Data Usability Summary
Test America Work Orders: 600-85272-1, 600-85272-2

Sample Dates:	January 7, 2014	**Project No.:**	1302086
Laboratory:	Test America (Houston TLAP Certification T104704223) (Denver TLAP Certification T104704183-13-8)	**Client:**	Exide Technologies Inc.
Work Orders:	Work Orders: 600-85272-1, 600-85272-2		
Intended Use	Affected Property Assessment Report (APAR)		
Site:	Exide Former Operating Plant (FOP), 7471 5th Street, Frisco, TX		

TESTS/ METHODS

Volatile Organic Compounds (VOCs) by SW-846 8260B – Gas Chromatography (GC)/Mass Spectrometry (MS)

Low Level Semivolatile Organic Compounds by SW-846 8270C – GC/MS

Texas Total Petroleum Hydrocarbons (TPH) by TX1005 – GC

Total Metals by SW-846 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP)

Sulfate by SW-846 9056 – Ion Chromatography

Perfluorinated Compounds (PFCs) by TestAmerica Proprietary Method DV-LC-0012 – Liquid Chromatography (LC)/MS completed by Test America Denver laboratory

SAMPLES

11 soil samples, 1 field blank, 2 equipment rinsate blanks, 2 trip blanks, and one Matrix Spike/Matrix Spike Duplicate (MS/MSD) set. See Table 1 for a complete cross-referenced listing of samples.

Golder completed a review of the above chemical analysis data for conformance with the requirements of the Texas Risk Reduction Program (TRRP) guidance document, Review and Reporting of COC Concentration Data (RGG-366/TRRP-13 Revised May 2010) and for adherence to project objectives. The results of the review are discussed in this data usability summary (DUS).

Golder completed the review using the following laboratory and project submittals:

Laboratory reportable data as defined in TRRP-13;

- Laboratory review checklists (LRC) with the associated exception reports;

- Laboratory Electronic Data Deliverable (EDD); and
- Project field notes from the sampling event.

The review of the reportable data included the quality control (QC) parameters listed below, as required per TRRP-13, using the applicable analytical method and project requirements:

- Data Completeness
- Chain-of-Custody Procedures
- Sample Condition - Holding Time, Preservation, and Containers
- Field Procedures
- Results Reporting Procedures
- Laboratory and Field QC Blanks
- Laboratory Control Spike and Matrix Spike Recoveries
- Surrogate Recoveries
- Laboratory and Field Duplicate Precision

Additionally, Golder used the LRC to evaluate the following QC parameters:

- Method Quantitation Limits (MQLs)
- Method Detection Limits (MDLs)
- Instrument Tuning, Calibration, and Performance
- Internal Standards

Criteria used for this data usability review are as follows:

- Organics: 60-140% spike recovery (and not less than 10% or data is rejected) and +MQL difference or 40% RPD (for laboratory duplicates) as recommended in TRRP-13;
- Inorganics: 70-130% spike recovery (and not less than 30% or data is rejected) and +MQL difference or 30% RPD (for laboratory duplicates) as recommended in TRRP-13; and
- Soil Samples: + 3x MQL difference (if either result is less than 5x MQL) or 50% RPD (for field duplicates) as recommended in TRRP-13.

If an item was found outside of the review criteria, the reviewer applied a data qualifier (DQ) and bias code to the results for the affected samples in accordance with TRRP-13. A list of all qualified results and definitions of the qualifier and bias codes are given in Table

GLOSSARY OF TERMS

The following definitions apply for terms related to analyte reporting limits:

MDL (Method Detection Limit) – the minimum concentration of an analyte that the laboratory can measure and report with 99% confidence that the analyte concentration is greater than zero. The MDL is

determined by the laboratory for each analyte in a given reagent matrix (water or soil) generally using the procedures specified in 40 CFR Part 136, Appendix B. It is a measure of the concentration an instrument can detect or 'see' in a given reagent matrix. TRRP-13 requires that the laboratory routinely check the MDL for reasonableness.

SDL (Sample Detection Limit) – the MDL adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes than prescribed in the analytical method, and taking into account sample characteristics, sample preparation, and analytical adjustments including dry-weight adjustments. It is a measure of the concentration an instrument can detect or 'see' in a given sample. For TRRP, non-detects are reported using the SDL. This term was originally called the SQL (Sample Quantitation Limit) before the TRRP rule revisions effective March 19, 2007.

Unadjusted MQL (Method Quantitation Limit) – the lowest non-zero concentration standard in the laboratory's initial calibration curve calculated using the normal aliquot sizes and final volumes prescribed in the analytical method. The unadjusted MQL is reported by the laboratory for each analyte in a given matrix (water or soil). It is a measure of the concentration an instrument can accurately measure in a typical sample. Per TRRP, the Unadjusted MQLs should be below the Levels of Required Performance (LORPs) for purposes of assessment as well as demonstration of conformance with critical Protective Concentration Levels (PCLs).

MQL – the unadjusted MQL adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes than prescribed in the analytical method, and takes into account sample characteristics, sample preparation, and analytical adjustments including dry-weight adjustments. It is a measure of the concentration an instrument can accurately measure in a given sample. Analytes with concentrations above the SDL but below the MQL, though present in the sample, may not be accurately measured and are thus flagged as estimated (J).

LABORATORY CERTIFICATION

At the time the laboratory data were generated for this project, the laboratory was NELAC accredited under the Texas Laboratory Accreditation Program (TLAP) for the matrices, methods and parameters of analysis requested on the chain-of-custody forms. A copy of the applicable pages of the laboratory's National Environmental Laboratory Accreditation Program (NELAP) certificate valid during the period in which the laboratory generated the data in this report is included in Appendix 10.5.

USABILITY SUMMARY

1. Usability of Unqualified Non-Detects – Non-detects are reported at the sample detection limit (SDL) as required per TRRP. Additionally, according to the LRC, an MDL study was

performed for each analyte and the MDLs were checked for reasonableness for each applicable analyte. The levels of required performance (LORPs) have been established by Golder/PBW as the Residential Assessment Levels (RALs), which are the minimum of the TRRP residential Tier 1 $^{Tot}Soil_{Comb}$ and Tier 1, 2 or 3 $^{GW}Soil_{Ing}$ PCLs for a 30-acre source area or for a 0.5 acre area for VOCs/SVOCs. As needed per TRRP, the Unadjusted MQL stated by the laboratory is at or below the LORP for each applicable analyte, except for instances where no RAL is established (PFCs), or RALs are so low that they cannot be met by any laboratory. The MQLs for some SVOCs, although the low-level method was used, did not meet LORPs for the following: 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Nitroaniline, 2-Nitrophenol, 3,3'-Dichlorobenzidine, 3-Nitroaniline, 4,6-Dinitro-2-methylphenol, 4-Chloroaniline, 4-Chlorophenyl-phenylether, 4-Nitroaniline, 4-Nitrophenol, Benzidine, Bis(2-chloroethoxy)methane, Bis(2-chloroethyl) Ether, Bis(2-chloroisopropyl) Ether, N-Nitrosodimethylamine, N-Nitroso-di-n-propylamine, and Pentachlorophenol. Laboratory MQLs are considered the lowest attainable using standard methodology (SW-846 8270C LL) and are considered adequate for this phase of the site investigation. The analytical methods are appropriate and the results can be used to demonstrate conformance with the criteria.

2. Usability of Qualified Data – As shown in Table 2, the reviewer qualified benzidine for the rinse blank samples as rejected (R) because of low recovery on the LCS. Some detects were qualified as estimated (J) due to minor QC deficiencies. Detects that are biased high can be used; however, the reported concentration may be high. Detects that are estimated may be either low or high. Results with a laboratory J-flag (i.e., at a concentration between the SDL and MQL) should be considered estimates. The actual value is not expected to exceed the sample MQL.

Reviewer: Jing Song Xi 5/19/14

QUALITY CONTROL PARAMETERS AND OUTCOMES

Data Completeness

The laboratory data packages contain all necessary data (i.e., the laboratory reportable data per TRRP-13) and the EDD contain all sample results in acceptable format. Minor revisions were required for work orders 600-85272-1. All revisions are detailed in the laboratory narrative.

Chain-of-Custody

Proper sample custody procedures were used, which confirms that the integrity of the samples was maintained. Additionally, the information on the custody records is complete and agrees with that in the field notes and laboratory reports.

Sample Condition

Samples were collected in appropriate containers, properly preserved in the field, and prepared and analyzed within the holding times as required in the analytical methods, which ensures that the samples were not affected by analyte degradation:

- For 600-85272-1 and 600-85272-2, the temperature of the cooler at receipt was 4.3°C.

Field Procedures

The samples were collected and placed immediately into sterilized jars provided by the laboratory and then into a cooler with ice for overnight delivery to the laboratory.

One field blank and two equipment rinsate blanks were collected with the 11 investigative samples.

Results Reporting Procedures

The hardcopy analytical results include a Result, MQL (adjusted), and SDL. The EDD includes the MDL, SDL (under the SQL column per previously used terminology) and the MQL, which is not adjusted for sample specific factors.

Results are reported in mg/kg with dry-weight correction for the metals. Non-detects are reported using the SDL as specified per TRRP and detects between the SDL and MQL are reported with a laboratory J-flag. The concentration reported for detects between the SDL and MQL is below the calibration range and thus is considered estimated.

MQLs- The LORPs have been established by Golder/PBW as the Residential Assessment Levels (RALs), which are the minimum of the TRRP residential Tier 1 Tier 1 $^{Tot}Soil_{Comb}$ and Tier 1, 2 or 3 $^{GW}Soil_{Ing}$ PCLs for a 30-acre source area or for a 0.5 acre area for VOCs/SVOCs. The Unadjusted MQLs for the laboratory are at or below the LORPs for each applicable analyte, except for instances where no RAL is established (perfluorinated hydrocarbons), or RALs are so low that they cannot be met by any laboratory such as some SVOC compounds previously mentioned.

MDLs- According to the LRC, an MDL study was performed for each analyte, and the MDLs were checked for reasonableness and either adjusted or supported by the analysis of detectability check standards (DCS) for each applicable analyte as required per TRRP-13. Results for the DCS are included in the data packages.

Laboratory Blanks

Constituents reported above the detection limit in the laboratory blank may indicate that contamination was introduced in the laboratory, as follows:

Lab Package	Blank Type	QC Batch	Analyte	Blank Concentration
600-85272-1	Method	125073	SVOCs	Di-n-octyl phthalate at 0.0002944 J
600-85272-1	Method	125471	SVOCs	Butyl benzyl phthalate (0.01363 J) Diethyl phthalate (0.09509 J) Di-n-butyl phthalate (0.02540 J)

Results for samples prepared in the same QC batch as a contaminated method blank may be affected by laboratory contamination. Samples 600-85272-1, -3, -5, -10, and -11 from preparation batch 125471 are affected. Results for the above analytes are less than 10x the MB concentration, and qualified as U in Table 2.

Field QC Blanks

One field blank, two equipment rinsate blanks, and two trip blanks were collected to document sufficient field decontamination procedures for soil sampling devices. Detected concentrations in the QC blanks were as follows:

Lab Package	Field Sample ID	Sample Date	Analyte	Blank Concentration
600-85272-7	Field Blank	1-7-2014	Acetone	0.0121 mg/L
			Toluene	0.00262 J mg/L
600-85272-18	Rinse Blank Geo	1-7-2014	Bis(2-ethylhexyl) phthalate	0.0114 mg/L

Results for samples collected with a contaminated rinsate blank may be affected by field contamination. These samples were prepared in batches separate from the analysis of solids. Samples 600-85272-1, -3, -5, -8, -10, and -11 exhibited detections of some combination of the analytes mentioned above, however, a direct correlation cannot be made. Results for the above mentioned analytes are qualified as J in Table 2. There were no VOCs detected in the trip blanks.

Laboratory Control Sample

The laboratory prepared one laboratory control sample (LCS) for each analytical batch and reported recoveries for all of the analytes for each test. The LCS recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on a sample, free of matrix effects, except for the following:

- For batch 124830, benzidine was recovered below TRRP recommended control limits and < 10% (0%). Benzidine has been identified as a poor performing analyte when analyzed with the method utilized according to the laboratory. This analyte is not reasonably anticipated to be present at the site. However based on the poor recovery, non-detected results (rinse blanks only are affected) in this batch are rejected, as shown in Table 2.

Matrix Spike Recovery

The laboratory prepared one or more matrix spike (MS) and matrix spike duplicate (MSD) with each analytical batch. MS/MSD recoveries are reported for the same analytes as the LCS for MS/MSD

prepared using a sample from the site, which includes 3 MS/MSD for VOCs, SVOCs, and PFCs, as shown in Table 1.

The MS/MSD recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on a sample free of matrix effects, except for the following which were marginally outside of control limits in most cases:

QC Batch	Lab Sample ID	MS/MSD ID	Analyte	Parent Amount (mg/kg)	Spike Amount for MS/MSD (mg/kg)	MS % Recovery	MSD % Recovery	Qual
125471	600-85272-1	2013-FFTA-03 (0.25-2)	Benzo(b) fluoranthene	0.00449	0.870, 0.868	142	133	-
125471	600-85272-1	2013-FFTA-03 (0.25-2)	Benzo(k) fluorantene	0.00389	0.870, 0.868	143	128	-
125471	600-85272-1	2013-FFTA-03 (0.25-2)	Bis(2-ethylhexyl) phthalate	0.0146	0.870, 0.868	141	138	-
125471	600-85272-1	2013-FFTA-03 (0.25-2)	Carbazole	0.00814	0.870, 0.868	142	132	-
125471	600-85272-1	2013-FFTA-03 (0.25-2)	Indeno(1,2,3-cd) pyrene	0.00913	0.870, 0.868	144	127	-
209210	600-85272-2	2013-FFTA-03 (0.25-2)	Perfluorotetradecanoic acid	0.00128	0.0284, 0.0272	48	36	UJ

NA – Not available.

Where MS/MSD recoveries were marginally outside of control limits and other QC criteria such as the LCS was acceptable for these analytes, samples were not qualified.

In all cases where the spike amount is less than four times the result in the unspiked parent sample, the data are considered inconclusive and the MS/MSD recovery check is waived.

Surrogate Recovery

Surrogate recoveries were within acceptable limits, except for the following:

- For sample 600-85272-1 matrix spike, the surrogate recovery was just above laboratory control limits for phenol-d5 only, but still within TRRP limits; thus samples were unaffected.
- For sample 600-85272-8, the sample was diluted at 100x because of the nature of the sample matrix. The surrogate spike concentration was reduced to a level where the recovery calculation does not provide useful information according to the laboratory. Surrogate recoveries were 0% for all 6 compounds; however, dilution is believed to be the factor and sample results were not qualified based on surrogate recoveries.

Laboratory Duplicate Precision

The laboratory prepared one or more Matrix Spike Duplicate (MSD) with each analytical batch for each test. RPDs are reported for the same analytes as the LCS for MSD/MD prepared using a sample from the site, which include 3 MS/MSD for VOCs, SVOCs, and PFCs, as shown in Table 1.

The MSD and MD RPDs are within the TRRP recommended criteria, which indicates good precision for the preparation and analysis technique for the given sample matrix, except as follows:

QC Batch	Lab Sample ID	MS/MSD ID	Analyte	Parent Amount (mg/kg)	MSD RPD	MD RPD	Qual
209210	600-85272-2	2013-FFTA-03 (0.25-2)	Perfluorotetradecanoic acid	0.00128	32	-	UJ

Field Duplicate Precision

No field duplicates were collected in this data package.

Instrument Tuning

According to the LRC, instrument tuning met method requirements for the samples, which indicates the GC/MS instrument was properly set up to identify analytes.

Instrument Calibration

According to the LRC, initial and continuing calibration data met method requirements for all reported results, which indicates the instruments were properly calibrated to measure analyte concentrations, except for the following:

- The continuing calibration verification (CCV) for analytical batch 125073 recovered outside control limits for benzidine. This falls under the laboratory allowance for four non-CCC analytes to have % drifts greater than the acceptable limit. However LCS recovery issues for benzidine associated with batch 125073 (prep batch 124830) were previously noted and associated data (rinse blanks) are rejected.
- The continuing calibration verification (CCV) for analytical batch 125471 recovered above the upper control limit for benzyl alcohol. The samples in the batch reported non-detects for the analyte and have been flagged as UJ in Table 2.

Instrument Performance

According to the LRC, the serial dilution and ICP interference check samples met method requirements, which indicates that no significant matrix interference exists.

Internal Standards

According to the LRC, area counts and retention times were within method requirements, except for the following:

- Various internal standards responses were outside of the method required acceptance limits. The laboratory indicated that affected samples were reanalyzed but matrix seems to impact internal standards responses. Phenanthrene and chrysene responses were outside of the method required acceptance limits for MW-43 (0-2). These analytes have been qualified as UJ accordingly on Table 2.

TABLE 1
CROSS REFERENCE OF FIELD SAMPLE IDENTIFICATIONS AND LABORATORY IDENTIFICATIONS

Lab Sample ID	Field Sample ID	Prep Batch/ Analysis Batch	Sample Date	Matrix	Comments
600-85272-1	2013-FFTA-03 (0.25-2)	/124806 125220/125471 124912/124998	1/7/2014	Soil	site-specific MS/MSD
600-85272-2	2013-FFTA-03 (2-4)		1/7/2014	Soil	Not reported
600-85272-3	2013-FFTA-03 (14-16)	/124806 125220/125471 124912/124998	1/7/2014	Soil	
600-85272-4	2013-FFTA-03 (16-18)		1/7/2014	Soil	Not reported
600-85272-5	2013-FFTA-02 (0-2)	/124806 125220/125471 124912/124998	1/7/2014	Soil	
600-85272-6	2013-FFTA-02 (2-4)		1/7/2014	Soil	Not reported
600-85272-7	Field Blank	/124815	1/7/2014	Water	Field Blank for VOCs
600-85272-8	MW-43 (0-2)	/124806 124912/124998	1/7/2014	Soil	
600-85272-9	MW-43 (2-4)		1/7/2014	Soil	Not reported
600-85272-10	MW-43 (8-10)	/124806 125220/125471 124912/124998	1/7/2014	Soil	
600-85272-11	MW-43 (17-20)	/124806 125220/125471 124912/124998	1/7/2014	Soil	site-specific MS/MSD
600-85272-12	MW-45 (0-0.5)	124717/124683	1/7/2014	Soil	
600-85272-13	MW-45 (1-2)		1/7/2014	Soil	Not reported
600-85272-14	MW-45 (4-5)		1/7/2014	Soil	Not reported
600-85272-15	MW-45 (15-17)	124717/124683 124938/125019	1/7/2014	Soil	
600-85272-16	MW-45 (17-18)	124717/124683 124938/125019	1/7/2014	Soil	
600-85272-17	MW-45 (18-20)	124717/124683 124938/125019	1/7/2014	Soil	
600-85272-18	Rinse Blank - Geo	/124815 124830/125073 124855/124903	1/7/2014	Water	Rinsate Blank
600-85272-19	Rinse Blank - CME	/124815 124830/125073 124855/124903	1/7/2014	Water	Rinsate Blank
600-85272-20	Trip Blank	124815	1/7/2014	Water	Trip Blank
600-85272-21	Trip Blank	124815	1/7/2014	Water	Trip Blank

TABLE 2 - QUALIFIED DATA

Lab Sample ID	Field Sample ID	Analyte	Result	Units	Qualifer	Explanation
		Benzyl Alcohol	<0.0152 U	mg/kg	UJ	CCV outside specifications for batch
		Butyl benzyl phthalate	0.0259 J	mg/kg	<0.1363 U	Analyte detected in Method Blank, analyte result < 10x MB concentration
		Diethyl phthalate	0.193	mg/kg	<0.9509 U	Analyte detected in Method Blank, analyte result < 10x MB concentration
		Di-n-butyl phthalate	0.0216 J	mg/kg	<0.254 U	Analyte detected in Method Blank, analyte result < 10x MB concentration
600-85272-1	2013-FFTA-03 (0-2)	Bis (2-ethylhexyl) phthalate	0.0146 J	mg/kg	J	Analyte detected in field QC blank
		Benzyl Alcohol	<0.0149 U	mg/kg	UJ	CCV outside specifications for batch
		Butyl benzyl phthalate	0.0402 J	mg/kg	<0.1363 U	Analyte detected in Method Blank, analyte result < 10x MB concentration
		Diethyl phthalate	0.192	mg/kg	<0.9509 U	Analyte detected in Method Blank, analyte result < 10x MB concentration
		Di-n-butyl phthalate	0.0318 J	mg/kg	<0.254 U	Analyte detected in Method Blank, analyte result < 10x MB concentration
		Acetone	0.00511 J	mg/kg	J	Analyte detected in field QC blank
600-85272-3	2013-FFTA-03 (14-16)	Bis (2-ethylhexyl) phthalate	0.0624 J	mg/kg	J	Analyte detected in field QC blank
		Benzyl Alcohol	<0.0135 U	mg/kg	UJ	CCV outside specifications for batch
		Butyl benzyl phthalate	0.0306 J	mg/kg	<0.1363 U	Analyte detected in Method Blank, analyte result < 10x MB concentration
		Diethyl phthalate	0.234	mg/kg	<0.9509 U	Analyte detected in Method Blank, analyte result < 10x MB concentration
		Di-n-butyl phthalate	0.126 J	mg/kg	<0.254 U	Analyte detected in Method Blank, analyte result < 10x MB concentration
		Acetone	0.00552 J	mg/kg	J	Analyte detected in field QC blank
600-85272-5	2013-FFTA-02 (0.25-2)	Bis (2-ethylhexyl) phthalate	0.0778 J	mg/kg	J	Analyte detected in field QC blank
		Chrysene	<0.239 U	mg/kg	UJ	ISTD below specifications
600-85272-8	MW-43 (0-2)	Phenanthrene	<1.16 U	mg/kg	UJ	ISTD below specifications
		Benzyl Alcohol	<0.0138 U	mg/kg	UJ	CCV outside specifications for batch
		Butyl benzyl phthalate	0.0199 J	mg/kg	<0.1363 U	Analyte detected in Method Blank, analyte result < 10x MB concentration
		Diethyl phthalate	0.106 J	mg/kg	<0.9509 U	Analyte detected in Method Blank, analyte result < 10x MB concentration
		Di-n-butyl phthalate	0.0466 J	mg/kg	<0.254 U	Analyte detected in Method Blank, analyte result < 10x MB concentration
600-85272-10	MW-43 (8-10)	Acetone	0.0714	mg/kg	J	Analyte detected in field QC blank
		Benzyl Alcohol	<0.0132 U	mg/kg	UJ	CCV outside specifications for batch
		Butyl benzyl phthalate	0.0267 J	mg/kg	<0.1363 U	Analyte detected in Method Blank, analyte result < 10x MB concentration
		Diethyl phthalate	0.0847 J	mg/kg	<0.9509 U	Analyte detected in Method Blank, analyte result < 10x MB concentration
		Di-n-butyl phthalate	0.0627 J	mg/kg	<0.254 U	Analyte detected in Method Blank, analyte result < 10x MB concentration
600-85272-11	MW-43 (17-20)	Acetone	0.00799 J	mg/kg	J	Analyte detected in field QC blank
600-85272-18	RINSE BLANK - GEOPROBE	Benzidine	<0.0179 U	mg/L	R	LCS recovery below 10%
600-85272-19	RINSE BLANK - CME	Benzidine	<0.0179 U	mg/L	R	LCS recovery below 10%
600-85272-1	2013-FFTA-03 (0-2)	Perflurotetradecanoic Acid	<0.00128 U	mg/kg	UJ	MS/MSD %R below specifications, greater than 10%, MSD RPD outside specifications, parent sample only
600-85272-6	2013-FFTA-02 (0-2)	Perflurotetradecanoic Acid	<0.00129 U	mg/kg	UJ	MS %R below specifications, greater than 10%

Note:

Detected results between the SDL and MQL (i.e., results with a laboratory J-flag) have been included in the above table since the reported concentration is below the calibration range.

J Estimated data; The analyte was detected and identified. The associated numerical value (i.e., the reported sample concentration) is the approximate concentration of the analyte in the sample.

NJ Tentatively identified, estimated data; The analysis indicates the presence of the analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.

NS Not selected; Another result (from a secondary dilution, different analytical method, re-sampling, etc.) is selected for use based on QC outcomes and/or reported concentrations.

R Rejected data; The data is unusable. Serious QC deficiencies make it impossible to verify the absence or presence of this analyte.

U Not detected; The analyte was not detected >5x (10x for common contaminants) the level in an associated blank and thus should be considered not detected above the level of the associated numerical value (i.e., the reported sample concentration).

UJ Estimated data; The analyte was not detected above the reported sample detection limit (SDL). The numerical value of the SDL is estimated and may be inaccurate.

H Bias in sample result is likely to be high

L Bias in sample result is likely to be low

TABLE 3 - FIELD DUPLICATE PRECISION CALCULATIONS

Duplicate and Parent Sample Field Identification	Analyte	Sample Result	Duplicate Result	RPD[a]	Accept or Reject	Qualifier Added
None	-	-	-	-	-	-

[a] RPD = ((SR - DR)*200)/(SR + DR)

A - Acceptable Data

NA - Not Analyzed

The RPD test (<50%) applies if both results are greater than 5x MQL. Otherwise, the absolute difference test (< 3x MQL) applies.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

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TestAmerica Job ID: 600-85272-1
Client Project/Site: Exide Recycling Center
Revision: 1

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

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

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-85272-1 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☑ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☑ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Sophia Shah		1/27/2014
Name (printed)	Signature	Date

Project Management Assistant
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	1/27/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85272-1
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		X			R01A
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			R04B
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		X			R06D
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			R07C
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?		X			R10B
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
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3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	1/27/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85272-1
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?		X			S02B
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?		X			S02D
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?		X			S04A
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

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Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	1/27/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85272-1
Reviewer Name:	Dean A Joiner		

ER #[1]	Description
R01A	The following samples were collected in bulk containers: 600-85272-1, 600-85272-1 MS, 600-85272-1 MSD, 600-85272-2, 600-85272-3, 600-85272-4, 600-85272-5, 600-85272-6, 600-85272-7, 600-85272-8, 600-85272-9, 600-85272-10, 600-85272-11, 600-85272-12, 600-85272-13, 600-85272-14, 600-85272-15, 600-85272-16, 600-85272-17, 600-85272-18, 600-85272-19, 600-85272-20, and 600-85272-21.
R04B	Method 8270C LL: Six surrogates are used for this analysis. The laboratory's SOP allows 1 base and 1 acid of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. Samples 600-85272-1MS was biased high for Phenol-d5. These results have been reported and qualified. Method 8270C LL: The following sample(s) required a dilution due to the nature of the sample matrix: 600-85272-8. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.
R06D	Method 8270C LL: The laboratory control sample (LCS) for batch 12483recovered outside control limits for the following analytes: Benzidine and 3-Nitroaniline. Benzidine has been identified as a poor performing analyte when analyzed using this method. 3-Nitroaniline was biased high in the LCS and was not detected in the associated samples; therefore, these results have been reported and qualified..
R07C	Method 8270C LL: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 125471 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.
R10B	Method 8270C LL: The following sample(s) was diluted due to the nature of the sample matrix: 600-85272-8. Elevated reporting limits (RLs) are provided.
S02B	Method 8270C LL: The continuing calibration verification (CCV) for analytical batch 125073 recovered outside control limits for Benzidine (-90.8). The SOP makes allowance for up to four non-CCC analytes to have a %drift greater than the acceptable limit. The data have been qualified and reported.
S02D	Method 8270C LL: The continuing calibration verification (CCV) associated with batch 125471 recovered above the upper control limit for Benzyl alcohol. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.
S04A	Method 8270C LL: Various Internal standards (ISTD) responses were outside of acceptance limits. Effected samples were re-analyzed (including dilutions) but matrix seems to impact ISTD responces.

