 - 132	7	20
Anthracene	2100	D J	341	1970	D 4	ug/Kg	⊗	-49	47 - 123	16	20
Benzo[a]anthracene	8900	J D	341	8350	J D 4	ug/Kg	⊗	-145	49 - 126	19	20
Benzo[a]pyrene	7600	J D	341	6820	J D 4	ug/Kg	⊗	-235	45 - 129	15	20
Benzo[b]fluoranthene	14000	J D M	341	12200	J D M 4	ug/Kg	⊗	-564	45 - 132	12	20
Benzo[g,h,i]perylene	3500	J D	341	3130	D 4	ug/Kg	⊗	-109	43 - 134	12	20
Benzo[k]fluoranthene	3600	J D M	341	2120	D M 4	ug/Kg	⊗	-439	47 - 132	12	20
Chrysene	8500	J D	341	6280	J D 4	ug/Kg	⊗	-643	50 - 124	12	20
Dibenz(a,h)anthracene	1600	D J	341	1530	D 4	ug/Kg	⊗	-22	45 - 134	12	20
Fluoranthene	17000	J D	341	16000	J D 4	ug/Kg	⊗	-359	50 - 127	14	20
Fluorene	1000	D J	341	945	D J	ug/Kg	⊗	-19	43 - 125	11	20

TestAmerica Savannah

# QC Sample Results

Client: Earth Toxics, Inc

Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

## Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH (Continued)

**Lab Sample ID: 680-124505-7 MSD**

**Matrix: Solid**

**Analysis Batch: 431370**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Indeno[1,2,3-cd]pyrene	2200	D	341	2580	D 4	ug/Kg	⊗	121	45 - 133	7	20
Naphthalene	270	D	341	449	D	ug/Kg	⊗	54	35 - 123	5	20
Phenanthrene	15000	J D	341	12100	J D 4	ug/Kg	⊗	-733	50 - 121	9	20
Pyrene	17000	J D	341	10900	J D 4	ug/Kg	⊗	-1647	47 - 127	15	20
<b>Surrogate</b>		<b>MSD</b>	<b>MSD</b>								
<i>o-Terphenyl (Surr)</i>		%Recovery	Qualifier	<b>Limits</b>							
		67		36 - 131							

**Lab Sample ID: MB 680-430861/3-A**

**Matrix: Water**

**Analysis Batch: 431237**

Analyte	MB	MB	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac		
	Result	Qualifier									
1-Methylnaphthalene	0.40	U	1.0	0.40	ug/L		04/27/16 16:13	04/29/16 21:58	1		
2-Methylnaphthalene	0.20	U	0.20	0.10	ug/L		04/27/16 16:13	04/29/16 21:58	1		
Acenaphthene	0.20	U	0.20	0.10	ug/L		04/27/16 16:13	04/29/16 21:58	1		
Acenaphthylene	0.20	U	0.20	0.10	ug/L		04/27/16 16:13	04/29/16 21:58	1		
Anthracene	0.20	U	0.20	0.10	ug/L		04/27/16 16:13	04/29/16 21:58	1		
Benzo[a]anthracene	0.20	U	0.20	0.10	ug/L		04/27/16 16:13	04/29/16 21:58	1		
Benzo[a]pyrene	0.20	U	0.20	0.10	ug/L		04/27/16 16:13	04/29/16 21:58	1		
Benzo[b]fluoranthene	0.20	U	0.20	0.10	ug/L		04/27/16 16:13	04/29/16 21:58	1		
Benzo[g,h,i]perylene	0.20	U	0.20	0.10	ug/L		04/27/16 16:13	04/29/16 21:58	1		
Benzo[k]fluoranthene	0.20	U	0.20	0.10	ug/L		04/27/16 16:13	04/29/16 21:58	1		
Chrysene	0.10	U	0.20	0.045	ug/L		04/27/16 16:13	04/29/16 21:58	1		
Dibenz(a,h)anthracene	0.20	U	0.20	0.10	ug/L		04/27/16 16:13	04/29/16 21:58	1		
Fluoranthene	0.20	U	0.20	0.10	ug/L		04/27/16 16:13	04/29/16 21:58	1		
Fluorene	0.20	U	0.20	0.10	ug/L		04/27/16 16:13	04/29/16 21:58	1		
Indeno[1,2,3-cd]pyrene	0.20	U	0.20	0.10	ug/L		04/27/16 16:13	04/29/16 21:58	1		
Naphthalene	0.20	U	0.20	0.10	ug/L		04/27/16 16:13	04/29/16 21:58	1		
Phenanthrene	0.20	U	0.20	0.10	ug/L		04/27/16 16:13	04/29/16 21:58	1		
Pyrene	0.20	U	0.20	0.10	ug/L		04/27/16 16:13	04/29/16 21:58	1		
<b>Surrogate</b>		<b>MB</b>	<b>MB</b>								
<i>o-Terphenyl</i>		%Recovery	Qualifier	<b>Limits</b>				<b>Prepared</b>		<b>Analyzed</b>	
		66		35 - 130				04/27/16 16:13		04/29/16 21:58	

**Lab Sample ID: LCS 680-430861/4-A**

**Matrix: Water**

**Analysis Batch: 431237**

Analyte	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
1-Methylnaphthalene	10.0	6.23		ug/L	62	41 - 119	
2-Methylnaphthalene	10.0	5.70		ug/L	57	40 - 121	
Acenaphthene	10.0	6.55		ug/L	65	47 - 122	
Acenaphthylene	10.0	6.56		ug/L	66	41 - 130	
Anthracene	10.0	6.61		ug/L	66	57 - 123	
Benzo[a]anthracene	10.0	6.66		ug/L	67	58 - 125	
Benzo[a]pyrene	10.0	6.98		ug/L	70	54 - 128	
Benzo[b]fluoranthene	10.0	6.72		ug/L	67	53 - 131	

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 430861**

TestAmerica Savannah

# QC Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

## Method: 8270D DOD - Semivolatile Organic Compounds (GC/MS) Low level PAH (Continued)

**Lab Sample ID: LCS 680-430861/4-A**

**Matrix: Water**

**Analysis Batch: 431237**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 430861**

**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Benzo[g,h,i]perylene	10.0	7.68		ug/L	77	50 - 134	
Benzo[k]fluoranthene	10.0	6.75		ug/L	67	57 - 129	
Chrysene	10.0	6.49		ug/L	65	59 - 123	
Dibenz(a,h)anthracene	10.0	7.22		ug/L	72	51 - 134	
Fluoranthene	10.0	6.69		ug/L	67	57 - 128	
Fluorene	10.0	6.70		ug/L	67	52 - 124	
Indeno[1,2,3-cd]pyrene	10.0	7.03		ug/L	70	52 - 134	
Naphthalene	10.0	5.95		ug/L	59	40 - 121	
Phenanthrene	10.0	6.79		ug/L	68	59 - 120	
Pyrene	10.0	6.86		ug/L	69	57 - 126	
<hr/>							
<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
<i>o-Terphenyl</i>	61		35 - 130				

**Lab Sample ID: LCSD 680-430861/5-A**

**Matrix: Water**

**Analysis Batch: 431237**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 430861**

**%Rec.**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1-Methylnaphthalene	10.0	5.73		ug/L	57	41 - 119		8	20
2-Methylnaphthalene	10.0	5.59		ug/L	56	40 - 121		2	20
Acenaphthene	10.0	6.08		ug/L	61	47 - 122		7	20
Acenaphthylene	10.0	6.07		ug/L	61	41 - 130		8	20
Anthracene	10.0	6.74		ug/L	67	57 - 123		2	20
Benzo[a]anthracene	10.0	6.97		ug/L	70	58 - 125		5	20
Benzo[a]pyrene	10.0	6.59		ug/L	66	54 - 128		6	20
Benzo[b]fluoranthene	10.0	6.58		ug/L	66	53 - 131		2	20
Benzo[g,h,i]perylene	10.0	7.42		ug/L	74	50 - 134		3	20
Benzo[k]fluoranthene	10.0	6.53		ug/L	65	57 - 129		3	20
Chrysene	10.0	6.70		ug/L	67	59 - 123		3	20
Dibenz(a,h)anthracene	10.0	7.18		ug/L	72	51 - 134		1	20
Fluoranthene	10.0	7.07		ug/L	71	57 - 128		5	20
Fluorene	10.0	6.43		ug/L	64	52 - 124		4	20
Indeno[1,2,3-cd]pyrene	10.0	7.14		ug/L	71	52 - 134		2	20
Naphthalene	10.0	5.76		ug/L	58	40 - 121		3	20
Phenanthrene	10.0	6.91		ug/L	69	59 - 120		2	20
Pyrene	10.0	7.49		ug/L	75	57 - 126		9	20
<hr/>									
<b>Surrogate</b>	<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
<i>o-Terphenyl</i>	62		35 - 130						