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Detection Check Standard

Matrix:	Soil
Method:	6010B
Preparation:	3050
Date Analyzed:	12/30/2013
Date Prepared:	12/27/2013
Instrument:	Thermo 6500
TALS Batches:	123949, 123775p
Prep/Reagent Factor =	50
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.299654	0.5	0.36	25
Antimony	0.231553	0.45	0.5	2.5
Arsenic	0.217923	0.5	0.53	1
Barium	0.011322	0.03	0.04	1
Beryllium	0.014513	0.02	0.015	0.25
Boron	0.385535	0.6	0.56	20
Cadmium	0.025642	0.05	0.05	0.25
Calcium	0.86399	1.5	2.185	100
Chromium	0.050606	0.1	0.135	0.5
Cobalt	0.067622	0.1	0.09	0.5
Copper	0.173703	0.5	0.64	0.5
Iron	2.534007	4	3.76	20
Lead	0.104832	0.2	0.215	0.5
Selenium	0.258884	0.5	0.465	2
Manganese	0.038111	0.05	0.085	1.5
Molybdenum	0.136448	0.35	0.38	0.5
Nickel	0.116599	0.15	0.2	1
Silver	0.118848	0.2	0.15	0.5
Sodium	0.885548	2.4	3.135	100
Thallium	0.276988	0.7	0.73	1.5
Tin	0.08729	0.15	0.19	1
Titanium	0.014529	0.03	0.01	0.5
Vanadium	0.079068	0.15	0.125	0.5
Zinc	0.108432	0.2	0.305	1.5

Detection Check Standard

Matrix: Solid
Method: 8260B
Preparation: Wei Shen
Date Analyzed: 10/16/2013
Date Prepared: 10/16/2013
TALs Batches: 118344
Units: ug/Kg

Analyte	MDL	DCS Spike	Measured Result	MQL
1,1,1,2-Tetrachloroethane	1.4	5	4.8	5
1,1,1-Trichloroethane	0.74	5	3.9	5
1,1,2,2-Tetrachloroethane	0.87	5	4.4	5
1,1,2-Trichloro-1,2,2-trifluoroethane	1.44	5	4.3	5
1,1,2-Trichloroethane	0.73	5	4.3	5
1,1-Dichloroethane	0.87	5	8.7	5
1,1-Dichloroethene	1.22	5	9.1	5
1,1-Dichloropropene	0.65	5	3.4	5
1,2 Dichloroethene, Total	1.9	10	19	10
1,2,3-Trichlorobenzene	0.62	5	4.3	5
1,2,3-Trichloropropane	1.31	5	5.3	5
1,2,3-Trimethylbenzene	1.8	5	5.3	5
1,2,4-Trichlorobenzene	1.97	5	4.3	5
1,2,4-Trimethylbenzene	0.92	5	5.2	5
1,2-Dibromo-3-chloropropane	2.44	5	5.6	10
1,2-Dibromoethane (EDB)	1.02	5	4.4	5
1,2-Dichlorobenzene	0.8	5	4.2	5
1,2-Dichloroethane	0.9	5	5.1	5
1,2-Dichloropropane	0.71	5	4.8	5
1,3,5-Trichlorobenzene	5	5	4.1	5
1,3,5-Trimethylbenzene	1.6	5	5.2	5
1,3-Dichlorobenzene	0.71	5	7.9	5
1,3-Dichloropropane	0.63	5	4.3	5
1,3-Dichloropropane, Total	0.58	10	9.3	5
1,4-Dichlorobenzene	0.66	5	5.6	5
1,4-Dioxane	62.07	100	120	500
2,2-Dichloropropane	1.82	5	9.4	5
2-Butanone (MEK)	1.9	10	9.3	10
2-Chloro-1,3-butadiene	2.71	5	5.4	10
2-Chloroethyl vinylether	0.98	10	8	10
2-Chlorotoluene	0.68	5	7.9	5
2-Hexanone	1.01	10	10.8	10
4-Chlorotoluene	0.83	5	5.3	5
4-Isopropyltoluene	1.02	10	9.1	5
4-Methyl-2-pentanone	1.47	10	10.2	10
Acetone	1.66	10	6.5	10
Acetonitrile	1.39	10	49	10
Acrylonitrile	5.82	50	86	25
Allyl chloride (3-Chloro-1-propene)	1.39	5	8.9	5

Detection Check Standard

Matrix:	Solid
Method:	8260B
Preparation:	Wei Shen
Date Analyzed:	10/16/2013
Date Prepared:	10/16/2013
TALs Batches:	118344
Units:	ug/Kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Benzene	0.63	5	8.6	5
Bromoform	1.37	5	4.3	5
Bromomethane	1.78	5	5.2	10
Carbon Disulfide	0.55	10	9.2	5
Carbon Tetrachloride	1.13	5	4.3	5
Chlorobenzene	0.96	5	8	5
Chlorobromomethane	1.78	5	5.2	5
Chlorodibromomethane	0.94	5	4.4	5
Chloroethane	1.4	5	5.5	10
Chloroform	5.74	5	9.8	5
Chloromethane	1.66	5	5.8	10
cis-1,2-Dichloroethene	0.83	5	9.8	5
cis-1,3-Dichloropropene	0.54	5	5	5
Dibromomethane	0.75	5	4.9	5
Dichlorobromomethane	0.66	5	4.2	5
Dichlorodifluoromethane	1.54	5	4.3	5
Ethyl methacrylate	1.66	5	4.4	5
Ethylbenzene	1.02	5	4.9	5
Hexachlorobutadiene	1.13	5	9	5
Isobutyl alcohol	17.2	50	49	50
Isopropylbenzene	0.92	5	4.9	5
Methacrylonitrile	5	5	0.88	10
Methyl Iodide	2.5	5	8.5	10
Methyl methacrylate	2.86	10	21.9	10
Methyl tert-butyl ether	1.83	5	4.8	5
Methylcyclohexane	1.5	5	4.2	5
Methylene Chloride	2.19	5	7.8	10
m-Xylene & P-Xylene	1.52	5	4.5	10
Naphthalene	2.37	5	4.5	10
n-Butyl acetate	2.4	5	5.3	10
n-Butylbenzene	0.58	5	8.5	5
n-Propylbenzene	0.95	5	5.2	5
o-Xylene	1.13	5	7.8	5
Pentachloroethane	5	5	1.47	5
Propionaldehyde	64	5	4.9	100
Propionitrile	2.36	5	70	10
sec-Butylbenzene	0.7	5	8.6	5
Styrene	0.71	5	8.3	5
tert-Butylbenzene	0.95	5	5	5

Detection Check Standard

Matrix:	Solid
Method:	8260B
Preparation:	Wei Shen
Date Analyzed:	10/16/2013
Date Prepared:	10/16/2013
TALs Batches:	118344
Units:	ug/Kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Tetrachloroethene	1.4	5	4.7	5
Toluene	1.38	5	4.6	5
trans-1,2-Dichloroethene	1.14	5	9.2	5
trans-1,3-Dichloropropene	0.58	5	4.3	5
trans-1,4-Dichloro-2-butene	1.9	5	5	10
Trichloroethene	1.4	5	4.4	5
Trichlorofluoromethane	0.66	5	5.6	5
Trichlorotrifluoroethane	1.44	5	5.6	5
Vinyl Acetate	0.93	5	7.6	10
Vinyl Chloride	0.9	5	4.8	10
Xylenes (total)	1.13	5	12	5

Matrix: Water
Method: 8260B_LL
Date Analyzed: 12/10/2013
TALS Batch: 122598
Units: ug/L

Analyte	MDL	DCS Spike	Measured Result	MQL
1,1,1,2-Tetrachloroethane	0.180	0.500	0.411	1
1,1,1-Trichloroethane	0.150	0.500	0.475	1
1,1,2,2-Tetrachloroethane	0.220	0.500	0.515	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.000	0.250	0.276	1
1,1,2-Trichloroethane	0.280	0.500	0.507	1
1,1-Dichloroethane	0.110	0.250	0.300	1
1,1-Dichloroethene	0.190	0.500	0.439	1
1,1-Dichloropropene	0.210	0.500	0.431	1
1,2,3-Trichlorobenzene	0.570	0.500	0.950	1
1,2,3-Trichloropropane	0.290	0.500	0.568	1
1,2,3-Trimethylbenzene	0.130	0.500	0.449	1
1,2,4-Trichlorobenzene	0.310	0.500	0.713	1
1,2,4-Trimethylbenzene	0.140	0.500	0.434	1
1,2-Dibromo-3-Chloropropane	0.810	0.500	0.665	1
1,2-Dichlorobenzene	0.100	0.250	0.349	1
1,2-Dichloroethane	0.140	0.500	0.500	1
1,2-Dichloroethene, Total	0.300	1.000	0.970	1
1,2-Dichloropropane	0.160	0.500	0.474	1
1,3,5-Trichlorobenzene	1.000	0.500	0.578	1
1,3,5-Trimethylbenzene	0.100	0.250	0.262	1
1,3-Dichlorobenzene	0.130	0.500	0.530	1
1,3-Dichloropropane	0.220	0.500	0.531	1
1,4-Dichlorobenzene	0.110	0.250	0.336	1
1,4-Dioxane	30.790	10.000	11.352	50
1-Chlorohexane	0.260	0.250	0.279	1
2,2-Dichloropropane	0.130	0.500	0.452	1
2-Butanone (MEK)	0.760	1.000	0.963	2
2-Chloro-1,3-butadiene	0.330	0.500	0.406	1
2-Chloroethyl vinyl ether	0.500	1.000	0.798	2
2-Chlorotoluene	0.130	0.500	0.439	1
2-Hexanone	0.350	1.000	0.789	2
3-Chloro-1-propene	0.240	0.500	0.425	2
4-Chlorotoluene	0.140	0.500	0.490	1
4-Isopropyltoluene	0.100	0.250	0.279	1
4-Methyl-2-pentanone (MIBK)	0.450	1.000	0.931	2
Acetone	0.990	1.000	1.452	5
Acrolein	1.630	2.500	2.455	5
Acrylonitrile	0.520	2.500	2.614	5
Benzene	0.080	0.250	0.304	1
Benzyl chloride	0.240	0.500	0.977	1
Bromobenzene	0.190	0.500	0.523	1
Bromoform	0.190	0.500	0.410	1
Bromomethane	0.250	0.500	0.468	2
Butadiene	0.210	0.500	0.496	1
Carbon disulfide	0.240	0.500	0.478	2
Carbon tetrachloride	0.150	0.500	0.378	1
Chlorobenzene	0.120	0.250	0.317	1
Chlorobromomethane	0.180	0.500	0.480	1

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Matrix: Water
Method: 8260B_LL
Date Analyzed: 12/10/2013
TALS Batch: 122598
Units: ug/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Chlorodibromomethane	0.150	0.500	0.403	1
Chloroethane	0.080	0.250	0.313	2
Chloroform	0.130	0.500	0.471	1
Chloromethane	0.180	0.500	0.516	2
cis-1,2-Dichloroethene	0.060	0.250	0.324	1
cis-1,3-Dichloropropene	0.180	0.500	0.371	1
Cyclohexane	0.160	0.500	0.410	1
Cyclohexanone	8.640	25.000	30.305	50
Dibromomethane	0.520	0.500	0.962	1
Dichlorobromomethane	0.160	0.500	0.403	1
Dichlorodifluoromethane	0.120	0.250	0.245	1
Dichlorofluoromethane	1.000	0.500	0.472	1
Ethyl acetate	0.410	1.000	1.448	2
Ethyl acrylate	0.340	0.500	0.640	2
Ethyl ether	0.150	0.500	0.480	1
Ethyl methacrylate	0.260	0.500	0.415	2
Ethylbenzene	0.110	0.250	0.006	1
Ethylene Dibromide	0.180	0.500	0.474	1
Hexachlorobutadiene	0.170	0.500	0.620	1
Hexane	0.160	0.500	0.404	1
Iodomethane	0.158	0.500	0.484	2
Isobutyl alcohol	3.320	12.500	13.826	10
Isooctane	0.330	0.500	1.097	1
Isopropyl alcohol	3.720	5.000	5.417	10
Isopropyl ether	0.090	0.250	0.271	1
Isopropylbenzene	0.180	0.500	0.427	1
Methyl acetate	0.550	1.250	1.371	2
Methyl methacrylate	0.330	1.000	0.835	1
Methyl tert-butyl ether	0.120	0.250	0.287	1
Methylcyclohexane	0.100	0.250	0.292	1
Methylene Chloride	0.150	0.500	0.488	5
m-Xylene & p-Xylene	0.170	0.500	0.442	1
Naphthalene	0.320	0.500	0.776	2
n-Butyl acetate	0.190	0.500	0.384	1
n-Butylbenzene	0.160	0.500	0.423	1
N-Propylbenzene	0.150	0.500	0.418	1
o-Xylene	0.120	0.250	0.265	1
Propionitrile	0.660	2.500	2.335	2
sec-Butylbenzene	0.120	0.250	0.266	1
Styrene	0.070	0.250	0.230	1
tert-Butylbenzene	0.080	0.250	0.290	1
Tetrachloroethene	0.130	0.500	0.598	1
Toluene	0.150	0.500	0.503	1
trans-1,2-Dichloroethene	0.090	0.250	0.287	1
trans-1,3-Dichloropropene	0.210	0.500	0.763	1
Trichloroethene	0.180	0.500	0.481	1
Trichlorofluoromethane	0.080	0.250	0.234	1
Trihalomethanes, Total	1.000	2.000	1.680	5

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Matrix: Water
Method: 8260B_LL
Date Analyzed: 12/10/2013
TALS Batch: 122598
Units: ug/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Vinyl acetate	0.210	0.500	0.428	2
Vinyl chloride	0.110	0.250	0.293	2
Xylenes, Total	0.260	1.000	0.900	1

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Quality Control Report

Detection Check Standard

Matrix:	Soil
Method:	8270C LL
Preparation:	3550B
Date Analyzed:	7/22/2013
Date Prepared:	7/18/2013
Lab Sample ID:	600-111037
Units:	ug/Kg

Analyte	MDL	DCS Spike	DCS Result	MQL
Pyridine	3.52	16.7	2.76	16.67
N-Nitrosodimethylamine	4.19	16.7	11.04	16.67
bis (2-Chloroisopropyl) ether	8.84	16.7	14.71	16.67
Aniline	2.98	16.7	8.2	16.67
Phenol	4.24	8.35	3.56	16.67
bis(2-Chloroethyl)ether	1.65	8.35	2.85	16.67
2-Chlorophenol	1.97	8.35	3.01	16.67
1,3-Dichlorobenzene	1.54	8.35	3.64	16.67
1,4-Dichlorobenzene	2.25	8.35	3.59	16.67
1,2-Dichlorobenzene	3.02	8.35	3.92	16.67
Benzyl alcohol	5.83	16.7	9.65	16.67
2-Methylphenol	3.23	8.35	2.68	16.67
m&p-Cresols	2.79	8.35	2.3	16.67
N-Nitroso-di-n-propylamine	2.22	8.35	5.72	16.67
Hexachloroethane	2.31	8.35	4.09	16.67
Dibenzo(a,h)anthracene	4.56	16.7	13.7	16.67
Indeno(1,2,3-cd)pyrene	3.5	16.7	14.36	16.67
Nitrobenzene	2.96	8.35	3.64	16.67
Isophorone	1	8.35	3.18	16.67
2-Nitrophenol	3.89	8.35	1.96	16.67
Benzoic acid	32.76	83.5	459	83.33
2,4-Dimethylphenol	8.58	16.7	8.13	16.67
bis(2-Chloroethoxy)methane	1.42	8.35	2.82	16.67
2,4-Dichlorophenol	8.58	16.7	8.13	16.67
1,2,4-Trichlorobenzene	2.1	8.35	3.89	16.67
Naphthalene	1.35	8.35	3.43	16.67
Benzo(a)pyrene	1.61	8.35	2.53	16.67
Hexachlorobutadiene	1.92	8.35	3.34	16.67
4-Chloro-3-methylphenol	15.58	16.7	9.43	16.67
2-Methylnaphthalene	2.74	8.35	2.37	16.67
1-Methylnaphthalene	1.57	8.35	2.79	16.67
Benzo(k)fluoranthene	1.49	8.35	3.54	16.67
Hexachlorocyclopentadiene	4.61	8.35	2.19	16.67
2,4,6-Trichlorophenol	2.68	8.35	2.74	16.67
2,4,5-Trichlorophenol	10.01	16.7	12.18	16.67
2-Chloronaphthalene	1.21	8.35	2.84	16.67
2-Nitroaniline	4.89	16.7	11.59	16.67
1,4-Dinitrobenzene	16.67	16.7	14.73	16.67
1,3-Dinitrobenzene	2.96	8.35	2.97	16.67
1,2-Dinitrobenzene	16.67	16.7	12	16.67

Dimethylphthalate	4.89	8.35	3.46	16.67
Acenaphthylene	1	8.35	2.69	16.67
2,6-Dinitrotoluene	2.95	8.35	2.72	16.67
Benzo(b)fluoranthene	1.72	8.35	2.94	16.67
Acenaphthene	1.44	8.35	3.08	16.67
Di-n-octylphthalate	1.9	8.35	1.89	16.67
4-Nitrophenol	5.08	33.34	19.08	16.67
Dibenzofuran	1.85	8.35	3.04	16.67
2,4-Dinitrotoluene	3.61	16.7	2.35	16.67
2,3,4,6-Tetrachlorophenol	16.67	16.7	1.72	16.67
2,3,5,6-Tetrachlorophenol	16.67	16.7	27.43	16.67
Diethylphthalate	8.43	16.7	21.88	16.67
4-Chlorophenyl-phenylether	1.8	8.35	3.07	16.67
Fluorene	2.36	8.35	2.88	16.67
4-Nitroaniline	11.15	16.7	14.59	16.67
Chrysene	1.02	8.35	3.62	16.67
4,6-Dinitro-2-methylphenol	4.98	33.34	21.8	16.67
N-Nitrosodiphenylamine	1.89	16.7	2.87	16.67
Diphenylamine	1.94	16.7	2.86	16.67
1,2-Diphenylhydrazine	1.62	8.35	2.24	16.67
Azobenzene		8.35	2.26	16.67
4-Bromophenyl-phenylether	2.84	8.35	3.39	16.67
Hexachlorobenzene	1.52	8.35	2.94	16.67
Pentachlorophenol	4	33.34	59.74	16.67
Phenanthrene	4.95	16.7	12.04	16.67
Anthracene	1.28	8.35	2.53	16.67
Carbazole	3.12	16.7	12.14	16.67
Di-n-butylphthalate	2.59	8.35	3.24	16.67
Fluoranthene	3.11	8.35	3.28	16.67
Benzidine	9.02	417	318	16.67
Pyrene	1.83	8.35	3.15	16.67
Butylbenzylphthalate	6.19	16.7	10.18	16.67
3,3'-Dichlorobenzidine	16.67	16.7	3.58	16.67
Benzo(a)anthracene	1.38	8.35	3.54	16.67
bis(2-Ethylhexyl)phthalate	5.37	16.7	11.92	16.67
Benzo(g,h,i)perylene	5.07	16.7	15.35	16.67
4-Chloroaniline	4.72	16.7	4.22	16.67
3-Nitroaniline	7.15	16.7	5.07	16.67
2,4-Dinitrophenol	4.72	167	575	83.33

Matrix: Water
Method: 8270C
Prep Method: 3510C
Date Analyzed: 1/10/2014
Job #: 600-85250
TALS Batch: 124708
Units: ug/L

Analyte	MDL	DCS Spike	Measured Result	MQL
1,1'-Biphenyl	1.120	2.500	2.599	10
1,2,4,5-Tetrachlorobenzene	1.680	2.500	2.619	10
1,2,4-Trichlorobenzene	1.140	2.500	2.512	10
1,2-Dichlorobenzene	1.090	2.500	2.475	10
1,2-Dinitrobenzene	1.020	2.500	2.003	10
1,2-Diphenylhydrazine	0.900	2.500	2.890	10
1,3-Dichlorobenzene	1.150	2.500	2.580	10
1,3-Dinitrobenzene	3.470	5.000	4.860	10
1,4-Dichlorobenzene	1.260	2.500	2.580	10
1-Methylnaphthalene	0.530	2.500	2.645	10
2,2'-oxybis[1-chloropropane]	1.700	2.500	2.849	10
2,3,4,6-Tetrachlorophenol	0.830	2.500	1.973	10
2,4,5-Trichlorophenol	1.260	2.500	2.284	10
2,4,6-Trichlorophenol	0.920	2.500	2.319	10
2,4-Dichlorophenol	1.540	2.500	2.415	10
2,4-Dimethylphenol	1.340	2.500	2.781	10
2,4-Dinitrophenol	0.890	5.000	8.242	50
2,4-Dinitrotoluene	0.950	2.500	2.491	10
2,6-Dimethylphenol	1.030	2.500	2.249	10
2,6-Dinitrotoluene	0.640	2.500	2.481	10
2-Chloronaphthalene	1.000	2.500	2.695	10
2-Chlorophenol	0.670	2.500	2.420	10
2-Methylnaphthalene	1.100	2.500	2.692	10
2-Methylphenol	1.010	2.500	2.530	10
2-Nitroaniline	1.130	2.500	2.804	50
2-Nitrophenol	0.630	2.500	2.493	10
3 & 4 Methylphenol	1.880	2.500	2.655	20
3,3'-Dichlorobenzidine	0.580	2.500	4.823	20
3-Nitroaniline	0.510	2.500	2.477	50
4,6-Dinitro-2-methylphenol	1.880	5.000	3.164	50
4-Bromophenyl phenyl ether	0.680	2.500	2.519	10
4-Chloro-3-methylphenol	0.820	2.500	2.796	10
4-Chloroaniline	0.980	2.500	2.228	10
4-Chlorophenyl phenyl ether	0.790	2.500	2.875	10
4-Nitroaniline	1.010	2.500	2.276	50
4-Nitrophenol	0.990	5.000	3.057	50
Acenaphthene	0.530	2.500	2.607	10
Acenaphthylene	0.900	2.500	2.580	10
Acetophenone	1.020	2.500	2.738	10
Aniline	1.620	2.500	1.999	10
Anthracene	0.670	2.500	2.528	10
Azobenzene	10	2.500	2.890	10
Benzidine	0.610	25.000	2.670	50
Benzo[a]anthracene	0.580	2.500	2.537	10
Benzo[a]pyrene	0.570	2.500	2.311	10
Benzo[b]fluoranthene	1.050	2.500	2.564	10

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Matrix:	Water
Method:	8270C
Prep Method:	3510C
Date Analyzed:	1/10/2014
Job #:	600-85250
TALS Batch:	124708
Units:	ug/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Benzo[g,h,i]perylene	0.830	2.500	2.142	10
Benzo[k]fluoranthene	0.930	2.500	2.470	10
Benzoic acid	2.510	5.000	2.420	50
Benzyl alcohol	1.180	2.500	2.395	10
Bis(2-chloroethoxy)methane	1.240	2.500	2.776	10
Bis(2-chloroethyl)ether	1.190	2.500	2.577	10
Bis(2-ethylhexyl) phthalate	0.520	2.500	2.735	10
Butyl benzyl phthalate	0.610	2.500	2.781	10
Caprolactam	2.320	5.000	4.190	10
Carbazole	1.140	2.500	2.630	10
Chrysene	0.600	2.500	2.639	10
Dibenz(a,h)anthracene	0.720	2.500	2.244	10
Dibenzofuran	0.990	2.500	2.671	10
Diethyl phthalate	1.140	2.500	2.795	10
Dimethyl phthalate	0.520	2.500	2.597	10
Di-n-butyl phthalate	1.040	2.500	2.836	10
Di-n-octyl phthalate	0.690	2.500	2.335	10
Fluoranthene	0.520	2.500	2.616	10
Fluorene	1.420	2.500	2.748	10
Hexachlorobenzene	0.900	2.500	2.763	10
Hexachlorobutadiene	1.110	2.500	2.591	10
Hexachlorocyclopentadiene	0.580	2.500	1.623	10
Hexachloroethane	1.160	2.500	2.427	10
Indeno[1,2,3-cd]pyrene	0.670	2.500	1.627	10
Isophorone	0.730	2.500	2.806	10
Naphthalene	0.510	2.500	2.664	10
Nitrobenzene	1.180	2.500	3.061	10
N-Nitrosodimethylamine	1.930	2.500	1.988	10
N-Nitrosodi-n-propylamine	0.660	2.500	2.808	10
N-Nitrosodiphenylamine	1.030	2.500	2.590	10
Pentachlorophenol	0.890	5.000	2.274	50
Phenanthrene	0.790	2.500	2.579	10
Phenol	0.950	2.500	2.010	10
Pyrene	1.120	2.500	2.619	10
Pyridine	1.040	2.500	0.536	10
Total Cresols	1.880	5.000	5.200	50

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Detection Check Standard

Matrix:	Soil
Method:	300.0, 9056
Preparation:	Di Leach
Date Analyzed:	11/21/2013, 11/29/2013, 12/02/2013
Date Prepared:	11/21/2013, 11/29/2013, 12/02/2013
Units:	ppm

Analyte	MDL	DCS Spike	Measured Result	MQL
Fluoride	0.078	0.2	0.1553	3
Chloride	0.067	0.2	0.1526	4
Nitrite	0.024	0.05	0.0685	2
Bromide	0.117	0.2	0.2473	6
Nitrate	0.022	0.05	0.0616	2
Sulfate	0.315	0.6	0.4975	5

Detection Check Standard

Matrix: Soil
Method: TX1005
Preparation: Ray V.
Date Analyzed: 10/3/2013
Date Prepared: 10/4/2013
Data File: FID-07.I\100313A.b\A100313_029.d
Units: ug/Kg

Analyte	MDL	DCS Spike	Measured Result	MQL
C6-C12	3.8	10	20.4079	10
>C12-C28	4.06	10	20.8004	10
Total C6-C35	7.48	20	41.2083	10

Detection Check Standard

Matrix: Water
Method: TX1005
Preparation: Raymond
Date Analyzed: 10/7/2013
Date Prepared: 10/4/2013
Data File: FID-07.i\A100413B.b\B100413_031.d
Units: mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
C6-C12	0.83	1	0.633	10
>C12-C28	0.96	1	0.738	10
Total C6-C35	1.56	2	1.37	10

Job ID: 600-85272-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-85272-1

Comments
The report was revised on 04/14/14 to correct a sample IDs for samples 1 and 5, replacing the final report generated on 01/27/14.

Receipt
The samples were received on 1/9/2014 11:08 AM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 4.3º C.

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85272-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL HOU
TX 1005	Texas - Total Petroleum Hydrocarbon (GC)	TCEQ	TAL HOU
6010B	Metals (ICP)	SW846	TAL HOU
9056	Anions, Ion Chromatography	SW846	TAL HOU
Moisture	Percent Moisture	EPA	TAL HOU

Protocol References:

EPA = US Environmental Protection Agency

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

TCEQ = Texas Commission of Environmental Quality

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85272-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-85272-1	2013-FFTA-03 (0-2')	Solid	01/07/14 13:16	01/10/14 07:50
600-85272-3	2013-FFTA-03 (14-16')	Solid	01/07/14 13:20	01/10/14 07:50
600-85272-5	2013-FFTA-02 (0.25-2')	Solid	01/07/14 15:30	01/10/14 07:50
600-85272-6	2013-FFTA-02 (2-4')	Solid	01/07/14 15:45	01/10/14 07:50
600-85272-7	Field Blank	Water	01/07/14 17:20	01/10/14 07:50
600-85272-8	MW-43 (0-2')	Solid	01/07/14 12:00	01/10/14 07:50
600-85272-10	MW-43 (8-10')	Solid	01/07/14 12:20	01/10/14 07:50
600-85272-11	MW-43 (17-20')	Solid	01/07/14 12:30	01/10/14 07:50
600-85272-12	MW-45 (0-0.5')	Solid	01/07/14 14:06	01/10/14 07:50
600-85272-15	MW-45 (15-17')	Solid	01/07/14 15:10	01/10/14 07:50
600-85272-16	MW-45 (17-18')	Solid	01/07/14 15:20	01/10/14 07:50
600-85272-17	MW-45 (18-20')	Solid	01/07/14 15:30	01/10/14 07:50
600-85272-18	RINSE BLANK- GEOPROBE	Water	01/07/14 09:15	01/10/14 07:50
600-85272-19	RINSE BLANK- CME	Water	01/07/14 09:15	01/10/14 07:50
600-85272-20	TRIP BLANK	Water	01/07/14 00:00	01/09/14 11:08
600-85272-21	TRIP BLANK	Water	01/07/14 00:00	01/09/14 11:08

Client Sample ID: 2013-FFTA-03 (0-2')
Date Collected: 01/07/14 13:16
Date Received: 01/10/14 07:50

Lab Sample ID: 600-85272-1
Matrix: Solid
Percent Solids: 76.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00217	U	0.0131	0.00217	mg/Kg	☼		01/13/14 11:08	1
Benzene	0.000824	U	0.00654	0.000824	mg/Kg	☼		01/13/14 11:08	1
Chlorobromomethane	0.00233	U	0.00654	0.00233	mg/Kg	☼		01/13/14 11:08	1
Bromoform	0.00179	U	0.00654	0.00179	mg/Kg	☼		01/13/14 11:08	1
Bromomethane	0.00108	U	0.0131	0.00108	mg/Kg	☼		01/13/14 11:08	1
2-Butanone (MEK)	0.00248	U	0.0131	0.00248	mg/Kg	☼		01/13/14 11:08	1
Carbon disulfide	0.000719	U	0.0131	0.000719	mg/Kg	☼		01/13/14 11:08	1
Carbon tetrachloride	0.00148	U	0.00654	0.00148	mg/Kg	☼		01/13/14 11:08	1
Dibromochloromethane	0.00123	U	0.00654	0.00123	mg/Kg	☼		01/13/14 11:08	1
Chlorobenzene	0.00125	U	0.00654	0.00125	mg/Kg	☼		01/13/14 11:08	1
Chloroethane	0.00183	U	0.0131	0.00183	mg/Kg	☼		01/13/14 11:08	1
Chloroform	0.000863	U	0.00654	0.000863	mg/Kg	☼		01/13/14 11:08	1
Chloromethane	0.00217	U	0.0131	0.00217	mg/Kg	☼		01/13/14 11:08	1
1,1-Dichloroethane	0.00114	U	0.00654	0.00114	mg/Kg	☼		01/13/14 11:08	1
1,2-Dichloroethane	0.00118	U	0.00654	0.00118	mg/Kg	☼		01/13/14 11:08	1
1,1-Dichloroethene	0.00159	U	0.00654	0.00159	mg/Kg	☼		01/13/14 11:08	1
cis-1,2-Dichloroethene	0.00108	U	0.00654	0.00108	mg/Kg	☼		01/13/14 11:08	1
trans-1,2-Dichloroethene	0.00149	U	0.00654	0.00149	mg/Kg	☼		01/13/14 11:08	1
1,2-Dichloropropane	0.000928	U	0.00654	0.000928	mg/Kg	☼		01/13/14 11:08	1
cis-1,3-Dichloropropene	0.000706	U	0.00654	0.000706	mg/Kg	☼		01/13/14 11:08	1
trans-1,3-Dichloropropene	0.000758	U	0.00654	0.000758	mg/Kg	☼		01/13/14 11:08	1
Ethylbenzene	0.00133	U	0.00654	0.00133	mg/Kg	☼		01/13/14 11:08	1
2-Hexanone	0.00132	U	0.0131	0.00132	mg/Kg	☼		01/13/14 11:08	1
Methylene Chloride	0.00286	U	0.0131	0.00286	mg/Kg	☼		01/13/14 11:08	1
4-Methyl-2-pentanone (MIBK)	0.00192	U	0.0131	0.00192	mg/Kg	☼		01/13/14 11:08	1
Styrene	0.000928	U	0.00654	0.000928	mg/Kg	☼		01/13/14 11:08	1
1,1,2,2-Tetrachloroethane	0.00114	U	0.00654	0.00114	mg/Kg	☼		01/13/14 11:08	1
Tetrachloroethene	0.000928	U	0.00654	0.000928	mg/Kg	☼		01/13/14 11:08	1
Toluene	0.00180	U	0.00654	0.00180	mg/Kg	☼		01/13/14 11:08	1
1,1,1-Trichloroethane	0.000967	U	0.00654	0.000967	mg/Kg	☼		01/13/14 11:08	1
1,1,2-Trichloroethane	0.000954	U	0.00654	0.000954	mg/Kg	☼		01/13/14 11:08	1
Trichloroethene	0.00183	U	0.00654	0.00183	mg/Kg	☼		01/13/14 11:08	1
Vinyl acetate	0.00122	U	0.00654	0.00122	mg/Kg	☼		01/13/14 11:08	1
Vinyl chloride	0.00118	U	0.0131	0.00118	mg/Kg	☼		01/13/14 11:08	1
o-Xylene	0.00148	U	0.00654	0.00148	mg/Kg	☼		01/13/14 11:08	1
m-Xylene & p-Xylene	0.00199	U	0.0131	0.00199	mg/Kg	☼		01/13/14 11:08	1
Xylenes, Total	0.00148	U	0.00654	0.00148	mg/Kg	☼		01/13/14 11:08	1
Bromodichloromethane	0.000863	U	0.00654	0.000863	mg/Kg	☼		01/13/14 11:08	1
1,2-Dichloroethene, Total	0.00248	U	0.0131	0.00248	mg/Kg	☼		01/13/14 11:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*73*		*50 - 130*		*01/13/14 11:08*	*1*
Dibromofluoromethane	*84*		*68 - 140*		*01/13/14 11:08*	*1*
4-Bromofluorobenzene	*97*		*57 - 140*		*01/13/14 11:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*81*		*61 - 130*		*01/13/14 11:08*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00376	U	0.0435	0.00376	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Acenaphthylene	0.00261	U	0.0435	0.00261	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1