TestAmerica Savannah

# QC Association Summary

Client: Earth Toxics, Inc

Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

## GC/MS Semi VOA

### Prep Batch: 430813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-124505-1	AOPS M201-1	Total/NA	Solid	3546	5
680-124505-1 - DL	AOPS M201-1	Total/NA	Solid	3546	6
680-124505-2	AOPS M201-2	Total/NA	Solid	3546	7
680-124505-2 - DL	AOPS M201-2	Total/NA	Solid	3546	8
680-124505-3	AOPS M201-3	Total/NA	Solid	3546	9
680-124505-4	AOPC M201-3	Total/NA	Solid	3546	10
680-124505-5	AOPS M201-4	Total/NA	Solid	3546	11
680-124505-6 - DL	AOPS M201-5	Total/NA	Solid	3546	12
680-124505-6	AOPS M201-5	Total/NA	Solid	3546	
680-124505-7	AOPS M301-1	Total/NA	Solid	3546	
680-124505-7 - DL	AOPS M301-1	Total/NA	Solid	3546	
680-124505-7 MS	AOPS M301-1	Total/NA	Solid	3546	
680-124505-7 MSD	AOPS M301-1	Total/NA	Solid	3546	
680-124505-8	AOPS M301-2	Total/NA	Solid	3546	
680-124505-9 - DL	AOPS M301-3	Total/NA	Solid	3546	
680-124505-9	AOPS M301-3	Total/NA	Solid	3546	
680-124505-10	AOPS M301-4	Total/NA	Solid	3546	
680-124505-10 - DL	AOPS M301-4	Total/NA	Solid	3546	
LCS 680-430813/12-A	Lab Control Sample	Total/NA	Solid	3546	
MB 680-430813/11-A	Method Blank	Total/NA	Solid	3546	

### Prep Batch: 430861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-124505-11	FB042116	Total/NA	Water	3520C	
680-124505-12	EB042116	Total/NA	Water	3520C	
LCS 680-430861/4-A	Lab Control Sample	Total/NA	Water	3520C	
LCSD 680-430861/5-A	Lab Control Sample Dup	Total/NA	Water	3520C	
MB 680-430861/3-A	Method Blank	Total/NA	Water	3520C	

### Analysis Batch: 431237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-124505-11	FB042116	Total/NA	Water	8270D DOD	430861
680-124505-12	EB042116	Total/NA	Water	8270D DOD	430861
LCS 680-430861/4-A	Lab Control Sample	Total/NA	Water	8270D DOD	430861
LCSD 680-430861/5-A	Lab Control Sample Dup	Total/NA	Water	8270D DOD	430861
MB 680-430861/3-A	Method Blank	Total/NA	Water	8270D DOD	430861

### Analysis Batch: 431370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-124505-1	AOPS M201-1	Total/NA	Solid	8270D DOD	430813
680-124505-1 - DL	AOPS M201-1	Total/NA	Solid	8270D DOD	430813
680-124505-2	AOPS M201-2	Total/NA	Solid	8270D DOD	430813
680-124505-2 - DL	AOPS M201-2	Total/NA	Solid	8270D DOD	430813
680-124505-3	AOPS M201-3	Total/NA	Solid	8270D DOD	430813
680-124505-4	AOPC M201-3	Total/NA	Solid	8270D DOD	430813
680-124505-5	AOPS M201-4	Total/NA	Solid	8270D DOD	430813
680-124505-6	AOPS M201-5	Total/NA	Solid	8270D DOD	430813
680-124505-6 - DL	AOPS M201-5	Total/NA	Solid	8270D DOD	430813
680-124505-7	AOPS M301-1	Total/NA	Solid	8270D DOD	430813
680-124505-7 - DL	AOPS M301-1	Total/NA	Solid	8270D DOD	430813
680-124505-7 MS	AOPS M301-1	Total/NA	Solid	8270D DOD	430813

TestAmerica Savannah

# QC Association Summary

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

## GC/MS Semi VOA (Continued)

### Analysis Batch: 431370 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-124505-7 MSD	AOPS M301-1	Total/NA	Solid	8270D DOD	430813
680-124505-8	AOPS M301-2	Total/NA	Solid	8270D DOD	430813
680-124505-9	AOPS M301-3	Total/NA	Solid	8270D DOD	430813
680-124505-9 - DL	AOPS M301-3	Total/NA	Solid	8270D DOD	430813
680-124505-10	AOPS M301-4	Total/NA	Solid	8270D DOD	430813
680-124505-10 - DL	AOPS M301-4	Total/NA	Solid	8270D DOD	430813
LCS 680-430813/12-A	Lab Control Sample	Total/NA	Solid	8270D DOD	430813
MB 680-430813/11-A	Method Blank	Total/NA	Solid	8270D DOD	430813

## General Chemistry

### Analysis Batch: 430864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-124505-1	AOPS M201-1	Total/NA	Solid	Moisture	11
680-124505-2	AOPS M201-2	Total/NA	Solid	Moisture	12
680-124505-3	AOPS M201-3	Total/NA	Solid	Moisture	
680-124505-4	AOPC M201-3	Total/NA	Solid	Moisture	
680-124505-5	AOPS M201-4	Total/NA	Solid	Moisture	
680-124505-6	AOPS M201-5	Total/NA	Solid	Moisture	
680-124505-7	AOPS M301-1	Total/NA	Solid	Moisture	
680-124505-7 MS	AOPS M301-1	Total/NA	Solid	Moisture	
680-124505-7 MSD	AOPS M301-1	Total/NA	Solid	Moisture	
680-124505-8	AOPS M301-2	Total/NA	Solid	Moisture	
680-124505-9	AOPS M301-3	Total/NA	Solid	Moisture	
680-124505-10	AOPS M301-4	Total/NA	Solid	Moisture	

# Lab Chronicle

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

**Client Sample ID: AOPS M201-1**

Date Collected: 04/21/16 09:23

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124505-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV

**Client Sample ID: AOPS M201-1**

Date Collected: 04/21/16 09:23

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124505-1**

Matrix: Solid

Percent Solids: 90.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			30.49 g	1 mL	430813	04/27/16 08:24	CEW	TAL SAV
Total/NA	Analysis	8270D DOD		5	30.49 g	1 mL	431370	05/02/16 12:52	NED	TAL SAV
		Instrument ID: CMSF								
Total/NA	Prep	3546	DL		30.49 g	1 mL	430813	04/27/16 08:24	CEW	TAL SAV
Total/NA	Analysis	8270D DOD	DL	25	30.49 g	1 mL	431370	05/02/16 13:17	NED	TAL SAV
		Instrument ID: CMSF								

**Client Sample ID: AOPS M201-2**

Date Collected: 04/21/16 09:23

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124505-2**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV

**Client Sample ID: AOPS M201-2**

Date Collected: 04/21/16 09:23

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124505-2**

Matrix: Solid

Percent Solids: 89.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			30.23 g	1 mL	430813	04/27/16 08:24	CEW	TAL SAV
Total/NA	Analysis	8270D DOD		5	30.23 g	1 mL	431370	05/02/16 13:43	NED	TAL SAV
		Instrument ID: CMSF								
Total/NA	Prep	3546	DL		30.23 g	1 mL	430813	04/27/16 08:24	CEW	TAL SAV
Total/NA	Analysis	8270D DOD	DL	50	30.23 g	1 mL	431370	05/02/16 14:08	NED	TAL SAV
		Instrument ID: CMSF								

**Client Sample ID: AOPS M201-3**

Date Collected: 04/21/16 09:51

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124505-3**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV

TestAmerica Savannah

# Lab Chronicle

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

## Client Sample ID: AOPS M201-3

Date Collected: 04/21/16 09:51  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124505-3

Matrix: Solid  
Percent Solids: 87.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			30.23 g	1 mL	430813	04/27/16 08:24	CEW	TAL SAV
Total/NA	Analysis	8270D DOD		5	30.23 g	1 mL	431370	05/02/16 14:34	NED	TAL SAV
Instrument ID: CMSF										

## Client Sample ID: AOPC M201-3

Date Collected: 04/21/16 09:51  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124505-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture			1		430864	04/27/16 10:55	RAB	TAL SAV
Instrument ID: NOEQUIP										

## Client Sample ID: AOPC M201-3

Date Collected: 04/21/16 09:51  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124505-4

Matrix: Solid  
Percent Solids: 88.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			30.16 g	1 mL	430813	04/27/16 08:24	CEW	TAL SAV
Total/NA	Analysis	8270D DOD		1	30.16 g	1 mL	431370	05/02/16 15:00	NED	TAL SAV
Instrument ID: CMSF										

## Client Sample ID: AOPS M201-4

Date Collected: 04/21/16 09:46  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124505-5

Matrix: Solid  
Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV
Instrument ID: NOEQUIP										

## Client Sample ID: AOPS M201-4

Date Collected: 04/21/16 09:46  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124505-5

Matrix: Solid  
Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			30.10 g	1 mL	430813	04/27/16 08:24	CEW	TAL SAV
Total/NA	Analysis	8270D DOD		5	30.10 g	1 mL	431370	05/02/16 15:26	NED	TAL SAV
Instrument ID: CMSF										

TestAmerica Savannah

# Lab Chronicle

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

## **Client Sample ID: AOPS M201-5**

**Date Collected:** 04/21/16 10:16  
**Date Received:** 04/26/16 10:00

## **Lab Sample ID: 680-124505-6**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV
Instrument ID: NOEQUIP										

## **Client Sample ID: AOPS M201-5**

**Date Collected:** 04/21/16 10:16  
**Date Received:** 04/26/16 10:00

## **Lab Sample ID: 680-124505-6**

**Matrix:** Solid

**Percent Solids:** 93.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			30.29 g	1 mL	430813	04/27/16 08:24	CEW	TAL SAV
Total/NA	Analysis	8270D DOD		10	30.29 g	1 mL	431370	05/02/16 15:51	NED	TAL SAV
Instrument ID: CMSF										
Total/NA	Prep	3546	DL		30.29 g	1 mL	430813	04/27/16 08:24	CEW	TAL SAV
Total/NA	Analysis	8270D DOD	DL	50	30.29 g	1 mL	431370	05/02/16 16:17	NED	TAL SAV
Instrument ID: CMSF										

## **Client Sample ID: AOPS M301-1**

**Date Collected:** 04/21/16 10:20  
**Date Received:** 04/26/16 10:00

## **Lab Sample ID: 680-124505-7**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV
Instrument ID: NOEQUIP										

## **Client Sample ID: AOPS M301-1**

**Date Collected:** 04/21/16 10:20  
**Date Received:** 04/26/16 10:00

## **Lab Sample ID: 680-124505-7**

**Matrix:** Solid

**Percent Solids:** 96.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			30.05 g	1 mL	430813	04/27/16 08:24	CEW	TAL SAV
Total/NA	Analysis	8270D DOD		5	30.05 g	1 mL	431370	05/02/16 16:43	NED	TAL SAV
Instrument ID: CMSF										
Total/NA	Prep	3546	DL		30.05 g	1 mL	430813	04/27/16 08:24	CEW	TAL SAV
Total/NA	Analysis	8270D DOD	DL	50	30.05 g	1 mL	431370	05/02/16 17:09	NED	TAL SAV
Instrument ID: CMSF										

## **Client Sample ID: AOPS M301-2**

**Date Collected:** 04/21/16 10:40  
**Date Received:** 04/26/16 10:00

## **Lab Sample ID: 680-124505-8**

**Matrix:** Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV
Instrument ID: NOEQUIP										

TestAmerica Savannah

# Lab Chronicle

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

## Client Sample ID: AOPS M301-2

Date Collected: 04/21/16 10:40  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124505-8

Matrix: Solid  
Percent Solids: 95.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			30.07 g	1 mL	430813	04/27/16 08:24	CEW	TAL SAV
Total/NA	Analysis	8270D DOD		10	30.07 g	1 mL	431370	05/02/16 17:34	NED	TAL SAV
		Instrument ID: CMSF								

## Client Sample ID: AOPS M301-3

Date Collected: 04/21/16 10:50  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124505-9

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture			1		430864	04/27/16 10:55	RAB	TAL SAV
		Instrument ID: NOEQUIP								

## Client Sample ID: AOPS M301-3

Date Collected: 04/21/16 10:50  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124505-9

Matrix: Solid  
Percent Solids: 96.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			30.39 g	1 mL	430813	04/27/16 08:24	CEW	TAL SAV
Total/NA	Analysis	8270D DOD		10	30.39 g	1 mL	431370	05/02/16 18:25	NED	TAL SAV
		Instrument ID: CMSF								
Total/NA	Prep	3546	DL		30.39 g	1 mL	430813	04/27/16 08:24	CEW	TAL SAV
Total/NA	Analysis	8270D DOD	DL	50	30.39 g	1 mL	431370	05/02/16 18:51	NED	TAL SAV
		Instrument ID: CMSF								

## Client Sample ID: AOPS M301-4

Date Collected: 04/21/16 11:07  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124505-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1			430864	04/27/16 10:55	RAB	TAL SAV
		Instrument ID: NOEQUIP								

## Client Sample ID: AOPS M301-4

Date Collected: 04/21/16 11:07  
Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124505-10

Matrix: Solid  
Percent Solids: 93.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			30.19 g	1 mL	430813	04/27/16 08:24	CEW	TAL SAV
Total/NA	Analysis	8270D DOD		10	30.19 g	1 mL	431370	05/02/16 19:16	NED	TAL SAV
		Instrument ID: CMSF								
Total/NA	Prep	3546	DL		30.19 g	1 mL	430813	04/27/16 08:24	CEW	TAL SAV
Total/NA	Analysis	8270D DOD	DL	100	30.19 g	1 mL	431370	05/02/16 19:42	NED	TAL SAV
		Instrument ID: CMSF								

TestAmerica Savannah

# Lab Chronicle

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

**Client Sample ID: FB042116**

Date Collected: 04/21/16 11:20

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124505-11**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			501.7 mL	0.5 mL	430861	04/27/16 16:13	RBS	TAL SAV
Total/NA	Analysis	8270D DOD		1	501.7 mL	0.5 mL	431237	04/29/16 23:05	NED	TAL SAV
Instrument ID: CMSAE										

**Client Sample ID: EB042116**

Date Collected: 04/21/16 11:25

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124505-12**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3520C			501.0 mL	0.5 mL	430861	04/27/16 16:13	RBS	TAL SAV
Total/NA	Analysis	8270D DOD		1	501.0 mL	0.5 mL	431237	04/29/16 23:27	NED	TAL SAV
Instrument ID: CMSAE										

## Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

## Certification Summary

Client: Earth Toxics, Inc

Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

### Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP	399.01	02-28-17	
USDA	Federal	SAV 3-04	06-11-17	

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## Method Summary

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124505-1

Method	Method Description	Protocol	Laboratory
8270D DOD	Semivolatile Organic Compounds (GC/MS) Low level PAH	SW846	TAL SAV
Moisture	Percent Moisture	EPA	TAL SAV

**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 SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

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**RESOLUTION  
CONSULTANTS**

CHAIN OF CUSTODY AND ANALYTICAL REQUEST RECORD				COC No.		Page	1	of 1
Project Name:	Side Investigation			PO No. 20906		Project No: 08881781 (Phase: SI Task: SI)		
Site Location:	GTM0, Cuba							
CTO No.:	JMB5	RC Task Order Manager: Paul Stoddard						
Sampler/Site Phone#:	Robbie Thomas / (615) 255-9300							
Lab Name:	Test America	Turnaround Time(specify): 14 day s						
Lab ID	Sample ID (sys_samp_code)	Location ID (sys_loc_code)	Date (mm/dd/yy)	Time (Military) (hhmm)	Matrix Code (1)	Sample Type (2)	Field Filtered (Y/N)	HOLD
AOPSM201-1	M2-1	4/21/16	0923	SQ	N	N	P	
AOPSM201-2	M2-2	4/21/16	0923	SQ	N	N	X	
AOPSM201-3	M2-3	4/21/16	0951	SQ	N	N	X	
AOPCM201-3	M2-3	4/21/16	0951	SQ	F	N	X	
AOPSM201-4	M2-4	4/21/16	0946	SQ	N	N	X	
AOPSM201-5	M2-5	4/21/16	1016	SQ	N	N	X	
AOPSM301-1	M3-1	4/20/16	1020	SQ	N	N	X	
AOPSM301-2	M3-2	4/20/16	1040	SQ	N	N	X	
AOPSM301-3	M3-3	4/20/16	1050	SQ	N	N	X	
AOPSM301-4	M3-4	4/20/16	1107	SQ	N	N	X	
FB042116	—	4/20/16	1120	SQ	FB	N	X	
EB042116	—	4/20/16	1125	SQ	FB	N	X	
Field Comments:								
Lab Comments:								
Sample Shipment and Delivery Details								
Number of coolers in shipment: _____								
Samples iced? (check) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>								
Airlift No: _____ Date Shipped: _____								
Relinquished by (signature)	Date	Time	Received by (signature)	Date	Time			
1 Robbie Thomas	4/23/16	0710	1	4/25/16	0710			
2 Mopar Cosk H2o	4-23-2016	1440	2	4/25-2016	1440			
3			3	4/26/16	1000			