Client Sample ID: 2013-FFTA-03 (0-2')
Date Collected: 01/07/14 13:16
Date Received: 01/10/14 07:50

Lab Sample ID: 600-85272-1
Matrix: Solid
Percent Solids: 76.5

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	**0.00480**	**J**	0.0435	0.00334	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Benzidine	0.0235	U	0.217	0.0235	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Benzo[a]anthracene	0.00360	U	0.0435	0.00360	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Benzo[a]pyrene	0.00420	U	0.0435	0.00420	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Benzo[b]fluoranthene	0.00449	U	0.0435	0.00449	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Benzo[g,h,i]perylene	0.0132	U	0.0435	0.0132	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Benzo[k]fluoranthene	0.00389	U	0.0435	0.00389	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Benzyl alcohol	0.0152	U	0.0435	0.0152	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Bis(2-chloroethoxy)methane	0.00370	U	0.0435	0.00370	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Bis(2-chloroethyl)ether	0.00431	U	0.0435	0.00431	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
bis (2-Chloroisopropyl) ether	0.0231	U	0.0435	0.0231	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Bis(2-ethylhexyl) phthalate	**0.0146**	**J**	0.174	0.0140	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
4-Bromophenyl phenyl ether	0.00741	U	0.0435	0.00741	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Butyl benzyl phthalate	**0.0259**	**J b**	0.174	0.0162	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Carbazole	0.00814	U	0.0435	0.00814	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
4-Chloroaniline	0.0152	U	0.0435	0.0152	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
4-Chloro-3-methylphenol	0.0407	U	0.0435	0.0407	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
2-Chloronaphthalene	0.00316	U	0.0435	0.00316	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
2-Chlorophenol	0.00514	U	0.0435	0.00514	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
4-Chlorophenyl phenyl ether	0.00470	U	0.0435	0.00470	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Chrysene	0.00266	U	0.0435	0.00266	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Dibenz(a,h)anthracene	0.00947	U	0.0435	0.00947	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Dibenzofuran	0.00464	U	0.0435	0.00464	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
1,2-Dichlorobenzene	0.00788	U	0.0435	0.00788	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
1,3-Dichlorobenzene	0.00402	U	0.0435	0.00402	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
1,4-Dichlorobenzene	0.00587	U	0.0435	0.00587	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
3,3'-Dichlorobenzidine	0.0265	U	0.0435	0.0265	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
2,4-Dichlorophenol	0.0101	U	0.0435	0.0101	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Diethyl phthalate	**0.193**	**b**	0.174	0.0220	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
2,4-Dimethylphenol	0.0224	U	0.0435	0.0224	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Dimethyl phthalate	**0.143**	**J**	0.174	0.0128	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Di-n-butyl phthalate	**0.0216**	**J b**	0.174	0.00676	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
4,6-Dinitro-2-methylphenol	0.0130	U	0.0435	0.0130	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
2,4-Dinitrophenol	0.0123	U	0.261	0.0123	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
2,4-Dinitrotoluene	0.00942	U	0.0435	0.00942	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
2,6-Dinitrotoluene	0.00770	U	0.0435	0.00770	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Di-n-octyl phthalate	0.00496	U	0.174	0.00496	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Fluoranthene	**0.0110**	**J**	0.0435	0.00811	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Fluorene	0.00616	U	0.0435	0.00616	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Hexachlorobenzene	0.00397	U	0.0435	0.00397	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Hexachlorobutadiene	0.00501	U	0.0435	0.00501	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Hexachlorocyclopentadiene	0.0120	U	0.0435	0.0120	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Hexachloroethane	0.00603	U	0.0435	0.00603	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Indeno[1,2,3-cd]pyrene	0.00913	U	0.0435	0.00913	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Isophorone	0.00261	U	0.0435	0.00261	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
2-Methylnaphthalene	0.00715	U	0.0435	0.00715	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
2-Methylphenol	0.00843	U	0.0435	0.00843	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
3 & 4 Methylphenol	0.00728	U	0.0870	0.00728	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Naphthalene	**0.00410**	**J**	0.0435	0.00352	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1

Client Sample ID: 2013-FFTA-03 (0-2')

Lab Sample ID: 600-85272-1

Date Collected: 01/07/14 13:16
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 76.5

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	0.0128	U	0.0435	0.0128	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
3-Nitroaniline	0.0187	U	0.0435	0.0187	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
4-Nitroaniline	0.0291	U	0.0435	0.0291	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Nitrobenzene	0.00772	U	0.0435	0.00772	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
2-Nitrophenol	0.0101	U	0.0435	0.0101	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
4-Nitrophenol	0.0133	U	0.0435	0.0133	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
N-Nitrosodimethylamine	0.0109	U	0.0435	0.0109	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
N-Nitrosodi-n-propylamine	0.00579	U	0.0435	0.00579	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
N-Nitrosodiphenylamine	0.00493	U	0.0435	0.00493	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Pentachlorophenol	0.0104	U	0.436	0.0104	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Phenanthrene	0.0129	U	0.0435	0.0129	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Phenol	0.0111	U	0.0435	0.0111	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
Pyrene	**0.00630**	**J**	0.0435	0.00477	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
1,2,4-Trichlorobenzene	0.00548	U	0.0435	0.00548	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
2,4,5-Trichlorophenol	0.0261	U	0.0435	0.0261	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1
2,4,6-Trichlorophenol	0.00699	U	0.0435	0.00699	mg/Kg	☼	01/17/14 13:18	01/20/14 20:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*38 - 127*	*01/17/14 13:18*	*01/20/14 20:43*	*1*
2-Fluorophenol	*90*		*25 - 132*	*01/17/14 13:18*	*01/20/14 20:43*	*1*
Nitrobenzene-d5	*88*		*10 - 155*	*01/17/14 13:18*	*01/20/14 20:43*	*1*
Phenol-d5 (Surr)	*86*		*27 - 123*	*01/17/14 13:18*	*01/20/14 20:43*	*1*
Terphenyl-d14	*115*		*53 - 134*	*01/17/14 13:18*	*01/20/14 20:43*	*1*
2,4,6-Tribromophenol	*77*		*10 - 148*	*01/17/14 13:18*	*01/20/14 20:43*	*1*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	4.93	U	13.0	4.93	mg/Kg	☼	01/14/14 11:28	01/14/14 16:41	1
>C12-C28	5.26	U	13.0	5.26	mg/Kg	☼	01/14/14 11:28	01/14/14 16:41	1
>C28-C35	5.26	U	13.0	5.26	mg/Kg	☼	01/14/14 11:28	01/14/14 16:41	1
C6-C35	9.70	U	13.0	9.70	mg/Kg	☼	01/14/14 11:28	01/14/14 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*89*		*70 - 130*	*01/14/14 11:28*	*01/14/14 16:41*	*1*

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**23**		1.0	1.0	%			01/10/14 13:13	1
Percent Solids	**77**		1.0	1.0	%			01/10/14 13:13	1

Client Sample ID: 2013-FFTA-03 (14-16')

Lab Sample ID: 600-85272-3

Date Collected: 01/07/14 13:20
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 77.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.00511**	**J**	0.0129	0.00214	mg/Kg	☼		01/13/14 12:21	1
Benzene	0.000810	U	0.00643	0.000810	mg/Kg	☼		01/13/14 12:21	1
Chlorobromomethane	0.00229	U	0.00643	0.00229	mg/Kg	☼		01/13/14 12:21	1
Bromoform	0.00176	U	0.00643	0.00176	mg/Kg	☼		01/13/14 12:21	1
Bromomethane	0.00107	U	0.0129	0.00107	mg/Kg	☼		01/13/14 12:21	1

Client Sample ID: 2013-FFTA-03 (14-16')
Date Collected: 01/07/14 13:20
Date Received: 01/10/14 07:50

Lab Sample ID: 600-85272-3
Matrix: Solid
Percent Solids: 77.7

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	0.00244	U	0.0129	0.00244	mg/Kg	☼		01/13/14 12:21	1
Carbon disulfide	0.000707	U	0.0129	0.000707	mg/Kg	☼		01/13/14 12:21	1
Carbon tetrachloride	0.00145	U	0.00643	0.00145	mg/Kg	☼		01/13/14 12:21	1
Dibromochloromethane	0.00121	U	0.00643	0.00121	mg/Kg	☼		01/13/14 12:21	1
Chlorobenzene	0.00123	U	0.00643	0.00123	mg/Kg	☼		01/13/14 12:21	1
Chloroethane	0.00180	U	0.0129	0.00180	mg/Kg	☼		01/13/14 12:21	1
Chloroform	0.000849	U	0.00643	0.000849	mg/Kg	☼		01/13/14 12:21	1
Chloromethane	0.00214	U	0.0129	0.00214	mg/Kg	☼		01/13/14 12:21	1
1,1-Dichloroethane	0.00112	U	0.00643	0.00112	mg/Kg	☼		01/13/14 12:21	1
1,2-Dichloroethane	0.00116	U	0.00643	0.00116	mg/Kg	☼		01/13/14 12:21	1
1,1-Dichloroethene	0.00157	U	0.00643	0.00157	mg/Kg	☼		01/13/14 12:21	1
cis-1,2-Dichloroethene	0.00107	U	0.00643	0.00107	mg/Kg	☼		01/13/14 12:21	1
trans-1,2-Dichloroethene	0.00147	U	0.00643	0.00147	mg/Kg	☼		01/13/14 12:21	1
1,2-Dichloropropane	0.000913	U	0.00643	0.000913	mg/Kg	☼		01/13/14 12:21	1
cis-1,3-Dichloropropene	0.000695	U	0.00643	0.000695	mg/Kg	☼		01/13/14 12:21	1
trans-1,3-Dichloropropene	0.000746	U	0.00643	0.000746	mg/Kg	☼		01/13/14 12:21	1
Ethylbenzene	0.00131	U	0.00643	0.00131	mg/Kg	☼		01/13/14 12:21	1
2-Hexanone	0.00130	U	0.0129	0.00130	mg/Kg	☼		01/13/14 12:21	1
Methylene Chloride	0.00282	U	0.0129	0.00282	mg/Kg	☼		01/13/14 12:21	1
4-Methyl-2-pentanone (MIBK)	0.00189	U	0.0129	0.00189	mg/Kg	☼		01/13/14 12:21	1
Styrene	0.000913	U	0.00643	0.000913	mg/Kg	☼		01/13/14 12:21	1
1,1,2,2-Tetrachloroethane	0.00112	U	0.00643	0.00112	mg/Kg	☼		01/13/14 12:21	1
Tetrachloroethene	0.000913	U	0.00643	0.000913	mg/Kg	☼		01/13/14 12:21	1
Toluene	0.00178	U	0.00643	0.00178	mg/Kg	☼		01/13/14 12:21	1
1,1,1-Trichloroethane	0.000952	U	0.00643	0.000952	mg/Kg	☼		01/13/14 12:21	1
1,1,2-Trichloroethane	0.000939	U	0.00643	0.000939	mg/Kg	☼		01/13/14 12:21	1
Trichloroethene	0.00180	U	0.00643	0.00180	mg/Kg	☼		01/13/14 12:21	1
Vinyl acetate	0.00120	U	0.00643	0.00120	mg/Kg	☼		01/13/14 12:21	1
Vinyl chloride	0.00116	U	0.0129	0.00116	mg/Kg	☼		01/13/14 12:21	1
o-Xylene	0.00145	U	0.00643	0.00145	mg/Kg	☼		01/13/14 12:21	1
m-Xylene & p-Xylene	0.00196	U	0.0129	0.00196	mg/Kg	☼		01/13/14 12:21	1
Xylenes, Total	0.00145	U	0.00643	0.00145	mg/Kg	☼		01/13/14 12:21	1
Bromodichloromethane	0.000849	U	0.00643	0.000849	mg/Kg	☼		01/13/14 12:21	1
1,2-Dichloroethene, Total	0.00244	U	0.0129	0.00244	mg/Kg	☼		01/13/14 12:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*74*		*50 - 130*		*01/13/14 12:21*	*1*
Dibromofluoromethane	*88*		*68 - 140*		*01/13/14 12:21*	*1*
4-Bromofluorobenzene	*100*		*57 - 140*		*01/13/14 12:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*61 - 130*		*01/13/14 12:21*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00368	U	0.0427	0.00368	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Acenaphthylene	0.00256	U	0.0427	0.00256	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Anthracene	0.00328	U	0.0427	0.00328	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Benzidine	0.0231	U	0.213	0.0231	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Benzo[a]anthracene	0.00353	U	0.0427	0.00353	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Benzo[a]pyrene	0.00412	U	0.0427	0.00412	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Benzo[b]fluoranthene	0.00440	U	0.0427	0.00440	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85272-1

Client Sample ID: 2013-FFTA-03 (14-16')
Date Collected: 01/07/14 13:20
Date Received: 01/10/14 07:50

Lab Sample ID: 600-85272-3
Matrix: Solid
Percent Solids: 77.7

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	0.0130	U	0.0427	0.0130	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Benzo[k]fluoranthene	0.00381	U	0.0427	0.00381	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Benzyl alcohol	0.0149	U	0.0427	0.0149	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Bis(2-chloroethoxy)methane	0.00363	U	0.0427	0.00363	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Bis(2-chloroethyl)ether	0.00422	U	0.0427	0.00422	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
bis (2-Chloroisopropyl) ether	0.0226	U	0.0427	0.0226	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Bis(2-ethylhexyl) phthalate	**0.0624**	**J**	0.171	0.0137	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
4-Bromophenyl phenyl ether	0.00727	U	0.0427	0.00727	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Butyl benzyl phthalate	**0.0402**	**J b**	0.171	0.0158	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Carbazole	0.00798	U	0.0427	0.00798	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
4-Chloroaniline	0.0149	U	0.0427	0.0149	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
4-Chloro-3-methylphenol	0.0399	U	0.0427	0.0399	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
2-Chloronaphthalene	0.00310	U	0.0427	0.00310	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
2-Chlorophenol	0.00504	U	0.0427	0.00504	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
4-Chlorophenyl phenyl ether	0.00461	U	0.0427	0.00461	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Chrysene	0.00261	U	0.0427	0.00261	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Dibenz(a,h)anthracene	0.00929	U	0.0427	0.00929	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Dibenzofuran	0.00455	U	0.0427	0.00455	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
1,2-Dichlorobenzene	0.00773	U	0.0427	0.00773	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
1,3-Dichlorobenzene	0.00394	U	0.0427	0.00394	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
1,4-Dichlorobenzene	0.00576	U	0.0427	0.00576	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
3,3'-Dichlorobenzidine	0.0260	U	0.0427	0.0260	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
2,4-Dichlorophenol	0.00990	U	0.0427	0.00990	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Diethyl phthalate	**0.192**	**b**	0.171	0.0216	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
2,4-Dimethylphenol	0.0220	U	0.0427	0.0220	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Dimethyl phthalate	**0.167**	**J**	0.171	0.0125	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Di-n-butyl phthalate	**0.0318**	**J b**	0.171	0.00663	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
4,6-Dinitro-2-methylphenol	0.0127	U	0.0427	0.0127	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
2,4-Dinitrophenol	0.0121	U	0.256	0.0121	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
2,4-Dinitrotoluene	0.00924	U	0.0427	0.00924	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
2,6-Dinitrotoluene	0.00755	U	0.0427	0.00755	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Di-n-octyl phthalate	0.00486	U	0.171	0.00486	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Fluoranthene	0.00796	U	0.0427	0.00796	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Fluorene	**0.0131**	**J**	0.0427	0.00604	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Hexachlorobenzene	0.00389	U	0.0427	0.00389	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Hexachlorobutadiene	0.00491	U	0.0427	0.00491	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Hexachlorocyclopentadiene	0.0118	U	0.0427	0.0118	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Hexachloroethane	0.00591	U	0.0427	0.00591	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Indeno[1,2,3-cd]pyrene	0.00896	U	0.0427	0.00896	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Isophorone	0.00256	U	0.0427	0.00256	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
2-Methylnaphthalene	0.00701	U	0.0427	0.00701	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
2-Methylphenol	0.00827	U	0.0427	0.00827	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
3 & 4 Methylphenol	0.00714	U	0.0853	0.00714	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Naphthalene	**0.00591**	**J**	0.0427	0.00345	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
2-Nitroaniline	0.0125	U	0.0427	0.0125	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
3-Nitroaniline	0.0183	U	0.0427	0.0183	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
4-Nitroaniline	0.0285	U	0.0427	0.0285	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Nitrobenzene	0.00757	U	0.0427	0.00757	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
2-Nitrophenol	0.00995	U	0.0427	0.00995	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1

Client Sample ID: 2013-FFTA-03 (14-16')

Date Collected: 01/07/14 13:20
Date Received: 01/10/14 07:50

Lab Sample ID: 600-85272-3

Matrix: Solid
Percent Solids: 77.7

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	0.0130	U	0.0427	0.0130	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
N-Nitrosodimethylamine	0.0107	U	0.0427	0.0107	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
N-Nitrosodi-n-propylamine	0.00568	U	0.0427	0.00568	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
N-Nitrosodiphenylamine	0.00484	U	0.0427	0.00484	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Pentachlorophenol	0.0102	U	0.427	0.0102	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Phenanthrene	0.0127	U	0.0427	0.0127	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Phenol	0.0109	U	0.0427	0.0109	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
Pyrene	**0.0287**	**J**	0.0427	0.00468	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
1,2,4-Trichlorobenzene	0.00537	U	0.0427	0.00537	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
2,4,5-Trichlorophenol	0.0256	U	0.0427	0.0256	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1
2,4,6-Trichlorophenol	0.00686	U	0.0427	0.00686	mg/Kg	☼	01/17/14 13:18	01/20/14 22:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*109*		*38 - 127*	*01/17/14 13:18*	*01/20/14 22:03*	*1*
2-Fluorophenol	*104*		*25 - 132*	*01/17/14 13:18*	*01/20/14 22:03*	*1*
Nitrobenzene-d5	*100*		*10 - 155*	*01/17/14 13:18*	*01/20/14 22:03*	*1*
Phenol-d5 (Surr)	*93*		*27 - 123*	*01/17/14 13:18*	*01/20/14 22:03*	*1*
Terphenyl-d14	*130*		*53 - 134*	*01/17/14 13:18*	*01/20/14 22:03*	*1*
2,4,6-Tribromophenol	*94*		*10 - 148*	*01/17/14 13:18*	*01/20/14 22:03*	*1*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	4.85	U	12.8	4.85	mg/Kg	☼	01/14/14 11:28	01/14/14 17:17	1
>C12-C28	5.19	U	12.8	5.19	mg/Kg	☼	01/14/14 11:28	01/14/14 17:17	1
>C28-C35	5.19	U	12.8	5.19	mg/Kg	☼	01/14/14 11:28	01/14/14 17:17	1
C6-C35	9.55	U	12.8	9.55	mg/Kg	☼	01/14/14 11:28	01/14/14 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*90*		*70 - 130*	*01/14/14 11:28*	*01/14/14 17:17*	*1*

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**22**		1.0	1.0	%			01/10/14 13:13	1
Percent Solids	**78**		1.0	1.0	%			01/10/14 13:13	1

Client Sample ID: 2013-FFTA-02 (0.25-2')

Date Collected: 01/07/14 15:30
Date Received: 01/10/14 07:50

Lab Sample ID: 600-85272-5

Matrix: Solid
Percent Solids: 86.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.00552**	**J**	0.0116	0.00193	mg/Kg	☼		01/13/14 12:45	1
Benzene	0.000732	U	0.00581	0.000732	mg/Kg	☼		01/13/14 12:45	1
Chlorobromomethane	0.00207	U	0.00581	0.00207	mg/Kg	☼		01/13/14 12:45	1
Bromoform	0.00159	U	0.00581	0.00159	mg/Kg	☼		01/13/14 12:45	1
Bromomethane	0.000964	U	0.0116	0.000964	mg/Kg	☼		01/13/14 12:45	1
2-Butanone (MEK)	0.00221	U	0.0116	0.00221	mg/Kg	☼		01/13/14 12:45	1
Carbon disulfide	0.000639	U	0.0116	0.000639	mg/Kg	☼		01/13/14 12:45	1
Carbon tetrachloride	0.00131	U	0.00581	0.00131	mg/Kg	☼		01/13/14 12:45	1
Dibromochloromethane	0.00109	U	0.00581	0.00109	mg/Kg	☼		01/13/14 12:45	1
Chlorobenzene	0.00112	U	0.00581	0.00112	mg/Kg	☼		01/13/14 12:45	1

Client Sample ID: 2013-FFTA-02 (0.25-2')
Date Collected: 01/07/14 15:30
Date Received: 01/10/14 07:50

Lab Sample ID: 600-85272-5
Matrix: Solid
Percent Solids: 86.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	0.00163	U	0.0116	0.00163	mg/Kg	☼		01/13/14 12:45	1
Chloroform	0.000767	U	0.00581	0.000767	mg/Kg	☼		01/13/14 12:45	1
Chloromethane	0.00193	U	0.0116	0.00193	mg/Kg	☼		01/13/14 12:45	1
1,1-Dichloroethane	0.00101	U	0.00581	0.00101	mg/Kg	☼		01/13/14 12:45	1
1,2-Dichloroethane	0.00105	U	0.00581	0.00105	mg/Kg	☼		01/13/14 12:45	1
1,1-Dichloroethene	0.00142	U	0.00581	0.00142	mg/Kg	☼		01/13/14 12:45	1
cis-1,2-Dichloroethene	0.000964	U	0.00581	0.000964	mg/Kg	☼		01/13/14 12:45	1
trans-1,2-Dichloroethene	0.00132	U	0.00581	0.00132	mg/Kg	☼		01/13/14 12:45	1
1,2-Dichloropropane	0.000825	U	0.00581	0.000825	mg/Kg	☼		01/13/14 12:45	1
cis-1,3-Dichloropropene	0.000627	U	0.00581	0.000627	mg/Kg	☼		01/13/14 12:45	1
trans-1,3-Dichloropropene	0.000674	U	0.00581	0.000674	mg/Kg	☼		01/13/14 12:45	1
Ethylbenzene	0.00118	U	0.00581	0.00118	mg/Kg	☼		01/13/14 12:45	1
2-Hexanone	0.00117	U	0.0116	0.00117	mg/Kg	☼		01/13/14 12:45	1
Methylene Chloride	0.00254	U	0.0116	0.00254	mg/Kg	☼		01/13/14 12:45	1
4-Methyl-2-pentanone (MIBK)	0.00171	U	0.0116	0.00171	mg/Kg	☼		01/13/14 12:45	1
Styrene	0.000825	U	0.00581	0.000825	mg/Kg	☼		01/13/14 12:45	1
1,1,2,2-Tetrachloroethane	0.00101	U	0.00581	0.00101	mg/Kg	☼		01/13/14 12:45	1
Tetrachloroethene	0.000825	U	0.00581	0.000825	mg/Kg	☼		01/13/14 12:45	1
Toluene	0.00160	U	0.00581	0.00160	mg/Kg	☼		01/13/14 12:45	1
1,1,1-Trichloroethane	0.000860	U	0.00581	0.000860	mg/Kg	☼		01/13/14 12:45	1
1,1,2-Trichloroethane	0.000848	U	0.00581	0.000848	mg/Kg	☼		01/13/14 12:45	1
Trichloroethene	0.00163	U	0.00581	0.00163	mg/Kg	☼		01/13/14 12:45	1
Vinyl acetate	0.00108	U	0.00581	0.00108	mg/Kg	☼		01/13/14 12:45	1
Vinyl chloride	0.00105	U	0.0116	0.00105	mg/Kg	☼		01/13/14 12:45	1
o-Xylene	0.00131	U	0.00581	0.00131	mg/Kg	☼		01/13/14 12:45	1
m-Xylene & p-Xylene	0.00177	U	0.0116	0.00177	mg/Kg	☼		01/13/14 12:45	1
Xylenes, Total	0.00131	U	0.00581	0.00131	mg/Kg	☼		01/13/14 12:45	1
Bromodichloromethane	0.000767	U	0.00581	0.000767	mg/Kg	☼		01/13/14 12:45	1
1,2-Dichloroethene, Total	0.00221	U	0.0116	0.00221	mg/Kg	☼		01/13/14 12:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*77*		*50 - 130*		*01/13/14 12:45*	*1*
Dibromofluoromethane	*91*		*68 - 140*		*01/13/14 12:45*	*1*
4-Bromofluorobenzene	*101*		*57 - 140*		*01/13/14 12:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*		*01/13/14 12:45*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00334	U	0.0387	0.00334	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Acenaphthylene	0.00232	U	0.0387	0.00232	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Anthracene	0.00297	U	0.0387	0.00297	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Benzidine	0.0209	U	0.193	0.0209	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Benzo[a]anthracene	0.00320	U	0.0387	0.00320	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Benzo[a]pyrene	0.00373	U	0.0387	0.00373	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Benzo[b]fluoranthene	0.00399	U	0.0387	0.00399	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Benzo[g,h,i]perylene	0.0118	U	0.0387	0.0118	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Benzo[k]fluoranthene	0.00345	U	0.0387	0.00345	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Benzyl alcohol	0.0135	U	0.0387	0.0135	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Bis(2-chloroethoxy)methane	0.00329	U	0.0387	0.00329	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Bis(2-chloroethyl)ether	0.00383	U	0.0387	0.00383	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85272-1

Client Sample ID: 2013-FFTA-02 (0.25-2')
Date Collected: 01/07/14 15:30
Date Received: 01/10/14 07:50

Lab Sample ID: 600-85272-5
Matrix: Solid
Percent Solids: 86.1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
bis (2-Chloroisopropyl) ether	0.0205	U	0.0387	0.0205	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Bis(2-ethylhexyl) phthalate	**0.0778**	**J**	0.155	0.0125	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
4-Bromophenyl phenyl ether	0.00658	U	0.0387	0.00658	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Butyl benzyl phthalate	**0.0306**	**J b**	0.155	0.0144	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Carbazole	0.00723	U	0.0387	0.00723	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
4-Chloroaniline	0.0135	U	0.0387	0.0135	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
4-Chloro-3-methylphenol	0.0361	U	0.0387	0.0361	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
2-Chloronaphthalene	0.00281	U	0.0387	0.00281	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
2-Chlorophenol	0.00457	U	0.0387	0.00457	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
4-Chlorophenyl phenyl ether	0.00417	U	0.0387	0.00417	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Chrysene	0.00236	U	0.0387	0.00236	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Dibenz(a,h)anthracene	0.00842	U	0.0387	0.00842	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Dibenzofuran	0.00413	U	0.0387	0.00413	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
1,2-Dichlorobenzene	0.00700	U	0.0387	0.00700	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
1,3-Dichlorobenzene	0.00357	U	0.0387	0.00357	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
1,4-Dichlorobenzene	0.00522	U	0.0387	0.00522	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
3,3'-Dichlorobenzidine	0.0236	U	0.0387	0.0236	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
2,4-Dichlorophenol	0.00897	U	0.0387	0.00897	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Diethyl phthalate	**0.234**	**b**	0.155	0.0195	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
2,4-Dimethylphenol	0.0199	U	0.0387	0.0199	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Dimethyl phthalate	0.0113	U	0.155	0.0113	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Di-n-butyl phthalate	**0.126**	**J b**	0.155	0.00601	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
4,6-Dinitro-2-methylphenol	0.0115	U	0.0387	0.0115	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
2,4-Dinitrophenol	0.0109	U	0.232	0.0109	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
2,4-Dinitrotoluene	0.00837	U	0.0387	0.00837	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
2,6-Dinitrotoluene	0.00684	U	0.0387	0.00684	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Di-n-octyl phthalate	0.00441	U	0.155	0.00441	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Fluoranthene	0.00721	U	0.0387	0.00721	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Fluorene	0.00547	U	0.0387	0.00547	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Hexachlorobenzene	0.00352	U	0.0387	0.00352	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Hexachlorobutadiene	0.00445	U	0.0387	0.00445	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Hexachlorocyclopentadiene	0.0107	U	0.0387	0.0107	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Hexachloroethane	0.00536	U	0.0387	0.00536	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Indeno[1,2,3-cd]pyrene	0.00812	U	0.0387	0.00812	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Isophorone	0.00232	U	0.0387	0.00232	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
2-Methylnaphthalene	0.00635	U	0.0387	0.00635	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
2-Methylphenol	0.00749	U	0.0387	0.00749	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
3 & 4 Methylphenol	0.00647	U	0.0773	0.00647	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Naphthalene	0.00313	U	0.0387	0.00313	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
2-Nitroaniline	0.0113	U	0.0387	0.0113	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
3-Nitroaniline	0.0166	U	0.0387	0.0166	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
4-Nitroaniline	0.0259	U	0.0387	0.0259	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Nitrobenzene	0.00686	U	0.0387	0.00686	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
2-Nitrophenol	0.00902	U	0.0387	0.00902	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
4-Nitrophenol	0.0118	U	0.0387	0.0118	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
N-Nitrosodimethylamine	0.00972	U	0.0387	0.00972	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
N-Nitrosodi-n-propylamine	0.00515	U	0.0387	0.00515	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
N-Nitrosodiphenylamine	0.00438	U	0.0387	0.00438	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Pentachlorophenol	0.00927	U	0.387	0.00927	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1