- (1) AA=Ambient air, AQ=Air quality control, ASB=Aerosols, CK=Caulk, DS=Storm drain sediment, GS=Soil gas, IDW=IDW soil, IDS=IDW Solid, LD=LDW Concrete, SG=Soil, SQ=Soil/Solid quality control, SSU=Subsurface sediment, SU=Surface soil (<6 in), SW=Sludge, SL=Sludge, SW=Soil or Sludge, TA=Animal tissue, TP=Plant tissue, TQ=Tissue quality control, WG=Ground water, WL=Leachate, WO=Ocean water, WP=Drinking water, WQ=Water quality control, WR=Ground water effluent, WS=Surface water, WU=Storm water, WW=Waste water
- (2) Sample Type: AB=Ambient Blk, EB=Equipment Blk, FB=Field Blk, FD=Field Duplicate Sample, IDW=Field Duplicate Sample, MIS=Investigative-Derived Waste, NEM=Normal Environmental Sample, TB=Trip Blk
- (3) Preservative added: HA=Hydrochloric Acid, NI=Nitric Acid, ME=Methanol, SA=Sulfuric Acid, SB=Sodium bisulfate, ST=Sodium Thiosulfate If NO preservative added leave blank

Rev 5/17

11/16/2015

## Login Sample Receipt Checklist

Client: Earth Toxics, Inc

Job Number: 680-124505-1

**Login Number:** 124505

**List Source:** TestAmerica Savannah

**List Number:** 1

**Creator:** Murray, Thomas J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
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.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

**B-3**  
**PCB Wipe**

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-124509-1

Client Project/Site: Site Investigation/JMB5

Revision: 1

For:

Earth Toxics, Inc

PO BOX 3382

Logan, Utah 84321

Attn: Mike Dryden



Authorized for release by:

5/13/2016 4:17:50 PM

Robert Bearden, Project Manager I

(912)354-7858

[robert.bearden@testamericainc.com](mailto:robert.bearden@testamericainc.com)

Designee for

Michele Kersey, Project Manager I

(912)354-7858

[michele.kersey@testamericainc.com](mailto:michele.kersey@testamericainc.com)

### LINKS

Review your project  
results through

Total Access

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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.

## Definitions/Glossary

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124509-1

### Qualifiers

#### GC Semi VOA

Qualifier	Qualifier Description
U	Undetected at the Limit of Detection.

### Glossary

**Abbreviation** These commonly used abbreviations may or may not be present in this report.

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

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## Sample Summary

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124509-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-124509-1	AV32 WSWTR-1	Wipe	04/18/16 14:20	04/26/16 10:00
680-124509-2	AV32 WSWTR-2	Wipe	04/18/16 14:23	04/26/16 10:00
680-124509-3	AV32 WSWTR-3	Wipe	04/18/16 14:27	04/26/16 10:00
680-124509-4	AV32 WSWTB-1	Wipe	04/18/16 14:43	04/26/16 10:00
680-124509-5	AV32 WSWTB-2	Wipe	04/18/16 14:46	04/26/16 10:00
680-124509-6	AV32 WSWTB-3	Wipe	04/18/16 14:50	04/26/16 10:00
680-124509-7	AV32 WS ETR-1	Wipe	04/18/16 15:08	04/26/16 10:00
680-124509-8	AV32 WS ETR-2	Wipe	04/18/16 15:12	04/26/16 10:00
680-124509-9	AV32 WS ETR-3	Wipe	04/18/16 15:15	04/26/16 10:00
680-124509-10	AV32 WS ETR-3D	Wipe	04/18/16 15:19	04/26/16 10:00

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# Case Narrative

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124509-1

**Job ID: 680-124509-1**

**Laboratory: TestAmerica Savannah**

Narrative

## CASE NARRATIVE

**Client: Earth Toxics, Inc**

**Project: Site Investigation/JMB5**

**Report Number: 680-124509-1**

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 the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

### **REVISED REPORT**

This report was revised to correct the narrative

### **RECEIPT**

The samples were received on 4/26/2016 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.9° C and 4.4° C.

### **PESTICIDES AND PCBs**

Samples AV32 WSWTR-1 (680-124509-1), AV32 WSWTR-2 (680-124509-2), AV32 WSWTR-3 (680-124509-3), AV32 WSWTB-1 (680-124509-4), AV32 WSWTB-2 (680-124509-5), AV32 WSWTB-3 (680-124509-6), AV32 WS ETR-1 (680-124509-7), AV32 WS ETR-2 (680-124509-8), AV32 WS ETR-3 (680-124509-9) and AV32 WS ETR-3D (680-124509-10) were analyzed for PCBs in accordance with EPA SW-846 Method 8082A. The samples were prepared and analyzed on 05/02/2016.

The following samples required a sulfuric acid clean-up, via EPA Method 3665A, to reduce matrix interferences: AV32 WSWTR-1 (680 124509 1), AV32 WSWTR 2 (680 124509 2), AV32 WSWTR 3 (680 124509 3), AV32 WSWTB 1 (680 124509 4), AV32 WSWTB 2 (680-124509-5), AV32 WSWTB-3 (680-124509-6), AV32 WS ETR-1 (680-124509-7), AV32 WS ETR-2 (680-124509-8), AV32 WS ETR-3 (680-124509-9) and AV32 WS ETR-3D (680-124509-10).

This method incorporates 2nd column confirmation. Corrective action is not taken for surrogate/spike compounds unless results from both columns are unacceptable. Results outside criteria are qualified.

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

# Client Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124509-1

**Client Sample ID: AV32 WSWTR-1**

Date Collected: 04/18/16 14:20

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124509-1**

Matrix: Wipe

**Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 16:33	1
PCB-1221	2.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 16:33	1
PCB-1232	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 16:33	1
PCB-1242	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 16:33	1
PCB-1248	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 16:33	1
PCB-1254	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 16:33	1
PCB-1260	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 16:33	1
<b>Surrogate</b>									
DCB Decachlorobiphenyl	81		30 - 130				05/02/16 11:00	05/02/16 16:33	1
Tetrachloro-m-xylene	81		30 - 130				05/02/16 11:00	05/02/16 16:33	1

**Client Sample ID: AV32 WSWTR-2**

Date Collected: 04/18/16 14:23

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124509-2**

Matrix: Wipe

**Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 16:48	1
PCB-1221	2.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 16:48	1
PCB-1232	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 16:48	1
PCB-1242	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 16:48	1
PCB-1248	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 16:48	1
PCB-1254	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 16:48	1
PCB-1260	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 16:48	1
<b>Surrogate</b>									
DCB Decachlorobiphenyl	85		30 - 130				05/02/16 11:00	05/02/16 16:48	1
Tetrachloro-m-xylene	79		30 - 130				05/02/16 11:00	05/02/16 16:48	1

**Client Sample ID: AV32 WSWTR-3**

Date Collected: 04/18/16 14:27

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124509-3**

Matrix: Wipe

**Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:03	1
PCB-1221	2.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:03	1
PCB-1232	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:03	1
PCB-1242	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:03	1
PCB-1248	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:03	1
PCB-1254	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:03	1
PCB-1260	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:03	1
<b>Surrogate</b>									
DCB Decachlorobiphenyl	84		30 - 130				05/02/16 11:00	05/02/16 17:03	1
Tetrachloro-m-xylene	82		30 - 130				05/02/16 11:00	05/02/16 17:03	1

TestAmerica Savannah

# Client Sample Results

Client: Earth Toxics, Inc  
 Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124509-1

**Client Sample ID: AV32 WSWTB-1**

**Lab Sample ID: 680-124509-4**

Matrix: Wipe

Date Collected: 04/18/16 14:43  
 Date Received: 04/26/16 10:00

## Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:19	1
PCB-1221	2.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:19	1
PCB-1232	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:19	1
PCB-1242	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:19	1
PCB-1248	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:19	1
PCB-1254	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:19	1
PCB-1260	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:19	1
<b>Surrogate</b>		%Recovery	Qualifier	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
DCB Decachlorobiphenyl		82		30 - 130			05/02/16 11:00	05/02/16 17:19	1
Tetrachloro-m-xylene		81		30 - 130			05/02/16 11:00	05/02/16 17:19	1

**Client Sample ID: AV32 WSWTB-2**

**Lab Sample ID: 680-124509-5**

Matrix: Wipe

Date Collected: 04/18/16 14:46  
 Date Received: 04/26/16 10:00

## Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:34	1
PCB-1221	2.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:34	1
PCB-1232	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:34	1
PCB-1242	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:34	1
PCB-1248	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:34	1
PCB-1254	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:34	1
PCB-1260	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:34	1
<b>Surrogate</b>		%Recovery	Qualifier	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
DCB Decachlorobiphenyl		86		30 - 130			05/02/16 11:00	05/02/16 17:34	1
Tetrachloro-m-xylene		83		30 - 130			05/02/16 11:00	05/02/16 17:34	1

**Client Sample ID: AV32 WSWTB-3**

**Lab Sample ID: 680-124509-6**

Matrix: Wipe

Date Collected: 04/18/16 14:50  
 Date Received: 04/26/16 10:00

## Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:50	1
PCB-1221	2.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:50	1
PCB-1232	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:50	1
PCB-1242	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:50	1
PCB-1248	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:50	1
PCB-1254	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:50	1
PCB-1260	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 17:50	1
<b>Surrogate</b>		%Recovery	Qualifier	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
DCB Decachlorobiphenyl		75		30 - 130			05/02/16 11:00	05/02/16 17:50	1
Tetrachloro-m-xylene		77		30 - 130			05/02/16 11:00	05/02/16 17:50	1

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# Client Sample Results

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124509-1

## Client Sample ID: AV32 WS ETR-1

Date Collected: 04/18/16 15:08  
Date Received: 04/26/16 10:00

Lab Sample ID: 680-124509-7

Matrix: Wipe

### Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:05	1
PCB-1221	2.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:05	1
PCB-1232	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:05	1
PCB-1242	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:05	1
PCB-1248	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:05	1
PCB-1254	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:05	1
PCB-1260	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	86		30 - 130				05/02/16 11:00	05/02/16 18:05	1
Tetrachloro-m-xylene	83		30 - 130				05/02/16 11:00	05/02/16 18:05	1

## Client Sample ID: AV32 WS ETR-2

Date Collected: 04/18/16 15:12  
Date Received: 04/26/16 10:00

Lab Sample ID: 680-124509-8

Matrix: Wipe

### Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:20	1
PCB-1221	2.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:20	1
PCB-1232	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:20	1
PCB-1242	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:20	1
PCB-1248	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:20	1
PCB-1254	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:20	1
PCB-1260	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	83		30 - 130				05/02/16 11:00	05/02/16 18:20	1
Tetrachloro-m-xylene	83		30 - 130				05/02/16 11:00	05/02/16 18:20	1

## Client Sample ID: AV32 WS ETR-3

Date Collected: 04/18/16 15:15  
Date Received: 04/26/16 10:00

Lab Sample ID: 680-124509-9

Matrix: Wipe

### Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:36	1
PCB-1221	2.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:36	1
PCB-1232	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:36	1
PCB-1242	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:36	1
PCB-1248	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:36	1
PCB-1254	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:36	1
PCB-1260	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	82		30 - 130				05/02/16 11:00	05/02/16 18:36	1
Tetrachloro-m-xylene	80		30 - 130				05/02/16 11:00	05/02/16 18:36	1

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# Client Sample Results

Client: Earth Toxics, Inc  
 Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124509-1

**Client Sample ID: AV32 WS ETR-3D**  
**Date Collected: 04/18/16 15:19**  
**Date Received: 04/26/16 10:00**

**Lab Sample ID: 680-124509-10**  
**Matrix: Wipe**

**Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography**

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:51	1
PCB-1221	2.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:51	1
PCB-1232	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:51	1
PCB-1242	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:51	1
PCB-1248	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:51	1
PCB-1254	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:51	1
PCB-1260	1.0	U	1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 18:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
DCB Decachlorobiphenyl	81		30 - 130				05/02/16 11:00	05/02/16 18:51	1
Tetrachloro-m-xylene	80		30 - 130				05/02/16 11:00	05/02/16 18:51	1

# QC Sample Results

Client: Earth Toxics, Inc  
 Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124509-1

## Method: 8081B/8082A - Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography

**Lab Sample ID:** MB 680-431485/11-A

**Matrix:** Wipe

**Analysis Batch:** 431492

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 431485

Analyte	MB	MB	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
PCB-1016	1.0	U			1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 15:46	1
PCB-1221	2.0	U			1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 15:46	1
PCB-1232	1.0	U			1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 15:46	1
PCB-1242	1.0	U			1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 15:46	1
PCB-1248	1.0	U			1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 15:46	1
PCB-1254	1.0	U			1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 15:46	1
PCB-1260	1.0	U			1.0	1.0	ug/Wipe		05/02/16 11:00	05/02/16 15:46	1
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
DCB Decachlorobiphenyl	89		89		30 - 130				05/02/16 11:00	05/02/16 15:46	1
Tetrachloro-m-xylene	82				30 - 130				05/02/16 11:00	05/02/16 15:46	1

**Lab Sample ID:** LCS 680-431485/12-A

**Matrix:** Wipe

**Analysis Batch:** 431492

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA  
**Prep Batch:** 431485

Analyte	Spikes	LCS	LCS	Result	Qualifier	Unit	D	%Rec.	Limits	Prepared	Analyzed	Dil Fac
	Added	Result	Qualifier									
PCB-1016		6.00		5.20		ug/Wipe		87	30 - 130			
PCB-1260		6.00		5.37		ug/Wipe		89	30 - 130			
Surrogate	LCS	LCS	%Recovery	Result	Qualifier	Limits	Prepared	%Rec.	Limits	Prepared	Analyzed	Dil Fac
	Added	Result	Qualifier									
DCB Decachlorobiphenyl		91		91		30 - 130						
Tetrachloro-m-xylene		81		81		30 - 130						

**Lab Sample ID:** LCSD 680-431485/13-A

**Matrix:** Wipe

**Analysis Batch:** 431492

**Client Sample ID:** Lab Control Sample Dup  
**Prep Type:** Total/NA  
**Prep Batch:** 431485

Analyte	Spikes	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec.	Limits	Prepared	Analyzed	RPD	Limit
	Added	Result	Qualifier										
PCB-1016		6.00		5.24		ug/Wipe		87	30 - 130			1	50
PCB-1260		6.00		5.48		ug/Wipe		91	30 - 130			2	50
Surrogate	LCSD	LCSD	%Recovery	Result	Qualifier	Limits	Prepared	%Rec.	Limits	Prepared	Analyzed	RPD	Limit
	Added	Result	Qualifier										
DCB Decachlorobiphenyl		90		90		30 - 130							
Tetrachloro-m-xylene		80		80		30 - 130							

TestAmerica Savannah

# QC Association Summary

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124509-1

## GC Semi VOA

### Prep Batch: 431485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-124509-1	AV32 WSWTR-1	Total/NA	Wipe	3550C	5
680-124509-2	AV32 WSWTR-2	Total/NA	Wipe	3550C	5
680-124509-3	AV32 WSWTR-3	Total/NA	Wipe	3550C	5
680-124509-4	AV32 WSWTB-1	Total/NA	Wipe	3550C	6
680-124509-5	AV32 WSWTB-2	Total/NA	Wipe	3550C	6
680-124509-6	AV32 WSWTB-3	Total/NA	Wipe	3550C	6
680-124509-7	AV32 WS ETR-1	Total/NA	Wipe	3550C	8
680-124509-8	AV32 WS ETR-2	Total/NA	Wipe	3550C	8
680-124509-9	AV32 WS ETR-3	Total/NA	Wipe	3550C	9
680-124509-10	AV32 WS ETR-3D	Total/NA	Wipe	3550C	9
LCS 680-431485/12-A	Lab Control Sample	Total/NA	Wipe	3550C	10
LCSD 680-431485/13-A	Lab Control Sample Dup	Total/NA	Wipe	3550C	10
MB 680-431485/11-A	Method Blank	Total/NA	Wipe	3550C	11

### Analysis Batch: 431492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-124509-1	AV32 WSWTR-1	Total/NA	Wipe	8081B/8082A	431485
680-124509-2	AV32 WSWTR-2	Total/NA	Wipe	8081B/8082A	431485
680-124509-3	AV32 WSWTR-3	Total/NA	Wipe	8081B/8082A	431485
680-124509-4	AV32 WSWTB-1	Total/NA	Wipe	8081B/8082A	431485
680-124509-5	AV32 WSWTB-2	Total/NA	Wipe	8081B/8082A	431485
680-124509-6	AV32 WSWTB-3	Total/NA	Wipe	8081B/8082A	431485
680-124509-7	AV32 WS ETR-1	Total/NA	Wipe	8081B/8082A	431485
680-124509-8	AV32 WS ETR-2	Total/NA	Wipe	8081B/8082A	431485
680-124509-9	AV32 WS ETR-3	Total/NA	Wipe	8081B/8082A	431485
680-124509-10	AV32 WS ETR-3D	Total/NA	Wipe	8081B/8082A	431485
LCS 680-431485/12-A	Lab Control Sample	Total/NA	Wipe	8081B/8082A	431485
LCSD 680-431485/13-A	Lab Control Sample Dup	Total/NA	Wipe	8081B/8082A	431485
MB 680-431485/11-A	Method Blank	Total/NA	Wipe	8081B/8082A	431485