Client Sample ID: 2013-FFTA-02 (0.25-2')

Lab Sample ID: 600-85272-5

Date Collected: 01/07/14 15:30
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 86.1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	0.0115	U	0.0387	0.0115	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Phenol	0.00983	U	0.0387	0.00983	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
Pyrene	0.00424	U	0.0387	0.00424	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
1,2,4-Trichlorobenzene	0.00487	U	0.0387	0.00487	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
2,4,5-Trichlorophenol	0.0232	U	0.0387	0.0232	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1
2,4,6-Trichlorophenol	0.00621	U	0.0387	0.00621	mg/Kg	☼	01/17/14 13:18	01/21/14 00:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*106*		*38 - 127*	*01/17/14 13:18*	*01/21/14 00:18*	*1*
2-Fluorophenol	*119*		*25 - 132*	*01/17/14 13:18*	*01/21/14 00:18*	*1*
Nitrobenzene-d5	*111*		*10 - 155*	*01/17/14 13:18*	*01/21/14 00:18*	*1*
Phenol-d5 (Surr)	*108*		*27 - 123*	*01/17/14 13:18*	*01/21/14 00:18*	*1*
Terphenyl-d14	*112*		*53 - 134*	*01/17/14 13:18*	*01/21/14 00:18*	*1*
2,4,6-Tribromophenol	*84*		*10 - 148*	*01/17/14 13:18*	*01/21/14 00:18*	*1*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	4.41	U	11.6	4.41	mg/Kg	☼	01/14/14 11:28	01/15/14 09:02	1
>C12-C28	**21.9**		11.6	4.72	mg/Kg	☼	01/14/14 11:28	01/15/14 09:02	1
>C28-C35	**132**		11.6	4.72	mg/Kg	☼	01/14/14 11:28	01/15/14 09:02	1
C6-C35	**154**		11.6	8.69	mg/Kg	☼	01/14/14 11:28	01/15/14 09:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*90*		*70 - 130*	*01/14/14 11:28*	*01/15/14 09:02*	*1*

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**14**		1.0	1.0	%			01/10/14 13:13	1
Percent Solids	**86**		1.0	1.0	%			01/10/14 13:13	1

Client Sample ID: 2013-FFTA-02 (2-4')

Lab Sample ID: 600-85272-6

Date Collected: 01/07/14 15:45
Matrix: Solid
Date Received: 01/10/14 07:50

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**24**		1.0	1.0	%			01/10/14 13:13	1
Percent Solids	**76**		1.0	1.0	%			01/10/14 13:13	1

Client Sample ID: Field Blank

Lab Sample ID: 600-85272-7

Date Collected: 01/07/14 17:20
Matrix: Water
Date Received: 01/10/14 07:50

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.0121**		0.0100	0.00227	mg/L			01/11/14 14:59	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 14:59	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			01/11/14 14:59	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			01/11/14 14:59	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			01/11/14 14:59	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			01/11/14 14:59	1

Client Sample ID: Field Blank — **Lab Sample ID: 600-85272-7**
Date Collected: 01/07/14 17:20 — **Matrix: Water**
Date Received: 01/10/14 07:50

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.00170	U	0.00500	0.00170	mg/L			01/11/14 14:59	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			01/11/14 14:59	1
Dibromochloromethane	0.000920	U	0.00500	0.000920	mg/L			01/11/14 14:59	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			01/11/14 14:59	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			01/11/14 14:59	1
Chloroform	0.000820	U	0.00500	0.000820	mg/L			01/11/14 14:59	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			01/11/14 14:59	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			01/11/14 14:59	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			01/11/14 14:59	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			01/11/14 14:59	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 14:59	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			01/11/14 14:59	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			01/11/14 14:59	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			01/11/14 14:59	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			01/11/14 14:59	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			01/11/14 14:59	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			01/11/14 14:59	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			01/11/14 14:59	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			01/11/14 14:59	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 14:59	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			01/11/14 14:59	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			01/11/14 14:59	1
Toluene	**0.00262**	**J**	0.00500	0.000550	mg/L			01/11/14 14:59	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			01/11/14 14:59	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			01/11/14 14:59	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			01/11/14 14:59	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			01/11/14 14:59	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			01/11/14 14:59	1
o-Xylene	0.000930	U	0.00500	0.000930	mg/L			01/11/14 14:59	1
m-Xylene & p-Xylene	0.00126	U	0.0100	0.00126	mg/L			01/11/14 14:59	1
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			01/11/14 14:59	1
Bromodichloromethane	0.000760	U	0.00500	0.000760	mg/L			01/11/14 14:59	1
1,2-Dichloroethene, Total	0.000840	U	0.0100	0.000840	mg/L			01/11/14 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*70 - 130*		*01/11/14 14:59*	*1*
Dibromofluoromethane	*86*		*62 - 130*		*01/11/14 14:59*	*1*
4-Bromofluorobenzene	*101*		*67 - 139*		*01/11/14 14:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*82*		*50 - 134*		*01/11/14 14:59*	*1*

Client Sample ID: MW-43 (0-2') — **Lab Sample ID: 600-85272-8**
Date Collected: 01/07/14 12:00 — **Matrix: Solid**
Date Received: 01/10/14 07:50 — **Percent Solids: 85.0**

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00195	U	0.0118	0.00195	mg/Kg	☼		01/13/14 13:10	1
Benzene	0.000741	U	0.00588	0.000741	mg/Kg	☼		01/13/14 13:10	1
Chlorobromomethane	0.00209	U	0.00588	0.00209	mg/Kg	☼		01/13/14 13:10	1
Bromoform	0.00161	U	0.00588	0.00161	mg/Kg	☼		01/13/14 13:10	1

Client Sample ID: MW-43 (0-2')
Date Collected: 01/07/14 12:00
Date Received: 01/10/14 07:50

Lab Sample ID: 600-85272-8
Matrix: Solid
Percent Solids: 85.0

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	0.000977	U	0.0118	0.000977	mg/Kg	☼		01/13/14 13:10	1
2-Butanone (MEK)	0.00224	U	0.0118	0.00224	mg/Kg	☼		01/13/14 13:10	1
Carbon disulfide	0.000647	U	0.0118	0.000647	mg/Kg	☼		01/13/14 13:10	1
Carbon tetrachloride	0.00133	U	0.00588	0.00133	mg/Kg	☼		01/13/14 13:10	1
Dibromochloromethane	0.00111	U	0.00588	0.00111	mg/Kg	☼		01/13/14 13:10	1
Chlorobenzene	0.00113	U	0.00588	0.00113	mg/Kg	☼		01/13/14 13:10	1
Chloroethane	0.00165	U	0.0118	0.00165	mg/Kg	☼		01/13/14 13:10	1
Chloroform	0.000777	U	0.00588	0.000777	mg/Kg	☼		01/13/14 13:10	1
Chloromethane	0.00195	U	0.0118	0.00195	mg/Kg	☼		01/13/14 13:10	1
1,1-Dichloroethane	0.00102	U	0.00588	0.00102	mg/Kg	☼		01/13/14 13:10	1
1,2-Dichloroethane	0.00106	U	0.00588	0.00106	mg/Kg	☼		01/13/14 13:10	1
1,1-Dichloroethene	0.00144	U	0.00588	0.00144	mg/Kg	☼		01/13/14 13:10	1
cis-1,2-Dichloroethene	0.000977	U	0.00588	0.000977	mg/Kg	☼		01/13/14 13:10	1
trans-1,2-Dichloroethene	0.00134	U	0.00588	0.00134	mg/Kg	☼		01/13/14 13:10	1
1,2-Dichloropropane	0.000836	U	0.00588	0.000836	mg/Kg	☼		01/13/14 13:10	1
cis-1,3-Dichloropropene	0.000635	U	0.00588	0.000635	mg/Kg	☼		01/13/14 13:10	1
trans-1,3-Dichloropropene	0.000683	U	0.00588	0.000683	mg/Kg	☼		01/13/14 13:10	1
Ethylbenzene	0.00120	U	0.00588	0.00120	mg/Kg	☼		01/13/14 13:10	1
2-Hexanone	0.00119	U	0.0118	0.00119	mg/Kg	☼		01/13/14 13:10	1
Methylene Chloride	0.00258	U	0.0118	0.00258	mg/Kg	☼		01/13/14 13:10	1
4-Methyl-2-pentanone (MIBK)	0.00173	U	0.0118	0.00173	mg/Kg	☼		01/13/14 13:10	1
Styrene	0.000836	U	0.00588	0.000836	mg/Kg	☼		01/13/14 13:10	1
1,1,2,2-Tetrachloroethane	0.00102	U	0.00588	0.00102	mg/Kg	☼		01/13/14 13:10	1
Tetrachloroethene	0.000836	U	0.00588	0.000836	mg/Kg	☼		01/13/14 13:10	1
Toluene	0.00162	U	0.00588	0.00162	mg/Kg	☼		01/13/14 13:10	1
1,1,1-Trichloroethane	0.000871	U	0.00588	0.000871	mg/Kg	☼		01/13/14 13:10	1
1,1,2-Trichloroethane	0.000859	U	0.00588	0.000859	mg/Kg	☼		01/13/14 13:10	1
Trichloroethene	0.00165	U	0.00588	0.00165	mg/Kg	☼		01/13/14 13:10	1
Vinyl acetate	0.00109	U	0.00588	0.00109	mg/Kg	☼		01/13/14 13:10	1
Vinyl chloride	0.00106	U	0.0118	0.00106	mg/Kg	☼		01/13/14 13:10	1
o-Xylene	0.00133	U	0.00588	0.00133	mg/Kg	☼		01/13/14 13:10	1
m-Xylene & p-Xylene	0.00179	U	0.0118	0.00179	mg/Kg	☼		01/13/14 13:10	1
Xylenes, Total	0.00133	U	0.00588	0.00133	mg/Kg	☼		01/13/14 13:10	1
Bromodichloromethane	0.000777	U	0.00588	0.000777	mg/Kg	☼		01/13/14 13:10	1
1,2-Dichloroethene, Total	0.00224	U	0.0118	0.00224	mg/Kg	☼		01/13/14 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*78*		*50 - 130*		*01/13/14 13:10*	*1*
Dibromofluoromethane	*92*		*68 - 140*		*01/13/14 13:10*	*1*
4-Bromofluorobenzene	*104*		*57 - 140*		*01/13/14 13:10*	*1*
1,2-Dichloroethane-d4 (Surr)	*91*		*61 - 130*		*01/13/14 13:10*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.337	U	3.91	0.337	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Acenaphthylene	0.234	U	3.91	0.234	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Anthracene	0.300	U *	3.91	0.300	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Benzidine	2.11	U *	19.5	2.11	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Benzo[a]anthracene	0.323	U *	3.91	0.323	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Benzo[a]pyrene	0.377	U	3.91	0.377	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85272-1

Client Sample ID: MW-43 (0-2')
Date Collected: 01/07/14 12:00
Date Received: 01/10/14 07:50

Lab Sample ID: 600-85272-8
Matrix: Solid
Percent Solids: 85.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	0.403	U	3.91	0.403	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Benzo[g,h,i]perylene	1.19	U	3.91	1.19	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Benzo[k]fluoranthene	0.349	U	3.91	0.349	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Benzyl alcohol	1.37	U	3.91	1.37	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Bis(2-chloroethoxy)methane	0.333	U	3.91	0.333	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Bis(2-chloroethyl)ether	0.387	U	3.91	0.387	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
bis (2-Chloroisopropyl) ether	2.07	U	3.91	2.07	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Bis(2-ethylhexyl) phthalate	**39.6**	*	15.6	1.26	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
4-Bromophenyl phenyl ether	0.665	U *	3.91	0.665	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Butyl benzyl phthalate	1.45	U *	15.6	1.45	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Carbazole	0.731	U *	3.91	0.731	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
4-Chloroaniline	1.36	U	3.91	1.36	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
4-Chloro-3-methylphenol	3.65	U	3.91	3.65	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
2-Chloronaphthalene	0.283	U	3.91	0.283	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
2-Chlorophenol	0.462	U	3.91	0.462	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
4-Chlorophenyl phenyl ether	0.422	U	3.91	0.422	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Chrysene	0.239	U *	3.91	0.239	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Dibenz(a,h)anthracene	0.850	U	3.91	0.850	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Dibenzofuran	0.417	U	3.91	0.417	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
1,2-Dichlorobenzene	0.707	U	3.91	0.707	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
1,3-Dichlorobenzene	0.361	U	3.91	0.361	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
1,4-Dichlorobenzene	0.527	U	3.91	0.527	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
3,3'-Dichlorobenzidine	2.38	U *	3.91	2.38	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
2,4-Dichlorophenol	0.907	U	3.91	0.907	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Diethyl phthalate	1.97	U	15.6	1.97	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
2,4-Dimethylphenol	2.01	U	3.91	2.01	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Dimethyl phthalate	1.15	U	15.6	1.15	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Di-n-butyl phthalate	0.607	U *	15.6	0.607	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
4,6-Dinitro-2-methylphenol	1.17	U *	3.91	1.17	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
2,4-Dinitrophenol	1.11	U	23.4	1.11	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
2,4-Dinitrotoluene	0.846	U	3.91	0.846	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
2,6-Dinitrotoluene	0.691	U	3.91	0.691	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Di-n-octyl phthalate	0.445	U	15.6	0.445	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Fluoranthene	0.729	U *	3.91	0.729	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Fluorene	0.553	U	3.91	0.553	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Hexachlorobenzene	0.356	U *	3.91	0.356	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Hexachlorobutadiene	0.450	U	3.91	0.450	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Hexachlorocyclopentadiene	1.08	U	3.91	1.08	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Hexachloroethane	0.541	U	3.91	0.541	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Indeno[1,2,3-cd]pyrene	0.820	U	3.91	0.820	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Isophorone	0.234	U	3.91	0.234	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
2-Methylnaphthalene	0.642	U	3.91	0.642	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
2-Methylphenol	0.757	U	3.91	0.757	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
3 & 4 Methylphenol	0.654	U	7.81	0.654	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Naphthalene	0.316	U	3.91	0.316	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
2-Nitroaniline	1.15	U	3.91	1.15	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
3-Nitroaniline	1.67	U	3.91	1.67	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
4-Nitroaniline	2.61	U	3.91	2.61	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Nitrobenzene	0.693	U	3.91	0.693	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100

Client Sample ID: MW-43 (0-2')

Lab Sample ID: 600-85272-8

Date Collected: 01/07/14 12:00
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 85.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	0.911	U	3.91	0.911	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
4-Nitrophenol	1.19	U	3.91	1.19	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
N-Nitrosodimethylamine	0.982	U	3.91	0.982	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
N-Nitrosodi-n-propylamine	0.520	U	3.91	0.520	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
N-Nitrosodiphenylamine	0.443	U *	3.91	0.443	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Pentachlorophenol	0.937	U *	39.1	0.937	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Phenanthrene	1.16	U *	3.91	1.16	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Phenol	0.993	U	3.91	0.993	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
Pyrene	0.429	U *	3.91	0.429	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
1,2,4-Trichlorobenzene	0.492	U	3.91	0.492	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
2,4,5-Trichlorophenol	2.34	U	3.91	2.34	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100
2,4,6-Trichlorophenol	0.628	U	3.91	0.628	mg/Kg	☼	01/17/14 13:18	01/22/14 21:03	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*38 - 127*	*01/17/14 13:18*	*01/22/14 21:03*	*100*
2-Fluorophenol	*0*	*X*	*25 - 132*	*01/17/14 13:18*	*01/22/14 21:03*	*100*
Nitrobenzene-d5	*0*	*X*	*10 - 155*	*01/17/14 13:18*	*01/22/14 21:03*	*100*
Phenol-d5 (Surr)	*0*	*X*	*27 - 123*	*01/17/14 13:18*	*01/22/14 21:03*	*100*
Terphenyl-d14	*0*	*X * *	*53 - 134*	*01/17/14 13:18*	*01/22/14 21:03*	*100*
2,4,6-Tribromophenol	*0*	*X*	*10 - 148*	*01/17/14 13:18*	*01/22/14 21:03*	*100*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	4.46	U	11.7	4.46	mg/Kg	☼	01/14/14 11:28	01/14/14 18:25	1
>C12-C28	4.76	U	11.7	4.76	mg/Kg	☼	01/14/14 11:28	01/14/14 18:25	1
>C28-C35	4.76	U	11.7	4.76	mg/Kg	☼	01/14/14 11:28	01/14/14 18:25	1
C6-C35	8.78	U	11.7	8.78	mg/Kg	☼	01/14/14 11:28	01/14/14 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*84*		*70 - 130*	*01/14/14 11:28*	*01/14/14 18:25*	*1*

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15**		1.0	1.0	%			01/10/14 13:13	1
Percent Solids	**85**		1.0	1.0	%			01/10/14 13:13	1

Client Sample ID: MW-43 (8-10')

Lab Sample ID: 600-85272-10

Date Collected: 01/07/14 12:20
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 84.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.0714**		0.0119	0.00197	mg/Kg	☼		01/13/14 13:34	1
Benzene	**0.00106**	**J**	0.00594	0.000748	mg/Kg	☼		01/13/14 13:34	1
Chlorobromomethane	0.00211	U	0.00594	0.00211	mg/Kg	☼		01/13/14 13:34	1
Bromoform	0.00163	U	0.00594	0.00163	mg/Kg	☼		01/13/14 13:34	1
Bromomethane	0.000986	U	0.0119	0.000986	mg/Kg	☼		01/13/14 13:34	1
2-Butanone (MEK)	0.00226	U	0.0119	0.00226	mg/Kg	☼		01/13/14 13:34	1
Carbon disulfide	**0.00265**	**J**	0.0119	0.000653	mg/Kg	☼		01/13/14 13:34	1
Carbon tetrachloride	0.00134	U	0.00594	0.00134	mg/Kg	☼		01/13/14 13:34	1
Dibromochloromethane	0.00112	U	0.00594	0.00112	mg/Kg	☼		01/13/14 13:34	1

Client Sample ID: MW-43 (8-10')
Date Collected: 01/07/14 12:20
Date Received: 01/10/14 07:50

Lab Sample ID: 600-85272-10
Matrix: Solid
Percent Solids: 84.2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	0.00114	U	0.00594	0.00114	mg/Kg	☼		01/13/14 13:34	1
Chloroethane	0.00166	U	0.0119	0.00166	mg/Kg	☼		01/13/14 13:34	1
Chloroform	0.000784	U	0.00594	0.000784	mg/Kg	☼		01/13/14 13:34	1
Chloromethane	0.00197	U	0.0119	0.00197	mg/Kg	☼		01/13/14 13:34	1
1,1-Dichloroethane	0.00103	U	0.00594	0.00103	mg/Kg	☼		01/13/14 13:34	1
1,2-Dichloroethane	0.00107	U	0.00594	0.00107	mg/Kg	☼		01/13/14 13:34	1
1,1-Dichloroethene	0.00145	U	0.00594	0.00145	mg/Kg	☼		01/13/14 13:34	1
cis-1,2-Dichloroethene	0.000986	U	0.00594	0.000986	mg/Kg	☼		01/13/14 13:34	1
trans-1,2-Dichloroethene	0.00135	U	0.00594	0.00135	mg/Kg	☼		01/13/14 13:34	1
1,2-Dichloropropane	0.000843	U	0.00594	0.000843	mg/Kg	☼		01/13/14 13:34	1
cis-1,3-Dichloropropene	0.000641	U	0.00594	0.000641	mg/Kg	☼		01/13/14 13:34	1
trans-1,3-Dichloropropene	0.000689	U	0.00594	0.000689	mg/Kg	☼		01/13/14 13:34	1
Ethylbenzene	0.00121	U	0.00594	0.00121	mg/Kg	☼		01/13/14 13:34	1
2-Hexanone	0.00120	U	0.0119	0.00120	mg/Kg	☼		01/13/14 13:34	1
Methylene Chloride	0.00260	U	0.0119	0.00260	mg/Kg	☼		01/13/14 13:34	1
4-Methyl-2-pentanone (MIBK)	0.00175	U	0.0119	0.00175	mg/Kg	☼		01/13/14 13:34	1
Styrene	0.000843	U	0.00594	0.000843	mg/Kg	☼		01/13/14 13:34	1
1,1,2,2-Tetrachloroethane	0.00103	U	0.00594	0.00103	mg/Kg	☼		01/13/14 13:34	1
Tetrachloroethene	0.000843	U	0.00594	0.000843	mg/Kg	☼		01/13/14 13:34	1
Toluene	0.00164	U	0.00594	0.00164	mg/Kg	☼		01/13/14 13:34	1
1,1,1-Trichloroethane	0.000879	U	0.00594	0.000879	mg/Kg	☼		01/13/14 13:34	1
1,1,2-Trichloroethane	0.000867	U	0.00594	0.000867	mg/Kg	☼		01/13/14 13:34	1
Trichloroethene	0.00166	U	0.00594	0.00166	mg/Kg	☼		01/13/14 13:34	1
Vinyl acetate	0.00110	U	0.00594	0.00110	mg/Kg	☼		01/13/14 13:34	1
Vinyl chloride	0.00107	U	0.0119	0.00107	mg/Kg	☼		01/13/14 13:34	1
o-Xylene	0.00134	U	0.00594	0.00134	mg/Kg	☼		01/13/14 13:34	1
m-Xylene & p-Xylene	0.00181	U	0.0119	0.00181	mg/Kg	☼		01/13/14 13:34	1
Xylenes, Total	0.00134	U	0.00594	0.00134	mg/Kg	☼		01/13/14 13:34	1
Bromodichloromethane	0.000784	U	0.00594	0.000784	mg/Kg	☼		01/13/14 13:34	1
1,2-Dichloroethene, Total	0.00226	U	0.0119	0.00226	mg/Kg	☼		01/13/14 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*76*		*50 - 130*		*01/13/14 13:34*	*1*
Dibromofluoromethane	*90*		*68 - 140*		*01/13/14 13:34*	*1*
4-Bromofluorobenzene	*108*		*57 - 140*		*01/13/14 13:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*61 - 130*		*01/13/14 13:34*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00341	U	0.0394	0.00341	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Acenaphthylene	0.00237	U	0.0394	0.00237	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Anthracene	0.00303	U	0.0394	0.00303	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Benzidine	0.0213	U	0.197	0.0213	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Benzo[a]anthracene	0.00327	U	0.0394	0.00327	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Benzo[a]pyrene	0.00381	U	0.0394	0.00381	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Benzo[b]fluoranthene	0.00407	U	0.0394	0.00407	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Benzo[g,h,i]perylene	0.0120	U	0.0394	0.0120	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Benzo[k]fluoranthene	0.00353	U	0.0394	0.00353	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Benzyl alcohol	0.0138	U	0.0394	0.0138	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Bis(2-chloroethoxy)methane	0.00336	U	0.0394	0.00336	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85272-1

Client Sample ID: MW-43 (8-10')
Date Collected: 01/07/14 12:20
Date Received: 01/10/14 07:50

Lab Sample ID: 600-85272-10
Matrix: Solid
Percent Solids: 84.2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	0.00390	U	0.0394	0.00390	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
bis (2-Chloroisopropyl) ether	0.0209	U	0.0394	0.0209	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Bis(2-ethylhexyl) phthalate	**0.0355**	**J**	0.158	0.0127	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
4-Bromophenyl phenyl ether	0.00672	U	0.0394	0.00672	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Butyl benzyl phthalate	**0.0199**	**J b**	0.158	0.0146	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Carbazole	0.00738	U	0.0394	0.00738	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
4-Chloroaniline	0.0138	U	0.0394	0.0138	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
4-Chloro-3-methylphenol	0.0369	U	0.0394	0.0369	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
2-Chloronaphthalene	0.00286	U	0.0394	0.00286	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
2-Chlorophenol	0.00466	U	0.0394	0.00466	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
4-Chlorophenyl phenyl ether	0.00426	U	0.0394	0.00426	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Chrysene	0.00241	U	0.0394	0.00241	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Dibenz(a,h)anthracene	0.00859	U	0.0394	0.00859	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Dibenzofuran	0.00421	U	0.0394	0.00421	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
1,2-Dichlorobenzene	0.00715	U	0.0394	0.00715	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
1,3-Dichlorobenzene	0.00364	U	0.0394	0.00364	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
1,4-Dichlorobenzene	0.00532	U	0.0394	0.00532	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
3,3'-Dichlorobenzidine	0.0240	U	0.0394	0.0240	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
2,4-Dichlorophenol	0.00916	U	0.0394	0.00916	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Diethyl phthalate	**0.106**	**J b**	0.158	0.0199	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
2,4-Dimethylphenol	0.0203	U	0.0394	0.0203	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Dimethyl phthalate	**0.135**	**J**	0.158	0.0116	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Di-n-butyl phthalate	**0.0466**	**J b**	0.158	0.00613	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
4,6-Dinitro-2-methylphenol	0.0118	U	0.0394	0.0118	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
2,4-Dinitrophenol	0.0112	U	0.237	0.0112	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
2,4-Dinitrotoluene	0.00854	U	0.0394	0.00854	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
2,6-Dinitrotoluene	0.00698	U	0.0394	0.00698	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Di-n-octyl phthalate	0.00450	U	0.158	0.00450	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Fluoranthene	0.00736	U	0.0394	0.00736	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Fluorene	0.00558	U	0.0394	0.00558	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Hexachlorobenzene	0.00360	U	0.0394	0.00360	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Hexachlorobutadiene	0.00454	U	0.0394	0.00454	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Hexachlorocyclopentadiene	0.0109	U	0.0394	0.0109	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Hexachloroethane	0.00547	U	0.0394	0.00547	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Indeno[1,2,3-cd]pyrene	0.00828	U	0.0394	0.00828	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Isophorone	0.00237	U	0.0394	0.00237	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
2-Methylnaphthalene	0.00648	U	0.0394	0.00648	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
2-Methylphenol	0.00764	U	0.0394	0.00764	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
3 & 4 Methylphenol	0.00660	U	0.0789	0.00660	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Naphthalene	**0.00393**	**J**	0.0394	0.00319	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
2-Nitroaniline	0.0116	U	0.0394	0.0116	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
3-Nitroaniline	0.0169	U	0.0394	0.0169	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
4-Nitroaniline	0.0264	U	0.0394	0.0264	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Nitrobenzene	0.00700	U	0.0394	0.00700	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
2-Nitrophenol	0.00920	U	0.0394	0.00920	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
4-Nitrophenol	0.0120	U	0.0394	0.0120	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
N-Nitrosodimethylamine	0.00991	U	0.0394	0.00991	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
N-Nitrosodi-n-propylamine	0.00525	U	0.0394	0.00525	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
N-Nitrosodiphenylamine	0.00447	U	0.0394	0.00447	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1

Client Sample ID: MW-43 (8-10')

Lab Sample ID: 600-85272-10

Date Collected: 01/07/14 12:20
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 84.2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	0.00947	U	0.395	0.00947	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Phenanthrene	0.0117	U	0.0394	0.0117	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Phenol	0.0100	U	0.0394	0.0100	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
Pyrene	0.00433	U	0.0394	0.00433	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
1,2,4-Trichlorobenzene	0.00497	U	0.0394	0.00497	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
2,4,5-Trichlorophenol	0.0237	U	0.0394	0.0237	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1
2,4,6-Trichlorophenol	0.00634	U	0.0394	0.00634	mg/Kg	☼	01/17/14 13:18	01/20/14 23:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*113*		*38 - 127*	*01/17/14 13:18*	*01/20/14 23:24*	*1*
2-Fluorophenol	*113*		*25 - 132*	*01/17/14 13:18*	*01/20/14 23:24*	*1*
Nitrobenzene-d5	*108*		*10 - 155*	*01/17/14 13:18*	*01/20/14 23:24*	*1*
Phenol-d5 (Surr)	*103*		*27 - 123*	*01/17/14 13:18*	*01/20/14 23:24*	*1*
Terphenyl-d14	*133*		*53 - 134*	*01/17/14 13:18*	*01/20/14 23:24*	*1*
2,4,6-Tribromophenol	*111*		*10 - 148*	*01/17/14 13:18*	*01/20/14 23:24*	*1*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	4.50	U	11.8	4.50	mg/Kg	☼	01/14/14 11:28	01/14/14 19:00	1
>C12-C28	4.81	U	11.8	4.81	mg/Kg	☼	01/14/14 11:28	01/14/14 19:00	1
>C28-C35	4.81	U	11.8	4.81	mg/Kg	☼	01/14/14 11:28	01/14/14 19:00	1
C6-C35	8.86	U	11.8	8.86	mg/Kg	☼	01/14/14 11:28	01/14/14 19:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*87*		*70 - 130*	*01/14/14 11:28*	*01/14/14 19:00*	*1*

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16**		1.0	1.0	%			01/10/14 13:13	1
Percent Solids	**84**		1.0	1.0	%			01/10/14 13:13	1

Client Sample ID: MW-43 (17-20')