# Lab Chronicle

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124509-1

**Client Sample ID: AV32 WSWTR-1**

Date Collected: 04/18/16 14:20

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124509-1**

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			1 Wipe	10 mL	431485	05/02/16 11:00	CEW	TAL SAV
Total/NA	Analysis	8081B/8082A		1	1 Wipe	10 mL	431492	05/02/16 16:33	JCK	TAL SAV
Instrument ID: CSGZ										

**Client Sample ID: AV32 WSWTR-2**

Date Collected: 04/18/16 14:23

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124509-2**

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			1 Wipe	10 mL	431485	05/02/16 11:00	CEW	TAL SAV
Total/NA	Analysis	8081B/8082A		1	1 Wipe	10 mL	431492	05/02/16 16:48	JCK	TAL SAV
Instrument ID: CSGZ										

**Client Sample ID: AV32 WSWTR-3**

Date Collected: 04/18/16 14:27

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124509-3**

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			1 Wipe	10 mL	431485	05/02/16 11:00	CEW	TAL SAV
Total/NA	Analysis	8081B/8082A		1	1 Wipe	10 mL	431492	05/02/16 17:03	JCK	TAL SAV
Instrument ID: CSGZ										

**Client Sample ID: AV32 WSWTB-1**

Date Collected: 04/18/16 14:43

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124509-4**

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			1 Wipe	10 mL	431485	05/02/16 11:00	CEW	TAL SAV
Total/NA	Analysis	8081B/8082A		1	1 Wipe	10 mL	431492	05/02/16 17:19	JCK	TAL SAV
Instrument ID: CSGZ										

**Client Sample ID: AV32 WSWTB-2**

Date Collected: 04/18/16 14:46

Date Received: 04/26/16 10:00

**Lab Sample ID: 680-124509-5**

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			1 Wipe	10 mL	431485	05/02/16 11:00	CEW	TAL SAV
Total/NA	Analysis	8081B/8082A		1	1 Wipe	10 mL	431492	05/02/16 17:34	JCK	TAL SAV
Instrument ID: CSGZ										

TestAmerica Savannah

# Lab Chronicle

Client: Earth Toxics, Inc  
 Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124509-1

## Client Sample ID: AV32 WSWTB-3

Date Collected: 04/18/16 14:50  
 Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124509-6

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			1 Wipe	10 mL	431485	05/02/16 11:00	CEW	TAL SAV
Total/NA	Analysis	8081B/8082A		1	1 Wipe	10 mL	431492	05/02/16 17:50	JCK	TAL SAV
Instrument ID: CSGZ										

## Client Sample ID: AV32 WS ETR-1

Date Collected: 04/18/16 15:08  
 Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124509-7

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			1 Wipe	10 mL	431485	05/02/16 11:00	CEW	TAL SAV
Total/NA	Analysis	8081B/8082A		1	1 Wipe	10 mL	431492	05/02/16 18:05	JCK	TAL SAV
Instrument ID: CSGZ										

## Client Sample ID: AV32 WS ETR-2

Date Collected: 04/18/16 15:12  
 Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124509-8

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			1 Wipe	10 mL	431485	05/02/16 11:00	CEW	TAL SAV
Total/NA	Analysis	8081B/8082A		1	1 Wipe	10 mL	431492	05/02/16 18:20	JCK	TAL SAV
Instrument ID: CSGZ										

## Client Sample ID: AV32 WS ETR-3

Date Collected: 04/18/16 15:15  
 Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124509-9

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			1 Wipe	10 mL	431485	05/02/16 11:00	CEW	TAL SAV
Total/NA	Analysis	8081B/8082A		1	1 Wipe	10 mL	431492	05/02/16 18:36	JCK	TAL SAV
Instrument ID: CSGZ										

## Client Sample ID: AV32 WS ETR-3D

Date Collected: 04/18/16 15:19  
 Date Received: 04/26/16 10:00

## Lab Sample ID: 680-124509-10

Matrix: Wipe

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			1 Wipe	10 mL	431485	05/02/16 11:00	CEW	TAL SAV
Total/NA	Analysis	8081B/8082A		1	1 Wipe	10 mL	431492	05/02/16 18:51	JCK	TAL SAV
Instrument ID: CSGZ										

### Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Savannah

## Certification Summary

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124509-1

### Laboratory: TestAmerica Savannah

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP	399.01	02-28-17	
USDA	Federal	SAV 3-04	06-11-17	

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## Method Summary

Client: Earth Toxics, Inc  
Project/Site: Site Investigation/JMB5

TestAmerica Job ID: 680-124509-1

Method	Method Description	Protocol	Laboratory
8081B/8082A	Organochlorine Pesticides and Polychlorinated Biphenyls by Gas Chromatography	SW846	TAL SAV

**Protocol References:**

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

**Laboratory References:**

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

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## CHAIN OF CUSTODY AND ANALYTICAL REQUEST RECORD

Project Name: Site Investigation

Site Location: CT M.O., Cuba

**RESOLUTION  
CONSULTANTS**

CTO No. JMB5 RC Task Order Manager: Paul Stoddard

Sampler/Site Phone#: R. Babbie Thomas / (615) 255-9300

Lab Name: Test America

Turnaround Time(specify): 7 days

Lab ID	Sample ID (sys_samp_code)	Location ID (sys_loc_code)	Date (mm/dd/yy)	Time (Military) (hhmm)	Matrix (1)	Matrix (2)	Sample Type (1)	Field Filtered (Y/N)	Sample Analysis Requested (Enter number of containers for each test)		Total No. of Containers (3)	Extra Volume for MS/MSD	HOLD
									PCBs	PCBs			
	AV32.WSWTR-1	WTR	4/8/16	1420	SW	N	N	1	X	X	1		
	AV32.WSWTR-2	WTR		1423	SW	N	N	1	X	X	1		
	AV32.WSWTR-3	WTR		1427	SW	N	N	1	X	X	1		
	AV32.WSTB-1	TB		1443	SW	N	N	1	X	X	1		
	AV32.WSTB-2	TB		1446	SW	N	N	1	X	X	1		
	AV32.WSETR-1	ETR		1450	SW	N	N	1	X	X	1		
	AV32.WSETR-2	ETR		1508	SW	N	N	1	X	X	1		
	AV32.WSETR-3	ETR		1512	SW	N	N	1	X	X	1		
	AV32.WSETR-3D	ETR		1515	SW	N	N	1	X	X	1		
				1519	SW	N	N	1	X	X	1		
							FD						

## Field Comments:

Sample Shipment and Delivery Details

Number of coolers in shipment:  
Samples Iced?(check) Yes  No 

Date: 4/23/16 Time: 0710 Airbill No.: 4/23/16 0710 1932 Date Shipped: 10:00

Received by (signature)

Date: 4/23/16 Time: 0710

Airbill No.: 4/23/16 0710 1932

Date: 4/23/16 Time: 0710 Airbill No.: 4/23/16 0710 1932 Date Shipped: 10:00

(1) AA=Ambient air, AQ=Air quality control, ASB=Asbestos, CK=Caulk, DS=Storm drain sediment, GS=Soil gas, IC=IDW Concrete, IDW=IDW Soil, IDW=IDW Water, LF=Free Product, MA=Mastic, PC=Paint Chips, SC=Cement/Concrete, SE=Sediment, SL=Sludge, SO=Soil, SQ=Soil/Solid quality control, SSD=Subsurface sediment, SW=Swab or wipe, TA=Animal tissue, TQ=Tissue quality control, WG=Ground water, WL=Leachate, WO=Ocean water, WP=Drinking water, WU=Ground water effluent, WS=Surface water, WW=Waste water.

(2) Sample Type: AB=Ambient Blk, EB=Equipment Blk, FB=Field Blk, FD=Field Duplicate Sample, IDW=Investigative-Derived Waste, MS=Incremental Sampling Methodology, N=Normal Environmental Sample, TB=Trip Blk

(3) Preservative added: HA=Hydrochloric Acid, NI=Nitric Acid, SH=Sulfuric Acid, ME=Methanol, SB=Sodium bisulfate, ST=Sodium bisulfite, ST=Normal Thiosulfate If NO preservative added leave blank

Rev 5/12

## Login Sample Receipt Checklist

Client: Earth Toxics, Inc

Job Number: 680-124509-1

**Login Number:** 124509

**List Source:** TestAmerica Savannah

**List Number:** 1

**Creator:** Murray, Thomas J

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

**Attachment C**  
**Analytical Result Tables**

**C-1  
Soil**

		<b>Sample Location:</b>	BS01	BS02	BS03	BS03	BS04	BS05	BS06	BS07	BS08	
		<b>Sample ID:</b>	AOP SB S01	AOP SB S02	AOP CB S03	AOP SB S03	AOP SB S04	AOP SB S05	AOP SB S06	AOP SB S07	AOP SB S08	
		<b>Sample Date:</b>	10/15/2015	10/15/2015	10/15/2015	10/15/2015	10/15/2015	10/15/2015	10/15/2015	10/15/2015	10/15/2015	
		<b>Sample Type:</b>	Normal	Normal	Duplicate	Normal	Normal	Normal	Normal	Normal	Normal	
		<b>Matrix:</b>	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	
<b>Method</b>	<b>CAS No.</b>	<b>Analyte</b>	<b>Units</b>									
6020A	7429-90-5	ALUMINUM	MG_KG	<b>10000</b>	11000	11000	11000	12000	10000	12000	12000	
6020A	7440-36-0	ANTIMONY	MG_KG	0.29 U	<b>0.29 J</b>	0.41 J	0.42 J	1.3	0.2 J	0.35 J	0.36 J	0.23 J
6020A	7440-38-2	ARSENIC	MG_KG	<b>1.4</b>	1.2	1.2	1.3	1.9	1.8	2	1.5	1.6
6020A	7440-39-3	BARIUM	MG_KG	<b>26</b>	40	37	38	45	46	48	32	40
6020A	7440-41-7	BERYLLIUM	MG_KG	<b>0.17</b>	0.26	0.26	0.22	0.18	0.26	0.21	0.2	0.21
6020A	7440-43-9	CADMIUM	MG_KG	<b>0.23</b>	0.66	1.5	1.4	0.53	0.15	0.4	0.21	0.22
6020A	7440-70-2	CALCIUM	MG_KG	<b>5900</b>	4700	5700	5700	4800	6200	7600	12000	8800
6020A	7440-47-3	CHROMIUM, TOTAL	MG_KG	<b>740 J</b>	820 J	800 J	790 J	810 J	790 J	710 J	680 J	660 J
6020A	7440-48-4	COBALT	MG_KG	<b>81</b>	93	84	77	79	78	79	83	76
6020A	7440-50-8	COPPER	MG_KG	<b>38</b>	45	41	39	42	37	38	42	38
6020A	7439-89-6	IRON	MG_KG	<b>34000</b>	35000	35000	35000	40000	55000	32000	37000	52000
6020A	7439-92-1	LEAD	MG_KG	<b>7.3</b>	6.2	8.7	8.5	6.6	5.6	15	14	11
6020A	7439-95-4	MAGNESIUM	MG_KG	<b>98000</b>	51000	48000 J	92000 J	88000	87000	87000	100000	91000
6020A	7439-96-5	MANGANESE	MG_KG	<b>850</b>	1100	1000	960	950	1000	950	980	950
6020A	7440-02-0	NICKEL	MG_KG	<b>1400</b>	1500	1400	1400	1700	1500	1300	1500	1400
6020A	7440-09-7	POTASSIUM	MG_KG	<b>1700</b>	1900	1700	1700	2100	1900	2200	1900	2700
6020A	7782-49-2	SELENIUM	MG_KG	<b>0.18 J</b>	0.23 J	0.16 J	0.2 J	0.29 J	0.19 J	0.18 J	0.15 J	0.25 J
6020A	7440-22-4	SILVER	MG_KG	<b>0.038 J</b>	0.046 J	0.04 J	0.051 J	0.052 J	0.053 J	0.045 J	0.049 J	0.043 J
6020A	7440-23-5	SODIUM	MG_KG	<b>63</b>	67	97	80	94	84	77	86	210
6020A	7440-28-0	THALLIUM	MG_KG	0.097 U	<b>0.054 J</b>	0.1 U	0.1 U	0.11 U	0.1 U	0.097 U	0.097 U	0.1 U
6020A	7440-62-2	VANADIUM	MG_KG	<b>64</b>	73	70	68	77	80	72	68	66
6020A	7440-66-6	ZINC	MG_KG	<b>49</b>	60	92	91	58	55	72	80	79

**Notes:**

MG\_KG = Milligrams per kilogram

J = Estimated value

U = Not detected

**Bold** = Detected

		<b>Sample Location:</b>	BS09	BS10	BS11	BS12	BS13	BS14	BS14
		<b>Sample ID:</b>	AOP SB S09	AOP SB S10	AOP SB S11	AOP SB S12	AOP SB S13	AOP CB S14	AOP SB S14
		<b>Sample Date:</b>	10/15/2015	10/15/2015	10/15/2015	10/15/2015	10/15/2015	10/15/2015	10/15/2015
		<b>Sample Type:</b>	Normal	Normal	Normal	Normal	Normal	Duplicate	Normal
		<b>Matrix:</b>	Soil	Soil	Soil	Soil	Soil	Soil	Soil
<b>Method</b>	<b>CAS No.</b>	<b>Analyte</b>	<b>Units</b>						
6020A	7429-90-5	ALUMINUM	MG_KG	<b>18000</b>	10000	12000	11000	12000	11000
6020A	7440-36-0	ANTIMONY	MG_KG	<b>0.59 J</b>	0.64 J	0.32 U	0.28 U	0.11 J	0.28 U
6020A	7440-38-2	ARSENIC	MG_KG	<b>1.7</b>	2.7	1.1	1.4	1.6	1
6020A	7440-39-3	BARIUM	MG_KG	<b>23</b>	40	32	28	57	23
6020A	7440-41-7	BERYLLIUM	MG_KG	<b>0.21</b>	0.24 J	0.14	0.2	0.22	0.23 J
6020A	7440-43-9	CADMIUM	MG_KG	<b>0.33</b>	0.29	0.11	0.15	0.16	0.17
6020A	7440-70-2	CALCIUM	MG_KG	<b>14000</b>	11000	11000	30000	5400	12000
6020A	7440-47-3	CHROMIUM, TOTAL	MG_KG	<b>680 J</b>	690 J	620 J	620 J	850 J	760 J
6020A	7440-48-4	COBALT	MG_KG	<b>69</b>	75	75	77	94	96
6020A	7440-50-8	COPPER	MG_KG	<b>50</b>	60	34	34	43	36
6020A	7439-89-6	IRON	MG_KG	<b>53000</b>	32000	32000	30000	37000	30000
6020A	7439-92-1	LEAD	MG_KG	<b>26</b>	42	17	30	38	19
6020A	7439-95-4	MAGNESIUM	MG_KG	<b>100000</b>	88000	100000	52000	87000	120000
6020A	7439-96-5	MANGANESE	MG_KG	<b>780</b>	900	800	790	1000	900
6020A	7440-02-0	NICKEL	MG_KG	<b>1200</b>	1200	1500	1400	1700	1600
6020A	7440-09-7	POTASSIUM	MG_KG	<b>1000</b>	1400	1400	1500	2300	1000
6020A	7782-49-2	SELENIUM	MG_KG	<b>0.14 J</b>	0.18 J	0.13 J	0.17 J	0.27 J	0.22 J
6020A	7440-22-4	SILVER	MG_KG	<b>0.036 J</b>	0.049 J	0.029 J	0.028 J	0.046 J	0.032 J
6020A	7440-23-5	SODIUM	MG_KG	<b>250</b>	270	91	180	100	90
6020A	7440-28-0	THALLIUM	MG_KG	0.1 U	0.099 U	0.11 U	0.095 U	0.1 U	0.095 U
6020A	7440-62-2	VANADIUM	MG_KG	<b>70</b>	71	68	65	82	68
6020A	7440-66-6	ZINC	MG_KG	<b>74</b>	89	55	58	72	83
									85