Lab Sample ID: 600-85272-11

Date Collected: 01/07/14 12:30
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 88.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.00799**	**J**	0.0113	0.00188	mg/Kg	☼		01/13/14 10:43	1
Benzene	0.000713	U	0.00566	0.000713	mg/Kg	☼		01/13/14 10:43	1
Chlorobromomethane	0.00201	U	0.00566	0.00201	mg/Kg	☼		01/13/14 10:43	1
Bromoform	0.00155	U	0.00566	0.00155	mg/Kg	☼		01/13/14 10:43	1
Bromomethane	0.000939	U	0.0113	0.000939	mg/Kg	☼		01/13/14 10:43	1
2-Butanone (MEK)	0.00215	U	0.0113	0.00215	mg/Kg	☼		01/13/14 10:43	1
Carbon disulfide	0.000622	U	0.0113	0.000622	mg/Kg	☼		01/13/14 10:43	1
Carbon tetrachloride	0.00128	U	0.00566	0.00128	mg/Kg	☼		01/13/14 10:43	1
Dibromochloromethane	0.00106	U	0.00566	0.00106	mg/Kg	☼		01/13/14 10:43	1
Chlorobenzene	0.00109	U	0.00566	0.00109	mg/Kg	☼		01/13/14 10:43	1
Chloroethane	0.00158	U	0.0113	0.00158	mg/Kg	☼		01/13/14 10:43	1
Chloroform	0.000747	U	0.00566	0.000747	mg/Kg	☼		01/13/14 10:43	1
Chloromethane	0.00188	U	0.0113	0.00188	mg/Kg	☼		01/13/14 10:43	1
1,1-Dichloroethane	0.000985	U	0.00566	0.000985	mg/Kg	☼		01/13/14 10:43	1

Client Sample ID: MW-43 (17-20')
Date Collected: 01/07/14 12:30
Date Received: 01/10/14 07:50

Lab Sample ID: 600-85272-11
Matrix: Solid
Percent Solids: 88.4

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	0.00102	U	0.00566	0.00102	mg/Kg	☼		01/13/14 10:43	1
1,1-Dichloroethene	0.00138	U	0.00566	0.00138	mg/Kg	☼		01/13/14 10:43	1
cis-1,2-Dichloroethene	0.000939	U	0.00566	0.000939	mg/Kg	☼		01/13/14 10:43	1
trans-1,2-Dichloroethene	0.00129	U	0.00566	0.00129	mg/Kg	☼		01/13/14 10:43	1
1,2-Dichloropropane	0.000803	U	0.00566	0.000803	mg/Kg	☼		01/13/14 10:43	1
cis-1,3-Dichloropropene	0.000611	U	0.00566	0.000611	mg/Kg	☼		01/13/14 10:43	1
trans-1,3-Dichloropropene	0.000656	U	0.00566	0.000656	mg/Kg	☼		01/13/14 10:43	1
Ethylbenzene	0.00115	U	0.00566	0.00115	mg/Kg	☼		01/13/14 10:43	1
2-Hexanone	0.00114	U	0.0113	0.00114	mg/Kg	☼		01/13/14 10:43	1
Methylene Chloride	0.00248	U	0.0113	0.00248	mg/Kg	☼		01/13/14 10:43	1
4-Methyl-2-pentanone (MIBK)	0.00166	U	0.0113	0.00166	mg/Kg	☼		01/13/14 10:43	1
Styrene	0.000803	U	0.00566	0.000803	mg/Kg	☼		01/13/14 10:43	1
1,1,2,2-Tetrachloroethane	0.000985	U	0.00566	0.000985	mg/Kg	☼		01/13/14 10:43	1
Tetrachloroethene	0.000803	U	0.00566	0.000803	mg/Kg	☼		01/13/14 10:43	1
Toluene	0.00156	U	0.00566	0.00156	mg/Kg	☼		01/13/14 10:43	1
1,1,1-Trichloroethane	0.000837	U	0.00566	0.000837	mg/Kg	☼		01/13/14 10:43	1
1,1,2-Trichloroethane	0.000826	U	0.00566	0.000826	mg/Kg	☼		01/13/14 10:43	1
Trichloroethene	0.00158	U	0.00566	0.00158	mg/Kg	☼		01/13/14 10:43	1
Vinyl acetate	0.00105	U	0.00566	0.00105	mg/Kg	☼		01/13/14 10:43	1
Vinyl chloride	0.00102	U	0.0113	0.00102	mg/Kg	☼		01/13/14 10:43	1
o-Xylene	0.00128	U	0.00566	0.00128	mg/Kg	☼		01/13/14 10:43	1
m-Xylene & p-Xylene	0.00172	U	0.0113	0.00172	mg/Kg	☼		01/13/14 10:43	1
Xylenes, Total	0.00128	U	0.00566	0.00128	mg/Kg	☼		01/13/14 10:43	1
Bromodichloromethane	0.000747	U	0.00566	0.000747	mg/Kg	☼		01/13/14 10:43	1
1,2-Dichloroethene, Total	0.00215	U	0.0113	0.00215	mg/Kg	☼		01/13/14 10:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*72*		*50 - 130*		*01/13/14 10:43*	*1*
Dibromofluoromethane	*89*		*68 - 140*		*01/13/14 10:43*	*1*
4-Bromofluorobenzene	*92*		*57 - 140*		*01/13/14 10:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*61 - 130*		*01/13/14 10:43*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00325	U	0.0377	0.00325	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Acenaphthylene	0.00226	U	0.0377	0.00226	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Anthracene	0.00289	U	0.0377	0.00289	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Benzidine	0.0204	U	0.188	0.0204	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Benzo[a]anthracene	0.00312	U	0.0377	0.00312	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Benzo[a]pyrene	0.00364	U	0.0377	0.00364	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Benzo[b]fluoranthene	0.00389	U	0.0377	0.00389	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Benzo[g,h,i]perylene	0.0115	U	0.0377	0.0115	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Benzo[k]fluoranthene	0.00337	U	0.0377	0.00337	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Benzyl alcohol	0.0132	U	0.0377	0.0132	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Bis(2-chloroethoxy)methane	0.00321	U	0.0377	0.00321	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Bis(2-chloroethyl)ether	0.00373	U	0.0377	0.00373	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
bis (2-Chloroisopropyl) ether	0.0200	U	0.0377	0.0200	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Bis(2-ethylhexyl) phthalate	**0.0232**	**J**	0.151	0.0121	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
4-Bromophenyl phenyl ether	0.00642	U	0.0377	0.00642	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Butyl benzyl phthalate	**0.0267**	**J b**	0.151	0.0140	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85272-1

Client Sample ID: MW-43 (17-20')
Date Collected: 01/07/14 12:30
Date Received: 01/10/14 07:50

Lab Sample ID: 600-85272-11
Matrix: Solid
Percent Solids: 88.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbazole	0.00705	U	0.0377	0.00705	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
4-Chloroaniline	0.0132	U	0.0377	0.0132	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
4-Chloro-3-methylphenol	0.0352	U	0.0377	0.0352	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
2-Chloronaphthalene	0.00273	U	0.0377	0.00273	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
2-Chlorophenol	0.00445	U	0.0377	0.00445	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
4-Chlorophenyl phenyl ether	0.00407	U	0.0377	0.00407	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Chrysene	0.00231	U	0.0377	0.00231	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Dibenz(a,h)anthracene	0.00820	U	0.0377	0.00820	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Dibenzofuran	0.00402	U	0.0377	0.00402	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
1,2-Dichlorobenzene	0.00683	U	0.0377	0.00683	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
1,3-Dichlorobenzene	0.00348	U	0.0377	0.00348	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
1,4-Dichlorobenzene	0.00509	U	0.0377	0.00509	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
3,3'-Dichlorobenzidine	0.0230	U	0.0377	0.0230	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
2,4-Dichlorophenol	0.00875	U	0.0377	0.00875	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Diethyl phthalate	**0.0847**	**J b**	0.151	0.0191	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
2,4-Dimethylphenol	0.0194	U	0.0377	0.0194	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Dimethyl phthalate	**0.0925**	**J**	0.151	0.0111	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Di-n-butyl phthalate	**0.0627**	**J b**	0.151	0.00585	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
4,6-Dinitro-2-methylphenol	0.0113	U	0.0377	0.0113	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
2,4-Dinitrophenol	0.0107	U	0.226	0.0107	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
2,4-Dinitrotoluene	0.00816	U	0.0377	0.00816	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
2,6-Dinitrotoluene	0.00667	U	0.0377	0.00667	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Di-n-octyl phthalate	0.00429	U	0.151	0.00429	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Fluoranthene	0.00703	U	0.0377	0.00703	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Fluorene	0.00533	U	0.0377	0.00533	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Hexachlorobenzene	0.00344	U	0.0377	0.00344	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Hexachlorobutadiene	0.00434	U	0.0377	0.00434	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Hexachlorocyclopentadiene	0.0104	U	0.0377	0.0104	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Hexachloroethane	0.00522	U	0.0377	0.00522	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Indeno[1,2,3-cd]pyrene	0.00791	U	0.0377	0.00791	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Isophorone	0.00226	U	0.0377	0.00226	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
2-Methylnaphthalene	0.00619	U	0.0377	0.00619	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
2-Methylphenol	0.00730	U	0.0377	0.00730	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
3 & 4 Methylphenol	0.00631	U	0.0753	0.00631	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Naphthalene	0.00305	U	0.0377	0.00305	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
2-Nitroaniline	0.0111	U	0.0377	0.0111	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
3-Nitroaniline	0.0162	U	0.0377	0.0162	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
4-Nitroaniline	0.0252	U	0.0377	0.0252	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Nitrobenzene	0.00669	U	0.0377	0.00669	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
2-Nitrophenol	0.00879	U	0.0377	0.00879	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
4-Nitrophenol	0.0115	U	0.0377	0.0115	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
N-Nitrosodimethylamine	0.00947	U	0.0377	0.00947	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
N-Nitrosodi-n-propylamine	0.00502	U	0.0377	0.00502	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
N-Nitrosodiphenylamine	0.00427	U	0.0377	0.00427	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Pentachlorophenol	0.00904	U	0.377	0.00904	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Phenanthrene	0.0112	U	0.0377	0.0112	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Phenol	0.00958	U	0.0377	0.00958	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
Pyrene	0.00414	U	0.0377	0.00414	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
1,2,4-Trichlorobenzene	0.00475	U	0.0377	0.00475	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1

Client Sample ID: MW-43 (17-20')

Lab Sample ID: 600-85272-11
Date Collected: 01/07/14 12:30
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 88.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	0.0226	U	0.0377	0.0226	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1
2,4,6-Trichlorophenol	0.00606	U	0.0377	0.00606	mg/Kg	☼	01/17/14 13:18	01/20/14 23:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*83*		*38 - 127*	*01/17/14 13:18*	*01/20/14 23:51*	*1*
2-Fluorophenol	*88*		*25 - 132*	*01/17/14 13:18*	*01/20/14 23:51*	*1*
Nitrobenzene-d5	*82*		*10 - 155*	*01/17/14 13:18*	*01/20/14 23:51*	*1*
Phenol-d5 (Surr)	*84*		*27 - 123*	*01/17/14 13:18*	*01/20/14 23:51*	*1*
Terphenyl-d14	*118*		*53 - 134*	*01/17/14 13:18*	*01/20/14 23:51*	*1*
2,4,6-Tribromophenol	*94*		*10 - 148*	*01/17/14 13:18*	*01/20/14 23:51*	*1*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	4.28	U	11.3	4.28	mg/Kg	☼	01/14/14 11:28	01/14/14 19:35	1
>C12-C28	4.58	U	11.3	4.58	mg/Kg	☼	01/14/14 11:28	01/14/14 19:35	1
>C28-C35	4.58	U	11.3	4.58	mg/Kg	☼	01/14/14 11:28	01/14/14 19:35	1
C6-C35	8.43	U	11.3	8.43	mg/Kg	☼	01/14/14 11:28	01/14/14 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*86*		*70 - 130*	*01/14/14 11:28*	*01/14/14 19:35*	*1*

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**12**		1.0	1.0	%			01/10/14 13:13	1
Percent Solids	**88**		1.0	1.0	%			01/10/14 13:13	1

Client Sample ID: MW-45 (0-0.5')

Lab Sample ID: 600-85272-12
Date Collected: 01/07/14 14:06
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 77.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**12.8**		1.21	0.263	mg/Kg	☼	01/10/14 12:37	01/10/14 15:32	1
Cadmium	**0.314**		0.302	0.0310	mg/Kg	☼	01/10/14 12:37	01/10/14 15:32	1
Lead	**44.6**		0.604	0.127	mg/Kg	☼	01/10/14 12:37	01/10/14 15:32	1
Selenium	0.313	U	2.42	0.313	mg/Kg	☼	01/10/14 12:37	01/10/14 15:32	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**23**		1.0	1.0	%			01/10/14 13:13	1
Percent Solids	**77**		1.0	1.0	%			01/10/14 13:13	1

Client Sample ID: MW-45 (15-17')

Lab Sample ID: 600-85272-15
Date Collected: 01/07/14 15:10
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 77.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.318	U	2.45	0.318	mg/Kg	☼	01/10/14 12:37	01/10/14 15:35	1

Client Sample ID: MW-45 (15-17')

Lab Sample ID: 600-85272-15

Date Collected: 01/07/14 15:10
Matrix: Solid
Date Received: 01/10/14 07:50

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			01/10/14 13:13	1
Percent Solids	78		1.0	1.0	%			01/10/14 13:13	1

General Chemistry - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	129		6.42	0.404	mg/Kg	☼		01/15/14 05:12	1

Client Sample ID: MW-45 (17-18')

Lab Sample ID: 600-85272-16

Date Collected: 01/07/14 15:20
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 77.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.307	U	2.37	0.307	mg/Kg	☼	01/10/14 12:37	01/10/14 15:37	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			01/10/14 13:13	1
Percent Solids	77		1.0	1.0	%			01/10/14 13:13	1

General Chemistry - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	49.8		6.48	0.408	mg/Kg	☼		01/15/14 05:28	1

Client Sample ID: MW-45 (18-20')

Lab Sample ID: 600-85272-17

Date Collected: 01/07/14 15:30
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 76.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.321	U	2.48	0.321	mg/Kg	☼	01/10/14 12:37	01/10/14 15:39	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			01/10/14 13:13	1
Percent Solids	77		1.0	1.0	%			01/10/14 13:13	1

General Chemistry - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	81.5		6.57	0.414	mg/Kg	☼		01/15/14 05:44	1

Client Sample ID: RINSE BLANK- GEOPROBE

Lab Sample ID: 600-85272-18

Date Collected: 01/07/14 09:15
Matrix: Water
Date Received: 01/10/14 07:50

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00227	U	0.0100	0.00227	mg/L			01/11/14 15:22	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 15:22	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			01/11/14 15:22	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			01/11/14 15:22	1

Client Sample ID: RINSE BLANK- GEOPROBE
Date Collected: 01/07/14 09:15
Date Received: 01/10/14 07:50

Lab Sample ID: 600-85272-18
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			01/11/14 15:22	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			01/11/14 15:22	1
Carbon disulfide	0.00170	U	0.00500	0.00170	mg/L			01/11/14 15:22	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			01/11/14 15:22	1
Dibromochloromethane	0.000920	U	0.00500	0.000920	mg/L			01/11/14 15:22	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			01/11/14 15:22	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			01/11/14 15:22	1
Chloroform	0.000820	U	0.00500	0.000820	mg/L			01/11/14 15:22	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			01/11/14 15:22	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			01/11/14 15:22	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			01/11/14 15:22	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			01/11/14 15:22	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 15:22	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			01/11/14 15:22	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			01/11/14 15:22	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			01/11/14 15:22	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			01/11/14 15:22	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			01/11/14 15:22	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			01/11/14 15:22	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			01/11/14 15:22	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			01/11/14 15:22	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 15:22	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			01/11/14 15:22	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			01/11/14 15:22	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			01/11/14 15:22	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			01/11/14 15:22	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			01/11/14 15:22	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			01/11/14 15:22	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			01/11/14 15:22	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			01/11/14 15:22	1
o-Xylene	0.000930	U	0.00500	0.000930	mg/L			01/11/14 15:22	1
m-Xylene & p-Xylene	0.00126	U	0.0100	0.00126	mg/L			01/11/14 15:22	1
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			01/11/14 15:22	1
Bromodichloromethane	0.000760	U	0.00500	0.000760	mg/L			01/11/14 15:22	1
1,2-Dichloroethene, Total	0.000840	U	0.0100	0.000840	mg/L			01/11/14 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*70 - 130*		*01/11/14 15:22*	*1*
Dibromofluoromethane	*87*		*62 - 130*		*01/11/14 15:22*	*1*
4-Bromofluorobenzene	*102*		*67 - 139*		*01/11/14 15:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*83*		*50 - 134*		*01/11/14 15:22*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 20:10	1
Acenaphthylene	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 20:10	1
Anthracene	0.000440	U	0.000500	0.000440	mg/L		01/13/14 13:39	01/14/14 20:10	1
Benzidine	0.0179	U *	0.0500	0.0179	mg/L		01/13/14 13:39	01/14/14 20:10	1
Benzo[a]anthracene	0.000250	U	0.000500	0.000250	mg/L		01/13/14 13:39	01/14/14 20:10	1
Benzo[b]fluoranthene	0.000180	U	0.000500	0.000180	mg/L		01/13/14 13:39	01/14/14 20:10	1

Client Sample ID: RINSE BLANK- GEOPROBE
Date Collected: 01/07/14 09:15
Date Received: 01/10/14 07:50

Lab Sample ID: 600-85272-18
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 20:10	1
Benzo[g,h,i]perylene	0.000350	U	0.000500	0.000350	mg/L		01/13/14 13:39	01/14/14 20:10	1
Benzo[a]pyrene	0.000130	U	0.000500	0.000130	mg/L		01/13/14 13:39	01/14/14 20:10	1
Bis(2-chloroethoxy)methane	0.000190	U	0.000500	0.000190	mg/L		01/13/14 13:39	01/14/14 20:10	1
Bis(2-chloroethyl)ether	0.000180	U	0.000500	0.000180	mg/L		01/13/14 13:39	01/14/14 20:10	1
Bis(2-ethylhexyl) phthalate	**0.0114**		0.00150	0.000590	mg/L		01/13/14 13:39	01/14/14 20:10	1
4-Bromophenyl phenyl ether	0.000250	U	0.000500	0.000250	mg/L		01/13/14 13:39	01/14/14 20:10	1
Butyl benzyl phthalate	0.000850	U	0.00250	0.000850	mg/L		01/13/14 13:39	01/14/14 20:10	1
4-Chloroaniline	0.000110	U	0.000500	0.000110	mg/L		01/13/14 13:39	01/14/14 20:10	1
2-Chloronaphthalene	0.000190	U	0.000500	0.000190	mg/L		01/13/14 13:39	01/14/14 20:10	1
4-Chlorophenyl phenyl ether	0.000230	U	0.000500	0.000230	mg/L		01/13/14 13:39	01/14/14 20:10	1
Carbazole	0.000350	U	0.000500	0.000350	mg/L		01/13/14 13:39	01/14/14 20:10	1
Chrysene	0.000240	U	0.000500	0.000240	mg/L		01/13/14 13:39	01/14/14 20:10	1
Di-n-butyl phthalate	0.00187	U	0.00500	0.00187	mg/L		01/13/14 13:39	01/14/14 20:10	1
Dibenz(a,h)anthracene	0.000290	U	0.000500	0.000290	mg/L		01/13/14 13:39	01/14/14 20:10	1
Dibenzofuran	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 20:10	1
1,2-Dichlorobenzene	0.000210	U	0.000500	0.000210	mg/L		01/13/14 13:39	01/14/14 20:10	1
1,3-Dichlorobenzene	0.000100	U	0.000500	0.000100	mg/L		01/13/14 13:39	01/14/14 20:10	1
1,4-Dichlorobenzene	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 20:10	1
3,3'-Dichlorobenzidine	0.000320	U	0.000500	0.000320	mg/L		01/13/14 13:39	01/14/14 20:10	1
Diethyl phthalate	0.00419	U	0.00500	0.00419	mg/L		01/13/14 13:39	01/14/14 20:10	1
Dimethyl phthalate	0.000180	U	0.00500	0.000180	mg/L		01/13/14 13:39	01/14/14 20:10	1
2,4-Dinitrotoluene	0.000320	U	0.000500	0.000320	mg/L		01/13/14 13:39	01/14/14 20:10	1
Di-n-octyl phthalate	0.000160	U	0.00500	0.000160	mg/L		01/13/14 13:39	01/14/14 20:10	1
Fluoranthene	0.000310	U	0.000500	0.000310	mg/L		01/13/14 13:39	01/14/14 20:10	1
Fluorene	0.000120	U	0.000500	0.000120	mg/L		01/13/14 13:39	01/14/14 20:10	1
Hexachlorobenzene	0.000250	U	0.000500	0.000250	mg/L		01/13/14 13:39	01/14/14 20:10	1
Hexachlorocyclopentadiene	0.000150	U	0.000500	0.000150	mg/L		01/13/14 13:39	01/14/14 20:10	1
Hexachloroethane	0.000170	U	0.000500	0.000170	mg/L		01/13/14 13:39	01/14/14 20:10	1
Hexachlorobutadiene	0.000190	U	0.000500	0.000190	mg/L		01/13/14 13:39	01/14/14 20:10	1
Indeno[1,2,3-cd]pyrene	0.000290	U	0.000500	0.000290	mg/L		01/13/14 13:39	01/14/14 20:10	1
Isophorone	0.000150	U	0.000500	0.000150	mg/L		01/13/14 13:39	01/14/14 20:10	1
2-Methylnaphthalene	0.000140	U	0.000500	0.000140	mg/L		01/13/14 13:39	01/14/14 20:10	1
Naphthalene	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 20:10	1
2-Nitroaniline	0.000350	U	0.000500	0.000350	mg/L		01/13/14 13:39	01/14/14 20:10	1
3-Nitroaniline	0.000130	U *	0.000500	0.000130	mg/L		01/13/14 13:39	01/14/14 20:10	1
4-Nitroaniline	0.000230	U	0.000500	0.000230	mg/L		01/13/14 13:39	01/14/14 20:10	1
Nitrobenzene	0.000200	U	0.000500	0.000200	mg/L		01/13/14 13:39	01/14/14 20:10	1
N-Nitrosodimethylamine	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 20:10	1
N-Nitrosodiphenylamine	0.000330	U	0.000500	0.000330	mg/L		01/13/14 13:39	01/14/14 20:10	1
N-Nitrosodi-n-propylamine	0.000240	U	0.000500	0.000240	mg/L		01/13/14 13:39	01/14/14 20:10	1
Phenanthrene	0.000290	U	0.000500	0.000290	mg/L		01/13/14 13:39	01/14/14 20:10	1
Pyrene	0.000330	U	0.000500	0.000330	mg/L		01/13/14 13:39	01/14/14 20:10	1
1,2,4-Trichlorobenzene	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 20:10	1
Benzyl alcohol	0.000510	U	0.000500	0.000510	mg/L		01/13/14 13:39	01/14/14 20:10	1
4-Chloro-3-methylphenol	0.000250	U	0.000500	0.000250	mg/L		01/13/14 13:39	01/14/14 20:10	1
2-Chlorophenol	0.000220	U	0.000500	0.000220	mg/L		01/13/14 13:39	01/14/14 20:10	1
2-Methylphenol	0.000190	U	0.000500	0.000190	mg/L		01/13/14 13:39	01/14/14 20:10	1
3 & 4 Methylphenol	0.000160	U	0.00100	0.000160	mg/L		01/13/14 13:39	01/14/14 20:10	1

Client Sample ID: RINSE BLANK- GEOPROBE

Lab Sample ID: 600-85272-18

Date Collected: 01/07/14 09:15

Matrix: Water

Date Received: 01/10/14 07:50

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	0.000260	U	0.000500	0.000260	mg/L		01/13/14 13:39	01/14/14 20:10	1
2,4-Dimethylphenol	0.000180	U	0.000500	0.000180	mg/L		01/13/14 13:39	01/14/14 20:10	1
4,6-Dinitro-2-methylphenol	0.000160	U	0.00100	0.000160	mg/L		01/13/14 13:39	01/14/14 20:10	1
2,4-Dinitrophenol	0.000400	U	0.00100	0.000400	mg/L		01/13/14 13:39	01/14/14 20:10	1
2-Nitrophenol	0.000220	U	0.000500	0.000220	mg/L		01/13/14 13:39	01/14/14 20:10	1
4-Nitrophenol	0.000330	U	0.00100	0.000330	mg/L		01/13/14 13:39	01/14/14 20:10	1
Pentachlorophenol	0.000960	U	0.00100	0.000960	mg/L		01/13/14 13:39	01/14/14 20:10	1
Phenol	0.000140	U	0.000500	0.000140	mg/L		01/13/14 13:39	01/14/14 20:10	1
2,4,5-Trichlorophenol	0.000290	U	0.000500	0.000290	mg/L		01/13/14 13:39	01/14/14 20:10	1
2,4,6-Trichlorophenol	0.000330	U	0.000500	0.000330	mg/L		01/13/14 13:39	01/14/14 20:10	1
2,6-Dinitrotoluene	0.000290	U	0.000500	0.000290	mg/L		01/13/14 13:39	01/14/14 20:10	1
bis (2-Chloroisopropyl) ether	0.000180	U	0.000500	0.000180	mg/L		01/13/14 13:39	01/14/14 20:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*89*		*33 - 141*	*01/13/14 13:39*	*01/14/14 20:10*	*1*
Nitrobenzene-d5	*87*		*47 - 120*	*01/13/14 13:39*	*01/14/14 20:10*	*1*
2-Fluorophenol	*62*		*18 - 120*	*01/13/14 13:39*	*01/14/14 20:10*	*1*
2-Fluorobiphenyl	*82*		*43 - 120*	*01/13/14 13:39*	*01/14/14 20:10*	*1*
2,4,6-Tribromophenol	*63*		*44 - 123*	*01/13/14 13:39*	*01/14/14 20:10*	*1*
Phenol-d5 (Surr)	*49*		*12 - 128*	*01/13/14 13:39*	*01/14/14 20:10*	*1*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	0.813	U	4.90	0.813	mg/L		01/13/14 15:36	01/13/14 17:43	1
>C12-C28	0.940	U	4.90	0.940	mg/L		01/13/14 15:36	01/13/14 17:43	1
>C28-C35	0.940	U	4.90	0.940	mg/L		01/13/14 15:36	01/13/14 17:43	1
C6-C35	1.53	U	4.90	1.53	mg/L		01/13/14 15:36	01/13/14 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*92*		*70 - 130*	*01/13/14 15:36*	*01/13/14 17:43*	*1*

Client Sample ID: RINSE BLANK- CME

Lab Sample ID: 600-85272-19

Date Collected: 01/07/14 09:15

Matrix: Water

Date Received: 01/10/14 07:50

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00227	U	0.0100	0.00227	mg/L			01/11/14 15:45	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 15:45	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			01/11/14 15:45	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			01/11/14 15:45	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			01/11/14 15:45	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			01/11/14 15:45	1
Carbon disulfide	0.00170	U	0.00500	0.00170	mg/L			01/11/14 15:45	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			01/11/14 15:45	1
Dibromochloromethane	0.000920	U	0.00500	0.000920	mg/L			01/11/14 15:45	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			01/11/14 15:45	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			01/11/14 15:45	1
Chloroform	0.000820	U	0.00500	0.000820	mg/L			01/11/14 15:45	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			01/11/14 15:45	1

Client Sample ID: RINSE BLANK- CME
Date Collected: 01/07/14 09:15
Date Received: 01/10/14 07:50

Lab Sample ID: 600-85272-19
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			01/11/14 15:45	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			01/11/14 15:45	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			01/11/14 15:45	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 15:45	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			01/11/14 15:45	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			01/11/14 15:45	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			01/11/14 15:45	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			01/11/14 15:45	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			01/11/14 15:45	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			01/11/14 15:45	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			01/11/14 15:45	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			01/11/14 15:45	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 15:45	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			01/11/14 15:45	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			01/11/14 15:45	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			01/11/14 15:45	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			01/11/14 15:45	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			01/11/14 15:45	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			01/11/14 15:45	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			01/11/14 15:45	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			01/11/14 15:45	1
o-Xylene	0.000930	U	0.00500	0.000930	mg/L			01/11/14 15:45	1
m-Xylene & p-Xylene	0.00126	U	0.0100	0.00126	mg/L			01/11/14 15:45	1
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			01/11/14 15:45	1
Bromodichloromethane	0.000760	U	0.00500	0.000760	mg/L			01/11/14 15:45	1
1,2-Dichloroethene, Total	0.000840	U	0.0100	0.000840	mg/L			01/11/14 15:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*01/11/14 15:45*	*1*
Dibromofluoromethane	*87*		*62 - 130*		*01/11/14 15:45*	*1*
4-Bromofluorobenzene	*103*		*67 - 139*		*01/11/14 15:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*82*		*50 - 134*		*01/11/14 15:45*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 20:36	1
Acenaphthylene	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 20:36	1
Anthracene	0.000440	U	0.000500	0.000440	mg/L		01/13/14 13:39	01/14/14 20:36	1
Benzidine	0.0179	U *	0.0500	0.0179	mg/L		01/13/14 13:39	01/14/14 20:36	1
Benzo[a]anthracene	0.000250	U	0.000500	0.000250	mg/L		01/13/14 13:39	01/14/14 20:36	1
Benzo[b]fluoranthene	0.000180	U	0.000500	0.000180	mg/L		01/13/14 13:39	01/14/14 20:36	1
Benzo[k]fluoranthene	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 20:36	1
Benzo[g,h,i]perylene	0.000350	U	0.000500	0.000350	mg/L		01/13/14 13:39	01/14/14 20:36	1
Benzo[a]pyrene	0.000130	U	0.000500	0.000130	mg/L		01/13/14 13:39	01/14/14 20:36	1
Bis(2-chloroethoxy)methane	0.000190	U	0.000500	0.000190	mg/L		01/13/14 13:39	01/14/14 20:36	1
Bis(2-chloroethyl)ether	0.000180	U	0.000500	0.000180	mg/L		01/13/14 13:39	01/14/14 20:36	1
Bis(2-ethylhexyl) phthalate	0.000590	U	0.00150	0.000590	mg/L		01/13/14 13:39	01/14/14 20:36	1
4-Bromophenyl phenyl ether	0.000250	U	0.000500	0.000250	mg/L		01/13/14 13:39	01/14/14 20:36	1
Butyl benzyl phthalate	0.000850	U	0.00250	0.000850	mg/L		01/13/14 13:39	01/14/14 20:36	1
4-Chloroaniline	0.000110	U	0.000500	0.000110	mg/L		01/13/14 13:39	01/14/14 20:36	1

Client Sample ID: RINSE BLANK- CME
Date Collected: 01/07/14 09:15
Date Received: 01/10/14 07:50

Lab Sample ID: 600-85272-19
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	0.000190	U	0.000500	0.000190	mg/L		01/13/14 13:39	01/14/14 20:36	1
4-Chlorophenyl phenyl ether	0.000230	U	0.000500	0.000230	mg/L		01/13/14 13:39	01/14/14 20:36	1
Carbazole	0.000350	U	0.000500	0.000350	mg/L		01/13/14 13:39	01/14/14 20:36	1
Chrysene	0.000240	U	0.000500	0.000240	mg/L		01/13/14 13:39	01/14/14 20:36	1
Di-n-butyl phthalate	0.00187	U	0.00500	0.00187	mg/L		01/13/14 13:39	01/14/14 20:36	1
Dibenz(a,h)anthracene	0.000290	U	0.000500	0.000290	mg/L		01/13/14 13:39	01/14/14 20:36	1
Dibenzofuran	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 20:36	1
1,2-Dichlorobenzene	0.000210	U	0.000500	0.000210	mg/L		01/13/14 13:39	01/14/14 20:36	1
1,3-Dichlorobenzene	0.000100	U	0.000500	0.000100	mg/L		01/13/14 13:39	01/14/14 20:36	1
1,4-Dichlorobenzene	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 20:36	1
3,3'-Dichlorobenzidine	0.000320	U	0.000500	0.000320	mg/L		01/13/14 13:39	01/14/14 20:36	1
Diethyl phthalate	0.00419	U	0.00500	0.00419	mg/L		01/13/14 13:39	01/14/14 20:36	1
Dimethyl phthalate	0.000180	U	0.00500	0.000180	mg/L		01/13/14 13:39	01/14/14 20:36	1
2,4-Dinitrotoluene	0.000320	U	0.000500	0.000320	mg/L		01/13/14 13:39	01/14/14 20:36	1
Di-n-octyl phthalate	0.000160	U	0.00500	0.000160	mg/L		01/13/14 13:39	01/14/14 20:36	1
Fluoranthene	0.000310	U	0.000500	0.000310	mg/L		01/13/14 13:39	01/14/14 20:36	1
Fluorene	0.000120	U	0.000500	0.000120	mg/L		01/13/14 13:39	01/14/14 20:36	1
Hexachlorobenzene	0.000250	U	0.000500	0.000250	mg/L		01/13/14 13:39	01/14/14 20:36	1
Hexachlorocyclopentadiene	0.000150	U	0.000500	0.000150	mg/L		01/13/14 13:39	01/14/14 20:36	1
Hexachloroethane	0.000170	U	0.000500	0.000170	mg/L		01/13/14 13:39	01/14/14 20:36	1
Hexachlorobutadiene	0.000190	U	0.000500	0.000190	mg/L		01/13/14 13:39	01/14/14 20:36	1
Indeno[1,2,3-cd]pyrene	0.000290	U	0.000500	0.000290	mg/L		01/13/14 13:39	01/14/14 20:36	1
Isophorone	0.000150	U	0.000500	0.000150	mg/L		01/13/14 13:39	01/14/14 20:36	1
2-Methylnaphthalene	0.000140	U	0.000500	0.000140	mg/L		01/13/14 13:39	01/14/14 20:36	1
Naphthalene	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 20:36	1
2-Nitroaniline	0.000350	U	0.000500	0.000350	mg/L		01/13/14 13:39	01/14/14 20:36	1
3-Nitroaniline	0.000130	U *	0.000500	0.000130	mg/L		01/13/14 13:39	01/14/14 20:36	1
4-Nitroaniline	0.000230	U	0.000500	0.000230	mg/L		01/13/14 13:39	01/14/14 20:36	1
Nitrobenzene	0.000200	U	0.000500	0.000200	mg/L		01/13/14 13:39	01/14/14 20:36	1
N-Nitrosodimethylamine	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 20:36	1
N-Nitrosodiphenylamine	0.000330	U	0.000500	0.000330	mg/L		01/13/14 13:39	01/14/14 20:36	1
N-Nitrosodi-n-propylamine	0.000240	U	0.000500	0.000240	mg/L		01/13/14 13:39	01/14/14 20:36	1
Phenanthrene	0.000290	U	0.000500	0.000290	mg/L		01/13/14 13:39	01/14/14 20:36	1
Pyrene	0.000330	U	0.000500	0.000330	mg/L		01/13/14 13:39	01/14/14 20:36	1
1,2,4-Trichlorobenzene	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 20:36	1
Benzyl alcohol	0.000510	U	0.000500	0.000510	mg/L		01/13/14 13:39	01/14/14 20:36	1
4-Chloro-3-methylphenol	0.000250	U	0.000500	0.000250	mg/L		01/13/14 13:39	01/14/14 20:36	1
2-Chlorophenol	0.000220	U	0.000500	0.000220	mg/L		01/13/14 13:39	01/14/14 20:36	1
2-Methylphenol	0.000190	U	0.000500	0.000190	mg/L		01/13/14 13:39	01/14/14 20:36	1
3 & 4 Methylphenol	0.000160	U	0.00100	0.000160	mg/L		01/13/14 13:39	01/14/14 20:36	1
2,4-Dichlorophenol	0.000260	U	0.000500	0.000260	mg/L		01/13/14 13:39	01/14/14 20:36	1
2,4-Dimethylphenol	0.000180	U	0.000500	0.000180	mg/L		01/13/14 13:39	01/14/14 20:36	1
4,6-Dinitro-2-methylphenol	0.000160	U	0.00100	0.000160	mg/L		01/13/14 13:39	01/14/14 20:36	1
2,4-Dinitrophenol	0.000400	U	0.00100	0.000400	mg/L		01/13/14 13:39	01/14/14 20:36	1
2-Nitrophenol	0.000220	U	0.000500	0.000220	mg/L		01/13/14 13:39	01/14/14 20:36	1
4-Nitrophenol	0.000330	U	0.00100	0.000330	mg/L		01/13/14 13:39	01/14/14 20:36	1
Pentachlorophenol	0.000960	U	0.00100	0.000960	mg/L		01/13/14 13:39	01/14/14 20:36	1
Phenol	0.000140	U	0.000500	0.000140	mg/L		01/13/14 13:39	01/14/14 20:36	1
2,4,5-Trichlorophenol	0.000290	U	0.000500	0.000290	mg/L		01/13/14 13:39	01/14/14 20:36	1

Client Sample ID: RINSE BLANK- CME

Lab Sample ID: 600-85272-19

Date Collected: 01/07/14 09:15

Matrix: Water

Date Received: 01/10/14 07:50

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,6-Trichlorophenol	0.000330	U	0.000500	0.000330	mg/L		01/13/14 13:39	01/14/14 20:36	1
2,6-Dinitrotoluene	0.000290	U	0.000500	0.000290	mg/L		01/13/14 13:39	01/14/14 20:36	1
bis (2-Chloroisopropyl) ether	0.000180	U	0.000500	0.000180	mg/L		01/13/14 13:39	01/14/14 20:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*87*		*33 - 141*	*01/13/14 13:39*	*01/14/14 20:36*	*1*
Nitrobenzene-d5	*85*		*47 - 120*	*01/13/14 13:39*	*01/14/14 20:36*	*1*
2-Fluorophenol	*57*		*18 - 120*	*01/13/14 13:39*	*01/14/14 20:36*	*1*
2-Fluorobiphenyl	*79*		*43 - 120*	*01/13/14 13:39*	*01/14/14 20:36*	*1*
2,4,6-Tribromophenol	*55*		*44 - 123*	*01/13/14 13:39*	*01/14/14 20:36*	*1*
Phenol-d5 (Surr)	*46*		*12 - 128*	*01/13/14 13:39*	*01/14/14 20:36*	*1*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	0.810	U	4.88	0.810	mg/L		01/13/14 15:36	01/13/14 18:18	1
>C12-C28	0.937	U	4.88	0.937	mg/L		01/13/14 15:36	01/13/14 18:18	1
>C28-C35	0.937	U	4.88	0.937	mg/L		01/13/14 15:36	01/13/14 18:18	1
C6-C35	1.52	U	4.88	1.52	mg/L		01/13/14 15:36	01/13/14 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*93*		*70 - 130*	*01/13/14 15:36*	*01/13/14 18:18*	*1*

Client Sample ID: TRIP BLANK

Lab Sample ID: 600-85272-20

Date Collected: 01/07/14 00:00

Matrix: Water

Date Received: 01/09/14 11:08

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00227	U	0.0100	0.00227	mg/L			01/11/14 14:13	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 14:13	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			01/11/14 14:13	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			01/11/14 14:13	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			01/11/14 14:13	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			01/11/14 14:13	1
Carbon disulfide	0.00170	U	0.00500	0.00170	mg/L			01/11/14 14:13	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			01/11/14 14:13	1
Dibromochloromethane	0.000920	U	0.00500	0.000920	mg/L			01/11/14 14:13	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			01/11/14 14:13	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			01/11/14 14:13	1
Chloroform	0.000820	U	0.00500	0.000820	mg/L			01/11/14 14:13	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			01/11/14 14:13	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			01/11/14 14:13	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			01/11/14 14:13	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			01/11/14 14:13	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 14:13	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			01/11/14 14:13	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			01/11/14 14:13	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			01/11/14 14:13	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			01/11/14 14:13	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			01/11/14 14:13	1

Client Sample ID: TRIP BLANK — **Lab Sample ID: 600-85272-20**
Date Collected: 01/07/14 00:00 — **Matrix: Water**
Date Received: 01/09/14 11:08

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			01/11/14 14:13	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			01/11/14 14:13	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			01/11/14 14:13	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 14:13	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			01/11/14 14:13	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			01/11/14 14:13	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			01/11/14 14:13	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			01/11/14 14:13	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			01/11/14 14:13	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			01/11/14 14:13	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			01/11/14 14:13	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			01/11/14 14:13	1
o-Xylene	0.000930	U	0.00500	0.000930	mg/L			01/11/14 14:13	1
m-Xylene & p-Xylene	0.00126	U	0.0100	0.00126	mg/L			01/11/14 14:13	1
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			01/11/14 14:13	1
Bromodichloromethane	0.000760	U	0.00500	0.000760	mg/L			01/11/14 14:13	1
1,2-Dichloroethene, Total	0.000840	U	0.0100	0.000840	mg/L			01/11/14 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*		*01/11/14 14:13*	*1*
Dibromofluoromethane	*88*		*62 - 130*		*01/11/14 14:13*	*1*
4-Bromofluorobenzene	*101*		*67 - 139*		*01/11/14 14:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*50 - 134*		*01/11/14 14:13*	*1*

Client Sample ID: TRIP BLANK — **Lab Sample ID: 600-85272-21**
Date Collected: 01/07/14 00:00 — **Matrix: Water**
Date Received: 01/09/14 11:08

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00227	U	0.0100	0.00227	mg/L			01/11/14 14:36	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 14:36	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			01/11/14 14:36	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			01/11/14 14:36	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			01/11/14 14:36	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			01/11/14 14:36	1
Carbon disulfide	0.00170	U	0.00500	0.00170	mg/L			01/11/14 14:36	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			01/11/14 14:36	1
Dibromochloromethane	0.000920	U	0.00500	0.000920	mg/L			01/11/14 14:36	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			01/11/14 14:36	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			01/11/14 14:36	1
Chloroform	0.000820	U	0.00500	0.000820	mg/L			01/11/14 14:36	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			01/11/14 14:36	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			01/11/14 14:36	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			01/11/14 14:36	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			01/11/14 14:36	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 14:36	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			01/11/14 14:36	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			01/11/14 14:36	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			01/11/14 14:36	1

Client Sample ID: TRIP BLANK
Date Collected: 01/07/14 00:00
Date Received: 01/09/14 11:08

Lab Sample ID: 600-85272-21
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			01/11/14 14:36	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			01/11/14 14:36	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			01/11/14 14:36	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			01/11/14 14:36	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			01/11/14 14:36	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 14:36	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			01/11/14 14:36	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			01/11/14 14:36	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			01/11/14 14:36	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			01/11/14 14:36	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			01/11/14 14:36	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			01/11/14 14:36	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			01/11/14 14:36	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			01/11/14 14:36	1
o-Xylene	0.000930	U	0.00500	0.000930	mg/L			01/11/14 14:36	1
m-Xylene & p-Xylene	0.00126	U	0.0100	0.00126	mg/L			01/11/14 14:36	1
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			01/11/14 14:36	1
Bromodichloromethane	0.000760	U	0.00500	0.000760	mg/L			01/11/14 14:36	1
1,2-Dichloroethene, Total	0.000840	U	0.0100	0.000840	mg/L			01/11/14 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*		*01/11/14 14:36*	*1*
Dibromofluoromethane	*88*		*62 - 130*		*01/11/14 14:36*	*1*
4-Bromofluorobenzene	*105*		*67 - 139*		*01/11/14 14:36*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*50 - 134*		*01/11/14 14:36*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
b	The compound was found in the blank and sample
N	MS, MSD: Spike recovery exceeds upper or lower control limits.
X	Surrogate is outside control limits
*	LCS or LCSD exceeds the control limits
*	ISTD response or retention time outside acceptable limits

GC Semi VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

Metals

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

General Chemistry

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

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
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)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	12DCE
Lab Sample ID	Client Sample ID	(50-130)	(68-140)	(57-140)	(61-130)
600-85272-1	2013-FFTA-03 (0-2')	73	84	97	81
600-85272-3	2013-FFTA-03 (14-16')	74	88	100	89
600-85272-5	2013-FFTA-02 (0.25-2')	77	91	101	85
600-85272-8	MW-43 (0-2')	78	92	104	91
600-85272-10	MW-43 (8-10')	76	90	108	88
600-85272-11	MW-43 (17-20')	72	89	92	84
600-85272-11 MS	MW-43 (17-20')	80	89	103	78
600-85272-11 MSD	MW-43 (17-20')	80	86	99	75
LCS 600-124806/3	Lab Control Sample	75	87	95	77
MB 600-124806/4	Method Blank	75	84	90	73

Surrogate Legend

TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane
BFB = 4-Bromofluorobenzene
12DCE = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	12DCE
Lab Sample ID	Client Sample ID	(70-130)	(62-130)	(67-139)	(50-134)
600-85272-7	Field Blank	97	86	101	82
600-85272-18	RINSE BLANK- GEOPROBE	99	87	102	83
600-85272-19	RINSE BLANK- CME	98	87	103	82
600-85272-20	TRIP BLANK	100	88	101	84
600-85272-21	TRIP BLANK	100	88	105	85
LCS 600-124815/3	Lab Control Sample	99	89	99	78
MB 600-124815/4	Method Blank	101	88	101	81

Surrogate Legend

TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane
BFB = 4-Bromofluorobenzene
12DCE = 1,2-Dichloroethane-d4 (Surr)

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPH	TBP
Lab Sample ID	Client Sample ID	(38-127)	(25-132)	(10-155)	(27-123)	(53-134)	(10-148)
600-85272-1	2013-FFTA-03 (0-2')	84	90	88	86	115	77
600-85272-1 MS	2013-FFTA-03 (0-2')	123	130	122	125 X	132	124
600-85272-1 MSD	2013-FFTA-03 (0-2')	112	121	111	109	118	110
600-85272-3	2013-FFTA-03 (14-16')	109	104	100	93	130	94
600-85272-5	2013-FFTA-02 (0.25-2')	106	119	111	108	112	84
600-85272-8	MW-43 (0-2')	0 X	0 X	0 X	0 X	0 X *	0 X
600-85272-10	MW-43 (8-10')	113	113	108	103	133	111

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPH	TBP
Lab Sample ID	Client Sample ID	(38-127)	(25-132)	(10-155)	(27-123)	(53-134)	(10-148)
600-85272-11	MW-43 (17-20')	83	88	82	84	118	94
LCS 600-125220/2-A	Lab Control Sample	77	78	76	81	79	70
MB 600-125220/1-A	Method Blank	68	72	69	64	74	30

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TPH	NBZ	2FP	FBP	TBP	PHL
Lab Sample ID	Client Sample ID	(33-141)	(47-120)	(18-120)	(43-120)	(44-123)	(12-128)
600-85272-18	RINSE BLANK- GEOPROBE	89	87	62	82	63	49
600-85272-19	RINSE BLANK- CME	87	85	57	79	55	46
LCS 600-124830/2-A	Lab Control Sample	88	90	73	85	83	63
LCS 600-124830/3-A	Lab Control Sample	87	92	65	84	70	55
LCSD 600-124830/4-A	Lab Control Sample Dup	90	89	62	82	71	51

Surrogate Legend

TPH = Terphenyl-d14
NBZ = Nitrobenzene-d5
2FP = 2-Fluorophenol
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
PHL = Phenol-d5 (Surr)

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TPH	TPH	NBZ	2FP	FBP	TBP
Lab Sample ID	Client Sample ID	(33-141)	(33-141)	(47-120)	(18-120)	(43-120)	(44-123)
MB 600-124830/1-A	Method Blank	85	85	85	66	79	63

Surrogate Legend

TPH = Terphenyl-d14
NBZ = Nitrobenzene-d5
2FP = 2-Fluorophenol
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol

Surrogate Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85272-1

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		OTPH								
Lab Sample ID	Client Sample ID	(70-130)								
600-85272-1	2013-FFTA-03 (0-2')	89								
600-85272-3	2013-FFTA-03 (14-16')	90								
600-85272-5	2013-FFTA-02 (0.25-2')	90								
600-85272-8	MW-43 (0-2')	84								
600-85272-10	MW-43 (8-10')	87								
600-85272-11	MW-43 (17-20')	86								
LCS 600-124912/2-A	Lab Control Sample	123								
MB 600-124912/1-A	Method Blank	88								

Surrogate Legend

OTPH = o-Terphenyl

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)								
		OTPH								
Lab Sample ID	Client Sample ID	(70-130)								
600-85272-18	RINSE BLANK- GEOPROBE	92								
600-85272-19	RINSE BLANK- CME	93								
LCS 600-124855/2-A	Lab Control Sample	126								
MB 600-124855/1-A	Method Blank	95								

Surrogate Legend

OTPH = o-Terphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-124806/4
Matrix: Solid
Analysis Batch: 124806

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00166	U	0.0100	0.00166	mg/Kg			01/13/14 10:19	1
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			01/13/14 10:19	1
Chlorobromomethane	0.00178	U	0.00500	0.00178	mg/Kg			01/13/14 10:19	1
Bromoform	0.00137	U	0.00500	0.00137	mg/Kg			01/13/14 10:19	1
Bromomethane	0.000830	U	0.0100	0.000830	mg/Kg			01/13/14 10:19	1
2-Butanone (MEK)	0.00190	U	0.0100	0.00190	mg/Kg			01/13/14 10:19	1
Carbon disulfide	0.000550	U	0.0100	0.000550	mg/Kg			01/13/14 10:19	1
Carbon tetrachloride	0.00113	U	0.00500	0.00113	mg/Kg			01/13/14 10:19	1
Dibromochloromethane	0.000940	U	0.00500	0.000940	mg/Kg			01/13/14 10:19	1
Chlorobenzene	0.000960	U	0.00500	0.000960	mg/Kg			01/13/14 10:19	1
Chloroethane	0.00140	U	0.0100	0.00140	mg/Kg			01/13/14 10:19	1
Chloroform	0.000660	U	0.00500	0.000660	mg/Kg			01/13/14 10:19	1
Chloromethane	0.00166	U	0.0100	0.00166	mg/Kg			01/13/14 10:19	1
1,1-Dichloroethane	0.000870	U	0.00500	0.000870	mg/Kg			01/13/14 10:19	1
1,2-Dichloroethane	0.000900	U	0.00500	0.000900	mg/Kg			01/13/14 10:19	1
1,1-Dichloroethene	0.00122	U	0.00500	0.00122	mg/Kg			01/13/14 10:19	1
cis-1,2-Dichloroethene	0.000830	U	0.00500	0.000830	mg/Kg			01/13/14 10:19	1
trans-1,2-Dichloroethene	0.00114	U	0.00500	0.00114	mg/Kg			01/13/14 10:19	1
1,2-Dichloropropane	0.000710	U	0.00500	0.000710	mg/Kg			01/13/14 10:19	1
cis-1,3-Dichloropropene	0.000540	U	0.00500	0.000540	mg/Kg			01/13/14 10:19	1
trans-1,3-Dichloropropene	0.000580	U	0.00500	0.000580	mg/Kg			01/13/14 10:19	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			01/13/14 10:19	1
2-Hexanone	0.00101	U	0.0100	0.00101	mg/Kg			01/13/14 10:19	1
Methylene Chloride	0.00219	U	0.0100	0.00219	mg/Kg			01/13/14 10:19	1
4-Methyl-2-pentanone (MIBK)	0.00147	U	0.0100	0.00147	mg/Kg			01/13/14 10:19	1
Styrene	0.000710	U	0.00500	0.000710	mg/Kg			01/13/14 10:19	1
1,1,2,2-Tetrachloroethane	0.000870	U	0.00500	0.000870	mg/Kg			01/13/14 10:19	1
Tetrachloroethene	0.000710	U	0.00500	0.000710	mg/Kg			01/13/14 10:19	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			01/13/14 10:19	1
1,1,1-Trichloroethane	0.000740	U	0.00500	0.000740	mg/Kg			01/13/14 10:19	1
1,1,2-Trichloroethane	0.000730	U	0.00500	0.000730	mg/Kg			01/13/14 10:19	1
Trichloroethene	0.00140	U	0.00500	0.00140	mg/Kg			01/13/14 10:19	1
Vinyl acetate	0.000930	U	0.00500	0.000930	mg/Kg			01/13/14 10:19	1
Vinyl chloride	0.000900	U	0.0100	0.000900	mg/Kg			01/13/14 10:19	1
o-Xylene	0.00113	U	0.00500	0.00113	mg/Kg			01/13/14 10:19	1
m-Xylene & p-Xylene	0.00152	U	0.0100	0.00152	mg/Kg			01/13/14 10:19	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			01/13/14 10:19	1
Bromodichloromethane	0.000660	U	0.00500	0.000660	mg/Kg			01/13/14 10:19	1
1,2-Dichloroethene, Total	0.00190	U	0.0100	0.00190	mg/Kg			01/13/14 10:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*75*		*50 - 130*		*01/13/14 10:19*	*1*
Dibromofluoromethane	*84*		*68 - 140*		*01/13/14 10:19*	*1*
4-Bromofluorobenzene	*90*		*57 - 140*		*01/13/14 10:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*73*		*61 - 130*		*01/13/14 10:19*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-124806/3
Matrix: Solid
Analysis Batch: 124806

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.100	0.09608		mg/Kg		96	44 - 136
Benzene	0.0500	0.04820		mg/Kg		96	66 - 128
Chlorobromomethane	0.0500	0.04664		mg/Kg		93	60 - 140
Bromoform	0.0500	0.04355		mg/Kg		87	50 - 130
Bromomethane	0.0500	0.04334		mg/Kg		87	28 - 164
2-Butanone (MEK)	0.100	0.1020		mg/Kg		102	42 - 186
Carbon disulfide	0.0500	0.04629		mg/Kg		93	53 - 176
Carbon tetrachloride	0.0500	0.04506		mg/Kg		90	63 - 132
Dibromochloromethane	0.0500	0.04188		mg/Kg		84	63 - 125
Chlorobenzene	0.0500	0.04149		mg/Kg		83	67 - 126
Chloroethane	0.0500	0.04492		mg/Kg		90	30 - 136
Chloroform	0.0500	0.04845		mg/Kg		97	67 - 126
Chloromethane	0.0500	0.04228		mg/Kg		85	21 - 153
1,1-Dichloroethane	0.0500	0.04794		mg/Kg		96	64 - 130
1,2-Dichloroethane	0.0500	0.05050		mg/Kg		101	61 - 135
1,1-Dichloroethene	0.0500	0.04529		mg/Kg		91	40 - 157
cis-1,2-Dichloroethene	0.0500	0.04715		mg/Kg		94	62 - 130
trans-1,2-Dichloroethene	0.0500	0.04564		mg/Kg		91	65 - 130
1,2-Dichloropropane	0.0500	0.04911		mg/Kg		98	71 - 122
cis-1,3-Dichloropropene	0.0500	0.04273		mg/Kg		85	66 - 129
trans-1,3-Dichloropropene	0.0500	0.04106		mg/Kg		82	66 - 134
Ethylbenzene	0.0500	0.03974		mg/Kg		79	64 - 127
2-Hexanone	0.100	0.09132		mg/Kg		91	52 - 142
Methylene Chloride	0.0500	0.04479		mg/Kg		90	48 - 144
4-Methyl-2-pentanone (MIBK)	0.100	0.1045		mg/Kg		104	52 - 146
Styrene	0.0500	0.04108		mg/Kg		82	63 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.04506		mg/Kg		90	59 - 134
Tetrachloroethene	0.0500	0.03604		mg/Kg		72	69 - 125
Toluene	0.0500	0.04069		mg/Kg		81	69 - 125
1,1,1-Trichloroethane	0.0500	0.04613		mg/Kg		92	70 - 127
1,1,2-Trichloroethane	0.0500	0.04098		mg/Kg		82	67 - 124
Trichloroethene	0.0500	0.04513		mg/Kg		90	70 - 136
Vinyl acetate	0.100	0.09816		mg/Kg		98	54 - 136
Vinyl chloride	0.0500	0.04052		mg/Kg		81	28 - 159
o-Xylene	0.0500	0.04146		mg/Kg		83	64 - 132
m-Xylene & p-Xylene	0.0500	0.04086		mg/Kg		82	65 - 128
Xylenes, Total	0.100	0.08232		mg/Kg		82	65 - 129
Bromodichloromethane	0.0500	0.04994		mg/Kg		100	68 - 121
1,2-Dichloroethene, Total	0.100	0.09279		mg/Kg		93	62 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*75*		*50 - 130*
Dibromofluoromethane	*87*		*68 - 140*
4-Bromofluorobenzene	*95*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*77*		*61 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 600-85272-11 MS
Matrix: Solid
Analysis Batch: 124806

Client Sample ID: MW-43 (17-20')
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.00799	J	0.113	0.07923		mg/Kg	☼	63	60 - 140
Benzene	0.000713	U	0.0566	0.05503		mg/Kg	☼	97	65 - 135
Chlorobromomethane	0.00201	U	0.0566	0.05095		mg/Kg	☼	90	60 - 140
Bromoform	0.00155	U	0.0566	0.04965		mg/Kg	☼	88	60 - 140
Bromomethane	0.000939	U	0.0566	0.04372		mg/Kg	☼	77	60 - 140
2-Butanone (MEK)	0.00215	U	0.113	0.09829		mg/Kg	☼	87	60 - 140
Carbon disulfide	0.000622	U	0.0566	0.05181		mg/Kg	☼	92	60 - 140
Carbon tetrachloride	0.00128	U	0.0566	0.05150		mg/Kg	☼	91	60 - 140
Dibromochloromethane	0.00106	U	0.0566	0.04802		mg/Kg	☼	85	60 - 140
Chlorobenzene	0.00109	U	0.0566	0.04606		mg/Kg	☼	81	65 - 135
Chloroethane	0.00158	U	0.0566	0.04733		mg/Kg	☼	84	60 - 140
Chloroform	0.000747	U	0.0566	0.05542		mg/Kg	☼	98	60 - 140
Chloromethane	0.00188	U	0.0566	0.04426		mg/Kg	☼	78	60 - 140
1,1-Dichloroethane	0.000985	U	0.0566	0.05413		mg/Kg	☼	96	60 - 140
1,2-Dichloroethane	0.00102	U	0.0566	0.05732		mg/Kg	☼	101	60 - 140
1,1-Dichloroethene	0.00138	U	0.0566	0.05218		mg/Kg	☼	92	65 - 135
cis-1,2-Dichloroethene	0.000939	U	0.0566	0.05308		mg/Kg	☼	94	60 - 140
trans-1,2-Dichloroethene	0.00129	U	0.0566	0.05032		mg/Kg	☼	89	60 - 140
1,2-Dichloropropane	0.000803	U	0.0566	0.05506		mg/Kg	☼	97	60 - 140
cis-1,3-Dichloropropene	0.000611	U	0.0566	0.05039		mg/Kg	☼	89	60 - 140
trans-1,3-Dichloropropene	0.000656	U	0.0566	0.04913		mg/Kg	☼	87	60 - 140
Ethylbenzene	0.00115	U	0.0566	0.04505		mg/Kg	☼	80	60 - 140
2-Hexanone	0.00114	U	0.113	0.09567		mg/Kg	☼	85	60 - 140
Methylene Chloride	0.00248	U	0.0566	0.05564		mg/Kg	☼	98	60 - 140
4-Methyl-2-pentanone (MIBK)	0.00166	U	0.113	0.1077		mg/Kg	☼	95	60 - 140
Styrene	0.000803	U	0.0566	0.04535		mg/Kg	☼	80	60 - 140
1,1,2,2-Tetrachloroethane	0.000985	U	0.0566	0.04618		mg/Kg	☼	82	60 - 140
Tetrachloroethene	0.000803	U	0.0566	0.04404		mg/Kg	☼	78	60 - 140
Toluene	0.00156	U	0.0566	0.04589		mg/Kg	☼	81	64 - 135
1,1,1-Trichloroethane	0.000837	U	0.0566	0.05322		mg/Kg	☼	94	60 - 140
1,1,2-Trichloroethane	0.000826	U	0.0566	0.04644		mg/Kg	☼	82	60 - 140
Trichloroethene	0.00158	U	0.0566	0.04932		mg/Kg	☼	87	61 - 135
Vinyl acetate	0.00105	U	0.113	0.09377		mg/Kg	☼	83	60 - 140
Vinyl chloride	0.00102	U	0.0566	0.04169		mg/Kg	☼	74	60 - 140
o-Xylene	0.00128	U	0.0566	0.04530		mg/Kg	☼	80	60 - 140
m-Xylene & p-Xylene	0.00172	U	0.0566	0.04557		mg/Kg	☼	81	60 - 140
Xylenes, Total	0.00128	U	0.113	0.09087		mg/Kg	☼	80	60 - 140
Bromodichloromethane	0.000747	U	0.0566	0.05580		mg/Kg	☼	99	60 - 140
1,2-Dichloroethene, Total	0.00215	U	0.113	0.1034		mg/Kg	☼	91	60 - 140