**Notes:**

MG\_KG = Milligrams per kilogram

J = Estimated value

U = Not detected

**Bold** = Detected

		Sample Location:	M2-1	M2-2	M2-3	M2-3	M2-4	M2-5	M3-1	M3-2	
		Sample ID:	AOPS M201-1	AOPS M201-2	AOPS M201-3	AOPC M201-3	AOPS M201-4	AOPS M201-5	AOPS M301-1	AOPS M301-2	
		Sample Date:	04/21/2016	04/21/2016	04/21/2016	04/21/2016	04/21/2016	04/21/2016	04/21/2016	04/21/2016	
		Sample Type:	Normal	Normal	Normal	Duplicate	Normal	Normal	Normal	Normal	
Method		Matrix:	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	
8270D	90-12-0	1-METHYLNAPHTHALENE	MG_KG	<b>0.14</b>	0.2	0.019 U	0.0037 U	<b>0.023 J</b>	0.14	0.35	0.085
8270D	91-57-6	2-METHYLNAPHTHALENE	MG_KG	<b>0.12</b>	<b>0.19</b>	0.038 U	0.0075 U	<b>0.025 J</b>	0.15	0.42	0.088
8270D	83-32-9	ACENAPHTHENE	MG_KG	<b>0.9</b>	1.3	<b>0.09</b>	<b>0.014</b>	<b>0.17</b>	0.94	1.9	0.46
8270D	208-96-8	ACENAPHTHYLENE	MG_KG	<b>0.066</b>	<b>0.077</b>	0.038 U	<b>0.0039 J</b>	0.039 U	<b>0.079</b>	0.1	<b>0.037 J</b>
8270D	120-12-7	ANTHRACENE	MG_KG	<b>1</b>	1.6	<b>0.14</b>	<b>0.029</b>	<b>0.28</b>	1	2.1	0.45
8270D	56-55-3	BENZO[A]ANTHRACENE	MG_KG	<b>5.8</b>	10	<b>0.42 J</b>	<b>0.12 J</b>	<b>1.2</b>	5.7	11	2.5
8270D	50-32-8	BENZO[A]PYRENE	MG_KG	<b>5.7</b>	9	<b>0.36 J</b>	<b>0.12 J</b>	<b>1.2</b>	5.1	10	2.3
8270D	205-99-2	BENZO[B]FLUORANTHENE	MG_KG	<b>10</b>	15	<b>0.59 J</b>	<b>0.22 J</b>	2	<b>11</b>	17	4
8270D	191-24-2	BENZO[G,H,I]PERYLENE	MG_KG	2.5	2.9	0.17	0.063	<b>0.57</b>	2.3	4.6	1.1
8270D	207-08-9	BENZO[K]FLUORANTHENE	MG_KG	<b>3.1</b>	2.5	0.29 J	<b>0.073 J</b>	<b>0.68</b>	3.2	7.2	1.8
8270D	218-01-9	CHRYSENE	MG_KG	<b>6.4</b>	11	0.42 J	<b>0.12 J</b>	1.3	6.4	13	2.9
8270D	53-70-3	DIBENZ[A,H]ANTHRACENE	MG_KG	<b>1.2</b>	1.3	<b>0.062</b>	0.02	<b>0.18</b>	<b>0.77</b>	1.6	<b>0.38</b>
8270D	206-44-0	FLUORANTHENE	MG_KG	<b>13</b>	20	<b>0.87 J</b>	<b>0.24 J</b>	2.6	15	24	5.1
8270D	86-73-7	FLUORENE	MG_KG	<b>0.43</b>	<b>0.71</b>	0.061	<b>0.0091</b>	0.11	0.42	1	0.2
8270D	193-39-5	INDENO[1,2,3-CD]PYRENE	MG_KG	<b>1.7 J</b>	<b>1.9 J</b>	<b>0.12 J</b>	<b>0.037 J</b>	0.33 J	<b>1.4 J</b>	2.2 J	<b>0.66 J</b>
8270D	91-20-3	NAPHTHALENE	MG_KG	<b>0.099</b>	0.2	0.038 U	<b>0.0048 J</b>	<b>0.029 J</b>	0.14	0.27	<b>0.049 J</b>
8270D	85-01-8	PHENANTHRENE	MG_KG	<b>9.2</b>	16	<b>0.75 J</b>	<b>0.15 J</b>	1.8	12	20	3.9
8270D	129-00-0	PYRENE	MG_KG	<b>11</b>	20	<b>0.76 J</b>	0.2 J	2.5	16	26	5.3

**Notes:**

MG\_KG = Milligrams per kilogram

J = Estimated value

U = Not detected

**Bold** = Detected

<b>Sample Location:</b>	M3-3	M3-4		
<b>Sample ID:</b>	AOPS M301-3	AOPS M301-4		
<b>Sample Date:</b>	04/21/2016	04/21/2016		
<b>Sample Type:</b>	Normal	Normal		
<b>Matrix:</b>	Soil	Soil		
Method	CAS No.	Analyte	Units	
8270D	90-12-0	1-METHYLNAPHTHALENE	MG_KG	<b>0.17</b>
8270D	91-57-6	2-METHYLNAPHTHALENE	MG_KG	<b>0.21</b>
8270D	83-32-9	ACENAPHTHENE	MG_KG	<b>0.75</b>
8270D	208-96-8	ACENAPHTHYLENE	MG_KG	<b>0.046 J</b>
8270D	120-12-7	ANTHRACENE	MG_KG	<b>0.68</b>
8270D	56-55-3	BENZO[A]ANTHRACENE	MG_KG	<b>3.7</b>
8270D	50-32-8	BENZO[A]PYRENE	MG_KG	<b>3.2</b>
8270D	205-99-2	BENZO[B]FLUORANTHENE	MG_KG	<b>5.3</b>
8270D	191-24-2	BENZO[G,H,I]PERYLENE	MG_KG	<b>1.4</b>
8270D	207-08-9	BENZO[K]FLUORANTHENE	MG_KG	<b>2.5</b>
8270D	218-01-9	CHRYSENE	MG_KG	<b>4.2</b>
8270D	53-70-3	DIBENZ[A,H]ANTHRACENE	MG_KG	<b>0.55</b>
8270D	206-44-0	FLUORANTHENE	MG_KG	<b>11</b>
8270D	86-73-7	FLUORENE	MG_KG	<b>0.28</b>
8270D	193-39-5	INDENO[1,2,3-CD]PYRENE	MG_KG	<b>0.92 J</b>
8270D	91-20-3	NAPHTHALENE	MG_KG	<b>0.16</b>
8270D	85-01-8	PHENANTHRENE	MG_KG	<b>9</b>
8270D	129-00-0	PYRENE	MG_KG	<b>11</b>
				<b>41</b>

**Notes:**

MG\_KG = Milligrams per kilogram

J = Estimated value

U = Not detected

**Bold** = Detected

**C-2**  
**PCB Wipe**

Sample Location:		ETR-1	ETR-2	ETR-3	ETR-3	TB-1	TB-2	TB-3	TR-1
Sample ID:		AV32 WS ETR-1	AV32 WS ETR-2	AV32 WS ETR-3	AV32 WS ETR-3D	AV32 WSWTB-1	AV32 WSWTB-2	AV32 WSWTB-3	AV32 WSWTR-1
Sample Date:		04/18/2016	04/18/2016	04/18/2016	04/18/2016	04/18/2016	04/18/2016	04/18/2016	04/18/2016
Sample Type:		Normal	Normal	Normal	Duplicate	Normal	Normal	Normal	Normal
Matrix:		Wipe	Wipe	Wipe	Wipe	Wipe	Wipe	Wipe	Wipe
Method	CAS No.	Analyte	Units						
8082A	12674-11-2	AROCLOR-1016	UG_WIPE	1 U	1 U	1 U	1 U	1 U	1 U
8082A	11104-28-2	AROCLOR-1221	UG_WIPE	2 U	2 U	2 U	2 U	2 U	2 U
8082A	11141-16-5	AROCLOR-1232	UG_WIPE	1 U	1 U	1 U	1 U	1 U	1 U
8082A	53469-21-9	AROCLOR-1242	UG_WIPE	1 U	1 U	1 U	1 U	1 U	1 U
8082A	12672-29-6	AROCLOR-1248	UG_WIPE	1 U	1 U	1 U	1 U	1 U	1 U
8082A	11097-69-1	AROCLOR-1254	UG_WIPE	1 U	1 U	1 U	1 U	1 U	1 U
8082A	11096-82-5	AROCLOR-1260	UG_WIPE	1 U	1 U	1 U	1 U	1 U	1 U

**Notes:**

UG\_WIPE = Micrograms per wipe

U = Not detected

<b>Sample Location:</b>	TR-2	TR-3		
<b>Sample ID:</b>	AV32 WSWTR-2	AV32 WSWTR-3		
<b>Sample Date:</b>	04/18/2016	04/18/2016		
<b>Sample Type:</b>	Normal	Normal		
	<b>Matrix:</b>	Wipe		
		Wipe		
Method	CAS No.	Analyte	Units	
8082A	12674-11-2	AROCLOR-1016	UG_WIPE	1 U
8082A	11104-28-2	AROCLOR-1221	UG_WIPE	2 U
8082A	11141-16-5	AROCLOR-1232	UG_WIPE	1 U
8082A	53469-21-9	AROCLOR-1242	UG_WIPE	1 U
8082A	12672-29-6	AROCLOR-1248	UG_WIPE	1 U
8082A	11097-69-1	AROCLOR-1254	UG_WIPE	1 U
8082A	11096-82-5	AROCLOR-1260	UG_WIPE	1 U

**Notes:**

UG\_WIPE = Micrograms per wipe

U = Not detected