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*80*		*50 - 130*
Dibromofluoromethane	*89*		*68 - 140*
4-Bromofluorobenzene	*103*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*78*		*61 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 600-85272-11 MSD
Matrix: Solid
Analysis Batch: 124806

Client Sample ID: MW-43 (17-20')
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.00799	J	0.113	0.09360		mg/Kg	☼	76	60 - 140	17	30
Benzene	0.000713	U	0.0566	0.05400		mg/Kg	☼	95	65 - 135	2	30
Chlorobromomethane	0.00201	U	0.0566	0.04659		mg/Kg	☼	82	60 - 140	9	30
Bromoform	0.00155	U	0.0566	0.04530		mg/Kg	☼	80	60 - 140	9	30
Bromomethane	0.000939	U	0.0566	0.05064		mg/Kg	☼	90	60 - 140	15	30
2-Butanone (MEK)	0.00215	U	0.113	0.1050		mg/Kg	☼	93	60 - 140	7	30
Carbon disulfide	0.000622	U	0.0566	0.05130		mg/Kg	☼	91	60 - 140	1	30
Carbon tetrachloride	0.00128	U	0.0566	0.05194		mg/Kg	☼	92	60 - 140	1	30
Dibromochloromethane	0.00106	U	0.0566	0.04662		mg/Kg	☼	82	60 - 140	3	30
Chlorobenzene	0.00109	U	0.0566	0.04658		mg/Kg	☼	82	65 - 135	1	30
Chloroethane	0.00158	U	0.0566	0.05568		mg/Kg	☼	98	60 - 140	16	30
Chloroform	0.000747	U	0.0566	0.05301		mg/Kg	☼	94	60 - 140	4	30
Chloromethane	0.00188	U	0.0566	0.05194		mg/Kg	☼	92	60 - 140	16	30
1,1-Dichloroethane	0.000985	U	0.0566	0.05366		mg/Kg	☼	95	60 - 140	1	30
1,2-Dichloroethane	0.00102	U	0.0566	0.05446		mg/Kg	☼	96	60 - 140	5	30
1,1-Dichloroethene	0.00138	U	0.0566	0.05180		mg/Kg	☼	92	65 - 135	1	30
cis-1,2-Dichloroethene	0.000939	U	0.0566	0.05054		mg/Kg	☼	89	60 - 140	5	30
trans-1,2-Dichloroethene	0.00129	U	0.0566	0.05051		mg/Kg	☼	89	60 - 140	0	30
1,2-Dichloropropane	0.000803	U	0.0566	0.05489		mg/Kg	☼	97	60 - 140	0	30
cis-1,3-Dichloropropene	0.000611	U	0.0566	0.04958		mg/Kg	☼	88	60 - 140	2	30
trans-1,3-Dichloropropene	0.000656	U	0.0566	0.04849		mg/Kg	☼	86	60 - 140	1	30
Ethylbenzene	0.00115	U	0.0566	0.04732		mg/Kg	☼	84	60 - 140	5	30
2-Hexanone	0.00114	U	0.113	0.09630		mg/Kg	☼	85	60 - 140	1	30
Methylene Chloride	0.00248	U	0.0566	0.05216		mg/Kg	☼	92	60 - 140	6	30
4-Methyl-2-pentanone (MIBK)	0.00166	U	0.113	0.1071		mg/Kg	☼	95	60 - 140	1	30
Styrene	0.000803	U	0.0566	0.04650		mg/Kg	☼	82	60 - 140	2	30
1,1,2,2-Tetrachloroethane	0.000985	U	0.0566	0.04657		mg/Kg	☼	82	60 - 140	1	30
Tetrachloroethene	0.000803	U	0.0566	0.04689		mg/Kg	☼	83	60 - 140	6	30
Toluene	0.00156	U	0.0566	0.04781		mg/Kg	☼	85	64 - 135	4	30
1,1,1-Trichloroethane	0.000837	U	0.0566	0.05379		mg/Kg	☼	95	60 - 140	1	30
1,1,2-Trichloroethane	0.000826	U	0.0566	0.04572		mg/Kg	☼	81	60 - 140	2	30
Trichloroethene	0.00158	U	0.0566	0.04864		mg/Kg	☼	86	61 - 135	1	30
Vinyl acetate	0.00105	U	0.113	0.08524		mg/Kg	☼	75	60 - 140	10	30
Vinyl chloride	0.00102	U	0.0566	0.05166		mg/Kg	☼	91	60 - 140	21	30
o-Xylene	0.00128	U	0.0566	0.04739		mg/Kg	☼	84	60 - 140	5	30
m-Xylene & p-Xylene	0.00172	U	0.0566	0.04722		mg/Kg	☼	83	60 - 140	4	30
Xylenes, Total	0.00128	U	0.113	0.09461		mg/Kg	☼	84	60 - 140	4	30
Bromodichloromethane	0.000747	U	0.0566	0.05340		mg/Kg	☼	94	60 - 140	4	30
1,2-Dichloroethene, Total	0.00215	U	0.113	0.1011		mg/Kg	☼	89	60 - 140	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*80*		*50 - 130*
Dibromofluoromethane	*86*		*68 - 140*
4-Bromofluorobenzene	*99*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*75*		*61 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-124815/4
Matrix: Water
Analysis Batch: 124815

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00227	U	0.0100	0.00227	mg/L			01/11/14 11:55	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 11:55	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			01/11/14 11:55	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			01/11/14 11:55	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			01/11/14 11:55	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			01/11/14 11:55	1
Carbon disulfide	0.00170	U	0.00500	0.00170	mg/L			01/11/14 11:55	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			01/11/14 11:55	1
Dibromochloromethane	0.000920	U	0.00500	0.000920	mg/L			01/11/14 11:55	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			01/11/14 11:55	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			01/11/14 11:55	1
Chloroform	0.000820	U	0.00500	0.000820	mg/L			01/11/14 11:55	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			01/11/14 11:55	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			01/11/14 11:55	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			01/11/14 11:55	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			01/11/14 11:55	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 11:55	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			01/11/14 11:55	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			01/11/14 11:55	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			01/11/14 11:55	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			01/11/14 11:55	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			01/11/14 11:55	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			01/11/14 11:55	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			01/11/14 11:55	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			01/11/14 11:55	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 11:55	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			01/11/14 11:55	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			01/11/14 11:55	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			01/11/14 11:55	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			01/11/14 11:55	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			01/11/14 11:55	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			01/11/14 11:55	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			01/11/14 11:55	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			01/11/14 11:55	1
o-Xylene	0.000930	U	0.00500	0.000930	mg/L			01/11/14 11:55	1
m-Xylene & p-Xylene	0.00126	U	0.0100	0.00126	mg/L			01/11/14 11:55	1
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			01/11/14 11:55	1
Bromodichloromethane	0.000760	U	0.00500	0.000760	mg/L			01/11/14 11:55	1
1,2-Dichloroethene, Total	0.000840	U	0.0100	0.000840	mg/L			01/11/14 11:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*01/11/14 11:55*	*1*
Dibromofluoromethane	*88*		*62 - 130*		*01/11/14 11:55*	*1*
4-Bromofluorobenzene	*101*		*67 - 139*		*01/11/14 11:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*81*		*50 - 134*		*01/11/14 11:55*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-124815/3
Matrix: Water
Analysis Batch: 124815

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.100	0.08884		mg/L		89	28 - 152
Benzene	0.0500	0.04907		mg/L		98	69 - 131
Chlorobromomethane	0.0500	0.05147		mg/L		103	60 - 141
Bromoform	0.0500	0.04099		mg/L		82	39 - 149
Bromomethane	0.0500	0.05474		mg/L		109	52 - 146
2-Butanone (MEK)	0.100	0.07429		mg/L		74	59 - 133
Carbon disulfide	0.0500	0.04410		mg/L		88	32 - 177
Carbon tetrachloride	0.0500	0.03961		mg/L		79	59 - 147
Dibromochloromethane	0.0500	0.04380		mg/L		88	58 - 132
Chlorobenzene	0.0500	0.04960		mg/L		99	60 - 136
Chloroethane	0.0500	0.05008		mg/L		100	56 - 144
Chloroform	0.0500	0.04577		mg/L		92	69 - 128
Chloromethane	0.0500	0.05169		mg/L		103	32 - 151
1,1-Dichloroethane	0.0500	0.04748		mg/L		95	66 - 126
1,2-Dichloroethane	0.0500	0.04184		mg/L		84	66 - 140
1,1-Dichloroethene	0.0500	0.04236		mg/L		85	59 - 145
cis-1,2-Dichloroethene	0.0500	0.04841		mg/L		97	69 - 129
trans-1,2-Dichloroethene	0.0500	0.04686		mg/L		94	70 - 132
1,2-Dichloropropane	0.0500	0.04924		mg/L		98	72 - 135
cis-1,3-Dichloropropene	0.0500	0.04840		mg/L		97	60 - 135
trans-1,3-Dichloropropene	0.0500	0.04567		mg/L		91	63 - 133
Ethylbenzene	0.0500	0.04788		mg/L		96	68 - 128
2-Hexanone	0.100	0.07234		mg/L		72	51 - 130
Methylene Chloride	0.0500	0.04580		mg/L		92	62 - 134
4-Methyl-2-pentanone (MIBK)	0.100	0.07388		mg/L		74	56 - 142
Styrene	0.0500	0.04940		mg/L		99	68 - 133
1,1,2,2-Tetrachloroethane	0.0500	0.03996		mg/L		80	68 - 134
Tetrachloroethene	0.0500	0.04275		mg/L		85	70 - 150
Toluene	0.0500	0.04826		mg/L		97	67 - 130
1,1,1-Trichloroethane	0.0500	0.04239		mg/L		85	65 - 142
1,1,2-Trichloroethane	0.0500	0.04439		mg/L		89	68 - 130
Trichloroethene	0.0500	0.04626		mg/L		93	68 - 130
Vinyl acetate	0.100	0.09050		mg/L		90	58 - 175
Vinyl chloride	0.0500	0.03610		mg/L		72	47 - 146
o-Xylene	0.0500	0.04777		mg/L		96	68 - 134
m-Xylene & p-Xylene	0.0500	0.04800		mg/L		96	67 - 132
Xylenes, Total	0.100	0.09577		mg/L		96	68 - 132
Bromodichloromethane	0.0500	0.04626		mg/L		93	73 - 130
1,2-Dichloroethene, Total	0.100	0.09527		mg/L		95	65 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*70 - 130*
Dibromofluoromethane	*89*		*62 - 130*
4-Bromofluorobenzene	*99*		*67 - 139*
1,2-Dichloroethane-d4 (Surr)	*78*		*50 - 134*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 600-124830/1-A
Matrix: Water
Analysis Batch: 125073

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124830

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 17:34	1
Acenaphthylene	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 17:34	1
Anthracene	0.000440	U	0.000500	0.000440	mg/L		01/13/14 13:39	01/14/14 17:34	1
Benzidine	0.0179	U	0.0500	0.0179	mg/L		01/13/14 13:39	01/14/14 17:34	1
Benzo[a]anthracene	0.000250	U	0.000500	0.000250	mg/L		01/13/14 13:39	01/14/14 17:34	1
Benzo[b]fluoranthene	0.000180	U	0.000500	0.000180	mg/L		01/13/14 13:39	01/14/14 17:34	1
Benzo[a]pyrene	0.000130	U	0.000500	0.000130	mg/L		01/13/14 13:39	01/14/14 17:34	1
Benzo[g,h,i]perylene	0.000350	U	0.000500	0.000350	mg/L		01/13/14 13:39	01/14/14 17:34	1
Benzo[k]fluoranthene	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 17:34	1
Bis(2-chloroethoxy)methane	0.000190	U	0.000500	0.000190	mg/L		01/13/14 13:39	01/14/14 17:34	1
Bis(2-chloroethyl)ether	0.000180	U	0.000500	0.000180	mg/L		01/13/14 13:39	01/14/14 17:34	1
Bis(2-ethylhexyl) phthalate	0.000590	U	0.00150	0.000590	mg/L		01/13/14 13:39	01/14/14 17:34	1
4-Bromophenyl phenyl ether	0.000250	U	0.000500	0.000250	mg/L		01/13/14 13:39	01/14/14 17:34	1
Butyl benzyl phthalate	0.000850	U	0.00250	0.000850	mg/L		01/13/14 13:39	01/14/14 17:34	1
Carbazole	0.000350	U	0.000500	0.000350	mg/L		01/13/14 13:39	01/14/14 17:34	1
4-Chloroaniline	0.000110	U	0.000500	0.000110	mg/L		01/13/14 13:39	01/14/14 17:34	1
2-Chloronaphthalene	0.000190	U	0.000500	0.000190	mg/L		01/13/14 13:39	01/14/14 17:34	1
4-Chlorophenyl phenyl ether	0.000230	U	0.000500	0.000230	mg/L		01/13/14 13:39	01/14/14 17:34	1
Chrysene	0.000240	U	0.000500	0.000240	mg/L		01/13/14 13:39	01/14/14 17:34	1
Dibenz(a,h)anthracene	0.000290	U	0.000500	0.000290	mg/L		01/13/14 13:39	01/14/14 17:34	1
Dibenzofuran	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 17:34	1
1,2-Dichlorobenzene	0.000210	U	0.000500	0.000210	mg/L		01/13/14 13:39	01/14/14 17:34	1
1,3-Dichlorobenzene	0.000100	U	0.000500	0.000100	mg/L		01/13/14 13:39	01/14/14 17:34	1
1,4-Dichlorobenzene	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 17:34	1
3,3'-Dichlorobenzidine	0.000320	U	0.000500	0.000320	mg/L		01/13/14 13:39	01/14/14 17:34	1
Diethyl phthalate	0.00419	U	0.00500	0.00419	mg/L		01/13/14 13:39	01/14/14 17:34	1
Dimethyl phthalate	0.000180	U	0.00500	0.000180	mg/L		01/13/14 13:39	01/14/14 17:34	1
Di-n-butyl phthalate	0.00187	U	0.00500	0.00187	mg/L		01/13/14 13:39	01/14/14 17:34	1
2,4-Dinitrotoluene	0.000320	U	0.000500	0.000320	mg/L		01/13/14 13:39	01/14/14 17:34	1
Di-n-octyl phthalate	0.0002944	J	0.00500	0.000160	mg/L		01/13/14 13:39	01/14/14 17:34	1
Fluoranthene	0.000310	U	0.000500	0.000310	mg/L		01/13/14 13:39	01/14/14 17:34	1
Fluorene	0.000120	U	0.000500	0.000120	mg/L		01/13/14 13:39	01/14/14 17:34	1
Hexachlorobenzene	0.000250	U	0.000500	0.000250	mg/L		01/13/14 13:39	01/14/14 17:34	1
Hexachlorobutadiene	0.000190	U	0.000500	0.000190	mg/L		01/13/14 13:39	01/14/14 17:34	1
Hexachlorocyclopentadiene	0.000150	U	0.000500	0.000150	mg/L		01/13/14 13:39	01/14/14 17:34	1
Hexachloroethane	0.000170	U	0.000500	0.000170	mg/L		01/13/14 13:39	01/14/14 17:34	1
Benzyl alcohol	0.000510	U	0.000500	0.000510	mg/L		01/13/14 13:39	01/14/14 17:34	1
Indeno[1,2,3-cd]pyrene	0.000290	U	0.000500	0.000290	mg/L		01/13/14 13:39	01/14/14 17:34	1
4-Chloro-3-methylphenol	0.000250	U	0.000500	0.000250	mg/L		01/13/14 13:39	01/14/14 17:34	1
Isophorone	0.000150	U	0.000500	0.000150	mg/L		01/13/14 13:39	01/14/14 17:34	1
2-Chlorophenol	0.000220	U	0.000500	0.000220	mg/L		01/13/14 13:39	01/14/14 17:34	1
2-Methylnaphthalene	0.000140	U	0.000500	0.000140	mg/L		01/13/14 13:39	01/14/14 17:34	1
2-Methylphenol	0.000190	U	0.000500	0.000190	mg/L		01/13/14 13:39	01/14/14 17:34	1
3 & 4 Methylphenol	0.000160	U	0.00100	0.000160	mg/L		01/13/14 13:39	01/14/14 17:34	1
2,4-Dichlorophenol	0.000260	U	0.000500	0.000260	mg/L		01/13/14 13:39	01/14/14 17:34	1
Naphthalene	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 17:34	1
2,4-Dimethylphenol	0.000180	U	0.000500	0.000180	mg/L		01/13/14 13:39	01/14/14 17:34	1
2-Nitroaniline	0.000350	U	0.000500	0.000350	mg/L		01/13/14 13:39	01/14/14 17:34	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 600-124830/1-A
Matrix: Water
Analysis Batch: 125073

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124830

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	0.000160	U	0.00100	0.000160	mg/L		01/13/14 13:39	01/14/14 17:34	1
2,4-Dinitrophenol	0.000400	U	0.00100	0.000400	mg/L		01/13/14 13:39	01/14/14 17:34	1
3-Nitroaniline	0.000130	U	0.000500	0.000130	mg/L		01/13/14 13:39	01/14/14 17:34	1
4-Nitroaniline	0.000230	U	0.000500	0.000230	mg/L		01/13/14 13:39	01/14/14 17:34	1
Nitrobenzene	0.000200	U	0.000500	0.000200	mg/L		01/13/14 13:39	01/14/14 17:34	1
2-Nitrophenol	0.000220	U	0.000500	0.000220	mg/L		01/13/14 13:39	01/14/14 17:34	1
4-Nitrophenol	0.000330	U	0.00100	0.000330	mg/L		01/13/14 13:39	01/14/14 17:34	1
N-Nitrosodimethylamine	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 17:34	1
N-Nitrosodi-n-propylamine	0.000240	U	0.000500	0.000240	mg/L		01/13/14 13:39	01/14/14 17:34	1
N-Nitrosodiphenylamine	0.000330	U	0.000500	0.000330	mg/L		01/13/14 13:39	01/14/14 17:34	1
Pentachlorophenol	0.000960	U	0.00100	0.000960	mg/L		01/13/14 13:39	01/14/14 17:34	1
Phenanthrene	0.000290	U	0.000500	0.000290	mg/L		01/13/14 13:39	01/14/14 17:34	1
Phenol	0.000140	U	0.000500	0.000140	mg/L		01/13/14 13:39	01/14/14 17:34	1
Pyrene	0.000330	U	0.000500	0.000330	mg/L		01/13/14 13:39	01/14/14 17:34	1
1,2,4-Trichlorobenzene	0.000160	U	0.000500	0.000160	mg/L		01/13/14 13:39	01/14/14 17:34	1
2,6-Dinitrotoluene	0.000290	U	0.000500	0.000290	mg/L		01/13/14 13:39	01/14/14 17:34	1
2,4,5-Trichlorophenol	0.000290	U	0.000500	0.000290	mg/L		01/13/14 13:39	01/14/14 17:34	1
bis (2-Chloroisopropyl) ether	0.000180	U	0.000500	0.000180	mg/L		01/13/14 13:39	01/14/14 17:34	1
2,4,6-Trichlorophenol	0.000330	U	0.000500	0.000330	mg/L		01/13/14 13:39	01/14/14 17:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*85*		*47 - 120*	*01/13/14 13:39*	*01/14/14 17:34*	*1*
2-Fluorophenol	*66*		*18 - 120*	*01/13/14 13:39*	*01/14/14 17:34*	*1*
2-Fluorobiphenyl	*79*		*43 - 120*	*01/13/14 13:39*	*01/14/14 17:34*	*1*
Terphenyl-d14	*85*		*33 - 141*	*01/13/14 13:39*	*01/14/14 17:34*	*1*
Terphenyl-d14	*85*		*33 - 141*	*01/13/14 13:39*	*01/14/14 17:34*	*1*
2,4,6-Tribromophenol	*63*		*44 - 123*	*01/13/14 13:39*	*01/14/14 17:34*	*1*

Lab Sample ID: LCS 600-124830/2-A
Matrix: Water
Analysis Batch: 125073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124830

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.00800	0.006507		mg/L		81	47 - 145
Acenaphthylene	0.00800	0.006408		mg/L		80	35 - 135
Anthracene	0.00800	0.006271		mg/L		78	53 - 124
Benzidine	0.0400	0.0179	U *	mg/L		0	10 - 120
Benzo[a]anthracene	0.00800	0.007220		mg/L		90	53 - 122
Benzo[b]fluoranthene	0.00800	0.007737		mg/L		97	53 - 131
Benzo[a]pyrene	0.00800	0.007051		mg/L		88	50 - 124
Benzo[g,h,i]perylene	0.00800	0.006832		mg/L		85	46 - 133
Benzo[k]fluoranthene	0.00800	0.005927		mg/L		74	46 - 130
Bis(2-chloroethoxy)methane	0.00800	0.006630		mg/L		83	42 - 119
Bis(2-chloroethyl)ether	0.00800	0.006034		mg/L		75	40 - 112
Bis(2-ethylhexyl) phthalate	0.00800	0.007574		mg/L		95	47 - 132
4-Bromophenyl phenyl ether	0.00800	0.006632		mg/L		83	46 - 129
Butyl benzyl phthalate	0.00800	0.007543		mg/L		94	50 - 126
Carbazole	0.00800	0.007474		mg/L		93	42 - 169

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 600-124830/2-A
Matrix: Water
Analysis Batch: 125073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124830

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	0.00800	0.006885		mg/L		86	19 - 129
2-Chloronaphthalene	0.00800	0.006600		mg/L		82	43 - 120
4-Chlorophenyl phenyl ether	0.00800	0.006597		mg/L		82	48 - 125
Chrysene	0.00800	0.006589		mg/L		82	49 - 124
Dibenz(a,h)anthracene	0.00800	0.006676		mg/L		83	42 - 134
Dibenzofuran	0.00800	0.006521		mg/L		82	46 - 123
1,2-Dichlorobenzene	0.00800	0.006381		mg/L		80	40 - 121
1,3-Dichlorobenzene	0.00800	0.006415		mg/L		80	39 - 122
1,4-Dichlorobenzene	0.00800	0.006521		mg/L		82	45 - 124
3,3'-Dichlorobenzidine	0.00800	0.007135		mg/L		89	38 - 168
Diethyl phthalate	0.00800	0.007336		mg/L		92	51 - 123
Dimethyl phthalate	0.00800	0.006767		mg/L		85	49 - 121
Di-n-butyl phthalate	0.00800	0.007188		mg/L		90	54 - 138
2,4-Dinitrotoluene	0.00800	0.006786		mg/L		85	43 - 128
Di-n-octyl phthalate	0.00800	0.007260		mg/L		91	27 - 157
Fluoranthene	0.00800	0.007001		mg/L		88	53 - 127
Fluorene	0.00800	0.006562		mg/L		82	48 - 127
Hexachlorobenzene	0.00800	0.006285		mg/L		79	46 - 129
Hexachlorobutadiene	0.00800	0.006477		mg/L		81	32 - 143
Hexachlorocyclopentadiene	0.00800	0.004969		mg/L		62	21 - 126
Hexachloroethane	0.00800	0.006387		mg/L		80	43 - 118
Benzyl alcohol	0.00800	0.004059		mg/L		51	39 - 115
Indeno[1,2,3-cd]pyrene	0.00800	0.006529		mg/L		82	45 - 124
4-Chloro-3-methylphenol	0.00800	0.006671		mg/L		83	44 - 131
Isophorone	0.00800	0.006441		mg/L		81	42 - 116
2-Chlorophenol	0.00800	0.006862		mg/L		86	23 - 134
2-Methylnaphthalene	0.00800	0.006639		mg/L		83	40 - 121
2-Methylphenol	0.00800	0.006945		mg/L		87	34 - 109
3 & 4 Methylphenol	0.00800	0.006863		mg/L		86	27 - 113
2,4-Dichlorophenol	0.00800	0.006831		mg/L		85	39 - 118
Naphthalene	0.00800	0.006608		mg/L		83	39 - 120
2,4-Dimethylphenol	0.00800	0.007659		mg/L		96	36 - 109
2-Nitroaniline	0.00800	0.006606		mg/L		83	42 - 130
4,6-Dinitro-2-methylphenol	0.0160	0.01177		mg/L		74	24 - 122
2,4-Dinitrophenol	0.0160	0.01065		mg/L		67	23 - 130
3-Nitroaniline	0.00800	0.01111	*	mg/L		139	47 - 138
4-Nitroaniline	0.00800	0.007062		mg/L		88	32 - 139
Nitrobenzene	0.00800	0.006907		mg/L		86	42 - 119
2-Nitrophenol	0.00800	0.006925		mg/L		87	40 - 121
4-Nitrophenol	0.0160	0.01013		mg/L		63	14 - 132
N-Nitrosodimethylamine	0.00800	0.005983		mg/L		75	26 - 104
N-Nitrosodi-n-propylamine	0.00800	0.006810		mg/L		85	39 - 124
N-Nitrosodiphenylamine	0.00800	0.007021		mg/L		88	43 - 107
Pentachlorophenol	0.0160	0.01010		mg/L		63	9 - 147
Phenanthrene	0.00800	0.006916		mg/L		86	52 - 121
Phenol	0.00800	0.004895		mg/L		61	11 - 112
Pyrene	0.00800	0.006984		mg/L		87	49 - 121
1,2,4-Trichlorobenzene	0.00800	0.006518		mg/L		81	38 - 118

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 600-124830/2-A
Matrix: Water
Analysis Batch: 125073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124830

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,6-Dinitrotoluene	0.00800	0.006610		mg/L		83	45 - 122
2,4,5-Trichlorophenol	0.00800	0.006677		mg/L		83	38 - 145
bis (2-Chloroisopropyl) ether	0.00800	0.006734		mg/L		84	41 - 111
2,4,6-Trichlorophenol	0.00800	0.006190		mg/L		77	39 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*90*		*47 - 120*
2-Fluorophenol	*73*		*18 - 120*
2-Fluorobiphenyl	*85*		*43 - 120*
Terphenyl-d14	*88*		*33 - 141*
2,4,6-Tribromophenol	*83*		*44 - 123*
Phenol-d5 (Surr)	*63*		*12 - 128*

Lab Sample ID: LCS 600-124830/3-A
Matrix: Water
Analysis Batch: 125073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124830

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*92*		*47 - 120*
2-Fluorophenol	*65*		*18 - 120*
2-Fluorobiphenyl	*84*		*43 - 120*
Terphenyl-d14	*87*		*33 - 141*
2,4,6-Tribromophenol	*70*		*44 - 123*
Phenol-d5 (Surr)	*55*		*12 - 128*

Lab Sample ID: LCSD 600-124830/4-A
Matrix: Water
Analysis Batch: 125073

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 124830

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*89*		*47 - 120*
2-Fluorophenol	*62*		*18 - 120*
2-Fluorobiphenyl	*82*		*43 - 120*
Terphenyl-d14	*90*		*33 - 141*
2,4,6-Tribromophenol	*71*		*44 - 123*
Phenol-d5 (Surr)	*51*		*12 - 128*

Lab Sample ID: MB 600-125220/1-A
Matrix: Solid
Analysis Batch: 125471

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 125220

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00288	U	0.0333	0.00288	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Acenaphthylene	0.00200	U	0.0333	0.00200	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Anthracene	0.00256	U	0.0333	0.00256	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Benzidine	0.0180	U	0.167	0.0180	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Benzo[a]anthracene	0.00276	U	0.0333	0.00276	mg/Kg		01/17/14 13:18	01/20/14 19:49	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 600-125220/1-A
Matrix: Solid
Analysis Batch: 125471

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 125220

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	0.00344	U	0.0333	0.00344	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Benzo[a]pyrene	0.00322	U	0.0333	0.00322	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Benzo[g,h,i]perylene	0.0101	U	0.0333	0.0101	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Benzo[k]fluoranthene	0.00298	U	0.0333	0.00298	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Bis(2-chloroethoxy)methane	0.00284	U	0.0333	0.00284	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Bis(2-chloroethyl)ether	0.00330	U	0.0333	0.00330	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Bis(2-ethylhexyl) phthalate	0.0107	U	0.133	0.0107	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
4-Bromophenyl phenyl ether	0.00568	U	0.0333	0.00568	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Butyl benzyl phthalate	0.01363	J	0.133	0.0124	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Carbazole	0.00624	U	0.0333	0.00624	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
4-Chloroaniline	0.0116	U	0.0333	0.0116	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2-Chloronaphthalene	0.00242	U	0.0333	0.00242	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
4-Chlorophenyl phenyl ether	0.00360	U	0.0333	0.00360	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Chrysene	0.00204	U	0.0333	0.00204	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Dibenz(a,h)anthracene	0.00726	U	0.0333	0.00726	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Dibenzofuran	0.00356	U	0.0333	0.00356	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
1,2-Dichlorobenzene	0.00604	U	0.0333	0.00604	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
1,3-Dichlorobenzene	0.00308	U	0.0333	0.00308	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
1,4-Dichlorobenzene	0.00450	U	0.0333	0.00450	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
3,3'-Dichlorobenzidine	0.0203	U	0.0333	0.0203	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Diethyl phthalate	0.09509	J	0.133	0.0169	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Dimethyl phthalate	0.00978	U	0.133	0.00978	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Di-n-butyl phthalate	0.02540	J	0.133	0.00518	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2,4-Dinitrotoluene	0.00722	U	0.0333	0.00722	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Di-n-octyl phthalate	0.00380	U	0.133	0.00380	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Fluoranthene	0.00622	U	0.0333	0.00622	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Fluorene	0.00472	U	0.0333	0.00472	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Hexachlorobenzene	0.00304	U	0.0333	0.00304	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Hexachlorobutadiene	0.00384	U	0.0333	0.00384	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Hexachlorocyclopentadiene	0.00922	U	0.0333	0.00922	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Hexachloroethane	0.00462	U	0.0333	0.00462	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Benzyl alcohol	0.0117	U	0.0333	0.0117	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Indeno[1,2,3-cd]pyrene	0.00700	U	0.0333	0.00700	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
4-Chloro-3-methylphenol	0.0312	U	0.0333	0.0312	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Isophorone	0.00200	U	0.0333	0.00200	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2-Chlorophenol	0.00394	U	0.0333	0.00394	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2-Methylnaphthalene	0.00548	U	0.0333	0.00548	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2-Methylphenol	0.00646	U	0.0333	0.00646	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
3 & 4 Methylphenol	0.00558	U	0.0667	0.00558	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2,4-Dichlorophenol	0.00774	U	0.0333	0.00774	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Naphthalene	0.00270	U	0.0333	0.00270	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2,4-Dimethylphenol	0.0172	U	0.0333	0.0172	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2-Nitroaniline	0.00978	U	0.0333	0.00978	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
4,6-Dinitro-2-methylphenol	0.00996	U	0.0333	0.00996	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2,4-Dinitrophenol	0.00944	U	0.200	0.00944	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
3-Nitroaniline	0.0143	U	0.0333	0.0143	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
4-Nitroaniline	0.0223	U	0.0333	0.0223	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Nitrobenzene	0.00592	U	0.0333	0.00592	mg/Kg		01/17/14 13:18	01/20/14 19:49	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 600-125220/1-A
Matrix: Solid
Analysis Batch: 125471

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 125220

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	0.00778	U	0.0333	0.00778	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
4-Nitrophenol	0.0102	U	0.0333	0.0102	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
N-Nitrosodimethylamine	0.00838	U	0.0333	0.00838	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
N-Nitrosodi-n-propylamine	0.00444	U	0.0333	0.00444	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
N-Nitrosodiphenylamine	0.00378	U	0.0333	0.00378	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Pentachlorophenol	0.00800	U	0.334	0.00800	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Phenanthrene	0.00990	U	0.0333	0.00990	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Phenol	0.00848	U	0.0333	0.00848	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Pyrene	0.00366	U	0.0333	0.00366	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
1,2,4-Trichlorobenzene	0.00420	U	0.0333	0.00420	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2,6-Dinitrotoluene	0.00590	U	0.0333	0.00590	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2,4,5-Trichlorophenol	0.0200	U	0.0333	0.0200	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
bis (2-Chloroisopropyl) ether	0.0177	U	0.0333	0.0177	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2,4,6-Trichlorophenol	0.00536	U	0.0333	0.00536	mg/Kg		01/17/14 13:18	01/20/14 19:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*69*		*10 - 155*	*01/17/14 13:18*	*01/20/14 19:49*	*1*
2-Fluorophenol	*72*		*25 - 132*	*01/17/14 13:18*	*01/20/14 19:49*	*1*
2-Fluorobiphenyl	*68*		*38 - 127*	*01/17/14 13:18*	*01/20/14 19:49*	*1*
Terphenyl-d14	*74*		*53 - 134*	*01/17/14 13:18*	*01/20/14 19:49*	*1*
2,4,6-Tribromophenol	*30*		*10 - 148*	*01/17/14 13:18*	*01/20/14 19:49*	*1*
Phenol-d5 (Surr)	*64*		*27 - 123*	*01/17/14 13:18*	*01/20/14 19:49*	*1*

Lab Sample ID: LCS 600-125220/2-A
Matrix: Solid
Analysis Batch: 125471

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125220

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.667	0.5160		mg/Kg		77	58 - 130
Acenaphthylene	0.667	0.5289		mg/Kg		79	57 - 130
Anthracene	0.667	0.5160		mg/Kg		77	58 - 130
Benzidine	3.33	1.296		mg/Kg		39	10 - 145
Benzo[a]anthracene	0.667	0.5639		mg/Kg		85	61 - 132
Benzo[b]fluoranthene	0.667	0.5166		mg/Kg		77	54 - 130
Benzo[a]pyrene	0.667	0.5856		mg/Kg		88	59 - 130
Benzo[g,h,i]perylene	0.667	0.5746		mg/Kg		86	58 - 150
Benzo[k]fluoranthene	0.667	0.5204		mg/Kg		78	56 - 136
Bis(2-chloroethoxy)methane	0.667	0.5066		mg/Kg		76	42 - 139
Bis(2-chloroethyl)ether	0.667	0.5044		mg/Kg		76	68 - 130
Bis(2-ethylhexyl) phthalate	0.667	0.6094		mg/Kg		91	68 - 133
4-Bromophenyl phenyl ether	0.667	0.4829		mg/Kg		72	69 - 130
Butyl benzyl phthalate	0.667	0.5929		mg/Kg		89	70 - 130
Carbazole	0.667	0.5852		mg/Kg		88	61 - 149
4-Chloroaniline	0.667	0.4143		mg/Kg		62	18 - 130
2-Chloronaphthalene	0.667	0.5161		mg/Kg		77	62 - 130
4-Chlorophenyl phenyl ether	0.667	0.5002		mg/Kg		75	46 - 130
Chrysene	0.667	0.5256		mg/Kg		79	64 - 130
Dibenz(a,h)anthracene	0.667	0.5362		mg/Kg		80	58 - 138

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 600-125220/2-A
Matrix: Solid
Analysis Batch: 125471

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125220

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibenzofuran	0.667	0.5231		mg/Kg		78	51 - 130
1,2-Dichlorobenzene	0.667	0.4887		mg/Kg		73	55 - 130
1,3-Dichlorobenzene	0.667	0.4753		mg/Kg		71	57 - 130
1,4-Dichlorobenzene	0.667	0.4531		mg/Kg		68	58 - 130
3,3'-Dichlorobenzidine	0.667	0.5417		mg/Kg		81	10 - 150
Diethyl phthalate	0.667	0.5703		mg/Kg		86	59 - 130
Dimethyl phthalate	0.667	0.5248		mg/Kg		79	68 - 130
Di-n-butyl phthalate	0.667	0.5866		mg/Kg		88	70 - 130
2,4-Dinitrotoluene	0.667	0.5026		mg/Kg		75	51 - 150
Di-n-octyl phthalate	0.667	0.5830		mg/Kg		87	68 - 131
Fluoranthene	0.667	0.5172		mg/Kg		78	63 - 130
Fluorene	0.667	0.5171		mg/Kg		78	52 - 130
Hexachlorobenzene	0.667	0.4537		mg/Kg		68	66 - 130
Hexachlorobutadiene	0.667	0.4490		mg/Kg		67	62 - 130
Hexachlorocyclopentadiene	0.667	0.4301		mg/Kg		65	24 - 130
Hexachloroethane	0.667	0.4859		mg/Kg		73	68 - 130
Benzyl alcohol	0.667	0.6353		mg/Kg		95	31 - 137
Indeno[1,2,3-cd]pyrene	0.667	0.5431		mg/Kg		81	56 - 150
4-Chloro-3-methylphenol	0.667	0.5005		mg/Kg		75	51 - 130
Isophorone	0.667	0.5099		mg/Kg		76	67 - 130
2-Chlorophenol	0.667	0.5282		mg/Kg		79	63 - 130
2-Methylnaphthalene	0.667	0.4902		mg/Kg		74	51 - 130
2-Methylphenol	0.667	0.5347		mg/Kg		80	57 - 130
3 & 4 Methylphenol	0.667	0.5593		mg/Kg		84	46 - 130
2,4-Dichlorophenol	0.667	0.5026		mg/Kg		75	38 - 130
Naphthalene	0.667	0.4776		mg/Kg		72	59 - 130
2,4-Dimethylphenol	0.667	0.4974		mg/Kg		75	55 - 130
2-Nitroaniline	0.667	0.5117		mg/Kg		77	67 - 150
4,6-Dinitro-2-methylphenol	1.33	1.047		mg/Kg		79	10 - 130
2,4-Dinitrophenol	1.33	0.9387		mg/Kg		70	24 - 143
3-Nitroaniline	0.667	0.4892		mg/Kg		73	24 - 150
4-Nitroaniline	0.667	0.5003		mg/Kg		75	45 - 160
Nitrobenzene	0.667	0.4802		mg/Kg		72	60 - 130
2-Nitrophenol	0.667	0.5539		mg/Kg		83	54 - 130
4-Nitrophenol	1.33	1.015		mg/Kg		76	36 - 149
N-Nitrosodimethylamine	0.667	0.4881		mg/Kg		73	54 - 130
N-Nitrosodi-n-propylamine	0.667	0.5284		mg/Kg		79	70 - 130
N-Nitrosodiphenylamine	0.667	0.5135		mg/Kg		77	70 - 130
Pentachlorophenol	1.33	0.8711		mg/Kg		65	43 - 130
Phenanthrene	0.667	0.5032		mg/Kg		75	57 - 130
Phenol	0.667	0.4584		mg/Kg		69	56 - 130
Pyrene	0.667	0.5191		mg/Kg		78	60 - 135
1,2,4-Trichlorobenzene	0.667	0.4477		mg/Kg		67	55 - 130
2,6-Dinitrotoluene	0.667	0.5138		mg/Kg		77	47 - 130
2,4,5-Trichlorophenol	0.667	0.5451		mg/Kg		82	56 - 130
bis (2-Chloroisopropyl) ether	0.667	0.4332		mg/Kg		65	63 - 142
2,4,6-Trichlorophenol	0.667	0.5172		mg/Kg		78	45 - 130

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 600-125220/2-A
Matrix: Solid
Analysis Batch: 125471

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125220

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*76*		*10 - 155*
2-Fluorophenol	*78*		*25 - 132*
2-Fluorobiphenyl	*77*		*38 - 127*
Terphenyl-d14	*79*		*53 - 134*
2,4,6-Tribromophenol	*70*		*10 - 148*
Phenol-d5 (Surr)	*81*		*27 - 123*

Lab Sample ID: 600-85272-1 MS
Matrix: Solid
Analysis Batch: 125471

Client Sample ID: 2013-FFTA-03 (0-2')
Prep Type: Total/NA
Prep Batch: 125220

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.00376	U	0.870	1.067		mg/Kg	☼	123	25 - 134
Acenaphthylene	0.00261	U	0.870	1.091		mg/Kg	☼	125	32 - 137
Anthracene	0.00480	J	0.870	1.084	N	mg/Kg	☼	124	35 - 115
Benzidine	0.0235	U	4.35	2.758		mg/Kg	☼	63	0 - 150
Benzo[a]anthracene	0.00360	U	0.870	1.153	N	mg/Kg	☼	133	38 - 128
Benzo[b]fluoranthene	0.00449	U	0.870	1.237	N	mg/Kg	☼	142	40 - 131
Benzo[a]pyrene	0.00420	U	0.870	1.213	N	mg/Kg	☼	139	30 - 130
Benzo[g,h,i]perylene	0.0132	U	0.870	1.211	N	mg/Kg	☼	139	34 - 110
Benzo[k]fluoranthene	0.00389	U	0.870	1.248	N	mg/Kg	☼	143	33 - 137
Bis(2-chloroethoxy)methane	0.00370	U	0.870	1.058	N	mg/Kg	☼	122	33 - 119
Bis(2-chloroethyl)ether	0.00431	U	0.870	1.055	N	mg/Kg	☼	121	28 - 120
Bis(2-ethylhexyl) phthalate	0.0146	J	0.870	1.242	N	mg/Kg	☼	141	44 - 139
4-Bromophenyl phenyl ether	0.00741	U	0.870	1.025		mg/Kg	☼	118	41 - 123
Butyl benzyl phthalate	0.0259	J b	0.870	1.242	N	mg/Kg	☼	140	41 - 139
Carbazole	0.00814	U	0.870	1.237		mg/Kg	☼	142	7 - 163
4-Chloroaniline	0.0152	U	0.870	0.8861		mg/Kg	☼	102	15 - 112
2-Chloronaphthalene	0.00316	U	0.870	1.079		mg/Kg	☼	124	34 - 126
4-Chlorophenyl phenyl ether	0.00470	U	0.870	1.015		mg/Kg	☼	117	32 - 132
Chrysene	0.00266	U	0.870	1.075		mg/Kg	☼	123	36 - 130
Dibenz(a,h)anthracene	0.00947	U	0.870	1.165	N	mg/Kg	☼	134	19 - 125
Dibenzofuran	0.00464	U	0.870	1.055		mg/Kg	☼	121	35 - 125
1,2-Dichlorobenzene	0.00788	U	0.870	0.9955		mg/Kg	☼	114	30 - 130
1,3-Dichlorobenzene	0.00402	U	0.870	0.9588		mg/Kg	☼	110	30 - 130
1,4-Dichlorobenzene	0.00587	U	0.870	0.8967		mg/Kg	☼	103	30 - 130
3,3'-Dichlorobenzidine	0.0265	U	0.870	1.080		mg/Kg	☼	124	14 - 132
Diethyl phthalate	0.193	b	0.870	1.105		mg/Kg	☼	105	41 - 129
Dimethyl phthalate	0.143	J	0.870	1.190		mg/Kg	☼	120	40 - 130
Di-n-butyl phthalate	0.0216	J b	0.870	1.214	N	mg/Kg	☼	137	41 - 126
2,4-Dinitrotoluene	0.00942	U	0.870	1.073		mg/Kg	☼	123	10 - 129
Di-n-octyl phthalate	0.00496	U	0.870	1.196		mg/Kg	☼	137	36 - 152
Fluoranthene	0.0110	J	0.870	1.089		mg/Kg	☼	124	37 - 132
Fluorene	0.00616	U	0.870	1.074	N	mg/Kg	☼	123	36 - 122
Hexachlorobenzene	0.00397	U	0.870	0.9976		mg/Kg	☼	115	40 - 123
Hexachlorobutadiene	0.00501	U	0.870	0.9218		mg/Kg	☼	106	32 - 124
Hexachlorocyclopentadiene	0.0120	U	0.870	0.9455		mg/Kg	☼	109	10 - 118
Hexachloroethane	0.00603	U	0.870	1.019	N	mg/Kg	☼	117	31 - 113

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: 600-85272-1 MS
Matrix: Solid
Analysis Batch: 125471

Client Sample ID: 2013-FFTA-03 (0-2')
Prep Type: Total/NA
Prep Batch: 125220

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzyl alcohol	0.0152	U	0.870	1.206	N	mg/Kg	☼	139	27 - 128
Indeno[1,2,3-cd]pyrene	0.00913	U	0.870	1.249	N	mg/Kg	☼	144	30 - 112
4-Chloro-3-methylphenol	0.0407	U	0.870	0.9320		mg/Kg	☼	107	26 - 132
Isophorone	0.00261	U	0.870	1.041		mg/Kg	☼	120	33 - 125
2-Chlorophenol	0.00514	U	0.870	1.075		mg/Kg	☼	124	21 - 130
2-Methylnaphthalene	0.00715	U	0.870	1.057		mg/Kg	☼	121	32 - 136
2-Methylphenol	0.00843	U	0.870	1.027		mg/Kg	☼	118	26 - 125
3 & 4 Methylphenol	0.00728	U	0.870	1.075		mg/Kg	☼	124	30 - 130
2,4-Dichlorophenol	0.0101	U	0.870	1.014		mg/Kg	☼	116	35 - 121
Naphthalene	0.00410	J	0.870	1.001	N	mg/Kg	☼	115	30 - 112
2,4-Dimethylphenol	0.0224	U	0.870	1.058		mg/Kg	☼	122	29 - 122
2-Nitroaniline	0.0128	U	0.870	1.032		mg/Kg	☼	119	38 - 130
4,6-Dinitro-2-methylphenol	0.0130	U	1.74	2.095	N	mg/Kg	☼	120	10 - 104
2,4-Dinitrophenol	0.0123	U	1.74	1.882		mg/Kg	☼	108	10 - 121
3-Nitroaniline	0.0187	U	0.870	1.066		mg/Kg	☼	122	22 - 124
4-Nitroaniline	0.0291	U	0.870	1.105	N	mg/Kg	☼	127	21 - 122
Nitrobenzene	0.00772	U	0.870	1.043	N	mg/Kg	☼	120	29 - 118
2-Nitrophenol	0.0101	U	0.870	1.169	N	mg/Kg	☼	134	30 - 130
4-Nitrophenol	0.0133	U	1.74	2.203	N	mg/Kg	☼	127	25 - 122
N-Nitrosodimethylamine	0.0109	U	0.870	0.9867		mg/Kg	☼	113	30 - 130
N-Nitrosodi-n-propylamine	0.00579	U	0.870	1.053	N	mg/Kg	☼	121	34 - 115
N-Nitrosodiphenylamine	0.00493	U	0.870	1.130	N	mg/Kg	☼	130	28 - 106
Pentachlorophenol	0.0104	U	1.74	1.975		mg/Kg	☼	113	25 - 124
Phenanthrene	0.0129	U	0.870	1.078		mg/Kg	☼	124	26 - 126
Phenol	0.0111	U	0.870	1.049		mg/Kg	☼	120	31 - 121
Pyrene	0.00630	J	0.870	1.076		mg/Kg	☼	123	28 - 138
1,2,4-Trichlorobenzene	0.00548	U	0.870	0.9635	N	mg/Kg	☼	111	38 - 107
2,6-Dinitrotoluene	0.00770	U	0.870	1.093	N	mg/Kg	☼	126	30 - 124
2,4,5-Trichlorophenol	0.0261	U	0.870	1.146	N	mg/Kg	☼	132	30 - 130
bis (2-Chloroisopropyl) ether	0.0231	U	0.870	0.8548		mg/Kg	☼	98	50 - 130
2,4,6-Trichlorophenol	0.00699	U	0.870	1.048		mg/Kg	☼	120	30 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*122*		*10 - 155*
2-Fluorophenol	*130*		*25 - 132*
2-Fluorobiphenyl	*123*		*38 - 127*
Terphenyl-d14	*132*		*53 - 134*
2,4,6-Tribromophenol	*124*		*10 - 148*
Phenol-d5 (Surr)	*125*	*X*	*27 - 123*

Lab Sample ID: 600-85272-1 MSD
Matrix: Solid
Analysis Batch: 125471

Client Sample ID: 2013-FFTA-03 (0-2')
Prep Type: Total/NA
Prep Batch: 125220

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	0.00376	U	0.868	0.9509		mg/Kg	☼	110	25 - 134	12	30
Acenaphthylene	0.00261	U	0.868	0.9772		mg/Kg	☼	113	32 - 137	11	30
Anthracene	0.00480	J	0.868	1.027	N	mg/Kg	☼	118	35 - 115	5	30

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: 600-85272-1 MSD
Matrix: Solid
Analysis Batch: 125471

Client Sample ID: 2013-FFTA-03 (0-2')
Prep Type: Total/NA
Prep Batch: 125220

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzidine	0.0235	U	4.34	2.359		mg/Kg	☼	54	0 - 150	16	40
Benzo[a]anthracene	0.00360	U	0.868	1.122	N	mg/Kg	☼	129	38 - 128	3	30
Benzo[b]fluoranthene	0.00449	U	0.868	1.154	N	mg/Kg	☼	133	40 - 131	7	30
Benzo[a]pyrene	0.00420	U	0.868	1.124		mg/Kg	☼	129	30 - 130	8	30
Benzo[g,h,i]perylene	0.0132	U	0.868	1.115	N	mg/Kg	☼	128	34 - 110	8	30
Benzo[k]fluoranthene	0.00389	U	0.868	1.110		mg/Kg	☼	128	33 - 137	12	30
Bis(2-chloroethoxy)methane	0.00370	U	0.868	0.9308		mg/Kg	☼	107	33 - 119	13	30
Bis(2-chloroethyl)ether	0.00431	U	0.868	0.9241		mg/Kg	☼	106	28 - 120	13	30
Bis(2-ethylhexyl) phthalate	0.0146	J	0.868	1.211		mg/Kg	☼	138	44 - 139	3	30
4-Bromophenyl phenyl ether	0.00741	U	0.868	0.8932		mg/Kg	☼	103	41 - 123	14	30
Butyl benzyl phthalate	0.0259	J b	0.868	1.167		mg/Kg	☼	132	41 - 139	6	30
Carbazole	0.00814	U	0.868	1.142		mg/Kg	☼	132	7 - 163	8	30
4-Chloroaniline	0.0152	U	0.868	0.7740		mg/Kg	☼	89	15 - 112	14	30
2-Chloronaphthalene	0.00316	U	0.868	0.9778		mg/Kg	☼	113	34 - 126	10	30
4-Chlorophenyl phenyl ether	0.00470	U	0.868	0.9465		mg/Kg	☼	109	32 - 132	7	30
Chrysene	0.00266	U	0.868	1.028		mg/Kg	☼	118	36 - 130	4	30
Dibenz(a,h)anthracene	0.00947	U	0.868	1.004		mg/Kg	☼	116	19 - 125	15	30
Dibenzofuran	0.00464	U	0.868	0.9669		mg/Kg	☼	111	35 - 125	9	30
1,2-Dichlorobenzene	0.00788	U	0.868	0.8592		mg/Kg	☼	99	30 - 130	15	30
1,3-Dichlorobenzene	0.00402	U	0.868	0.8491		mg/Kg	☼	98	30 - 130	12	30
1,4-Dichlorobenzene	0.00587	U	0.868	0.7827		mg/Kg	☼	90	30 - 130	14	30
3,3'-Dichlorobenzidine	0.0265	U	0.868	1.124		mg/Kg	☼	129	14 - 132	4	30
Diethyl phthalate	0.193	b	0.868	0.9912		mg/Kg	☼	92	41 - 129	11	30
Dimethyl phthalate	0.143	J	0.868	1.064		mg/Kg	☼	106	40 - 130	11	30
Di-n-butyl phthalate	0.0216	J b	0.868	1.097		mg/Kg	☼	124	41 - 126	10	30
2,4-Dinitrotoluene	0.00942	U	0.868	0.9773		mg/Kg	☼	113	10 - 129	9	30
Di-n-octyl phthalate	0.00496	U	0.868	1.096		mg/Kg	☼	126	36 - 152	9	30
Fluoranthene	0.0110	J	0.868	1.010		mg/Kg	☼	115	37 - 132	8	30
Fluorene	0.00616	U	0.868	0.9730		mg/Kg	☼	112	36 - 122	10	30
Hexachlorobenzene	0.00397	U	0.868	0.8802		mg/Kg	☼	101	40 - 123	13	30
Hexachlorobutadiene	0.00501	U	0.868	0.8110		mg/Kg	☼	93	32 - 124	13	30
Hexachlorocyclopentadiene	0.0120	U	0.868	0.7295		mg/Kg	☼	84	10 - 118	26	30
Hexachloroethane	0.00603	U	0.868	0.9146		mg/Kg	☼	105	31 - 113	11	30
Benzyl alcohol	0.0152	U	0.868	1.007		mg/Kg	☼	116	27 - 128	18	30
Indeno[1,2,3-cd]pyrene	0.00913	U	0.868	1.102	N	mg/Kg	☼	127	30 - 112	12	30
4-Chloro-3-methylphenol	0.0407	U	0.868	0.8746		mg/Kg	☼	101	26 - 132	6	30
Isophorone	0.00261	U	0.868	0.9326		mg/Kg	☼	107	33 - 125	11	30
2-Chlorophenol	0.00514	U	0.868	0.9619		mg/Kg	☼	111	21 - 130	11	30
2-Methylnaphthalene	0.00715	U	0.868	0.8927		mg/Kg	☼	103	32 - 136	17	30
2-Methylphenol	0.00843	U	0.868	0.9610		mg/Kg	☼	111	26 - 125	7	30
3 & 4 Methylphenol	0.00728	U	0.868	0.9509		mg/Kg	☼	110	30 - 130	12	30
2,4-Dichlorophenol	0.0101	U	0.868	0.8697		mg/Kg	☼	100	35 - 121	15	30
Naphthalene	0.00410	J	0.868	0.8887		mg/Kg	☼	102	30 - 112	12	30
2,4-Dimethylphenol	0.0224	U	0.868	0.9871		mg/Kg	☼	114	29 - 122	7	30
2-Nitroaniline	0.0128	U	0.868	0.9656		mg/Kg	☼	111	38 - 130	7	30
4,6-Dinitro-2-methylphenol	0.0130	U	1.74	1.845	N	mg/Kg	☼	106	10 - 104	13	30
2,4-Dinitrophenol	0.0123	U	1.74	1.625		mg/Kg	☼	94	10 - 121	15	30
3-Nitroaniline	0.0187	U	0.868	1.000		mg/Kg	☼	115	22 - 124	6	30

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: 600-85272-1 MSD
Matrix: Solid
Analysis Batch: 125471

Client Sample ID: 2013-FFTA-03 (0-2')
Prep Type: Total/NA
Prep Batch: 125220

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4-Nitroaniline	0.0291	U	0.868	0.9460		mg/Kg	☼	109	21 - 122	16	30
Nitrobenzene	0.00772	U	0.868	0.8580		mg/Kg	☼	99	29 - 118	19	30
2-Nitrophenol	0.0101	U	0.868	0.9918		mg/Kg	☼	114	30 - 130	16	30
4-Nitrophenol	0.0133	U	1.74	1.810		mg/Kg	☼	104	25 - 122	20	30
N-Nitrosodimethylamine	0.0109	U	0.868	0.8832		mg/Kg	☼	102	30 - 130	11	30
N-Nitrosodi-n-propylamine	0.00579	U	0.868	0.9333		mg/Kg	☼	108	34 - 115	12	30
N-Nitrosodiphenylamine	0.00493	U	0.868	1.015	N	mg/Kg	☼	117	28 - 106	11	30
Pentachlorophenol	0.0104	U	1.74	1.876		mg/Kg	☼	108	25 - 124	5	30
Phenanthrene	0.0129	U	0.868	0.9820		mg/Kg	☼	113	26 - 126	9	30
Phenol	0.0111	U	0.868	0.8588		mg/Kg	☼	99	31 - 121	20	30
Pyrene	0.00630	J	0.868	1.005		mg/Kg	☼	115	28 - 138	7	30
1,2,4-Trichlorobenzene	0.00548	U	0.868	0.8549		mg/Kg	☼	98	38 - 107	12	30
2,6-Dinitrotoluene	0.00770	U	0.868	1.019		mg/Kg	☼	117	30 - 124	7	30
2,4,5-Trichlorophenol	0.0261	U	0.868	1.014		mg/Kg	☼	117	30 - 130	12	30
bis (2-Chloroisopropyl) ether	0.0231	U	0.868	0.7534		mg/Kg	☼	87	50 - 130	13	30
2,4,6-Trichlorophenol	0.00699	U	0.868	0.9288		mg/Kg	☼	107	30 - 130	12	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*111*		*10 - 155*
2-Fluorophenol	*121*		*25 - 132*
2-Fluorobiphenyl	*112*		*38 - 127*
Terphenyl-d14	*118*		*53 - 134*
2,4,6-Tribromophenol	*110*		*10 - 148*
Phenol-d5 (Surr)	*109*		*27 - 123*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Lab Sample ID: MB 600-124855/1-A
Matrix: Water
Analysis Batch: 124903

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124855

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	0.830	U	5.00	0.830	mg/L		01/13/14 15:36	01/13/14 16:34	1
>C12-C28	0.960	U	5.00	0.960	mg/L		01/13/14 15:36	01/13/14 16:34	1
>C28-C35	0.960	U	5.00	0.960	mg/L		01/13/14 15:36	01/13/14 16:34	1
C6-C35	1.56	U	5.00	1.56	mg/L		01/13/14 15:36	01/13/14 16:34	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*95*		*70 - 130*	*01/13/14 15:36*	*01/13/14 16:34*	*1*

Lab Sample ID: LCS 600-124855/2-A
Matrix: Water
Analysis Batch: 124903

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124855

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C12	33.3	36.63		mg/L		110	75 - 125
>C12-C28	33.3	35.55		mg/L		107	75 - 125

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Lab Sample ID: LCS 600-124855/2-A
Matrix: Water
Analysis Batch: 124903

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124855

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C35			66.7	72.17		mg/L		108	75 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*126*		*70 - 130*

Lab Sample ID: MB 600-124912/1-A
Matrix: Solid
Analysis Batch: 124998

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124912

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	3.80	U	10.0	3.80	mg/Kg		01/14/14 11:28	01/14/14 14:57	1
>C12-C28	4.06	U	10.0	4.06	mg/Kg		01/14/14 11:28	01/14/14 14:57	1
>C28-C35	4.06	U	10.0	4.06	mg/Kg		01/14/14 11:28	01/14/14 14:57	1
C6-C35	7.48	U	10.0	7.48	mg/Kg		01/14/14 11:28	01/14/14 14:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*88*		*70 - 130*	*01/14/14 11:28*	*01/14/14 14:57*	*1*

Lab Sample ID: LCS 600-124912/2-A
Matrix: Solid
Analysis Batch: 124998

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124912

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
C6-C12			250	246.8		mg/Kg		99	75 - 125		
>C12-C28			250	241.7		mg/Kg		97	75 - 125		
C6-C35			500	488.5		mg/Kg		98	75 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*123*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-124717/1-A
Matrix: Solid
Analysis Batch: 124683

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124717

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.218	U	1.00	0.218	mg/Kg		01/10/14 12:37	01/10/14 15:04	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		01/10/14 12:37	01/10/14 15:04	1
Lead	0.105	U	0.500	0.105	mg/Kg		01/10/14 12:37	01/10/14 15:04	1
Selenium	0.259	U	2.00	0.259	mg/Kg		01/10/14 12:37	01/10/14 15:04	1

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

Lab Sample ID: LCSSRM 600-124717/2-A
Matrix: Solid
Analysis Batch: 124683

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124717

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	63.66		mg/Kg		72.2	45.4 - 231.3
Arsenic	99.6	99.84		mg/Kg		100.2	80.8 - 119.5
Cadmium	182	179.9		mg/Kg		98.8	81.9 - 118.1
Lead	115	110.4		mg/Kg		96.0	81.8 - 119.1
Selenium	150	147.7		mg/Kg		98.5	77.3 - 122.7

Method: 9056 - Anions, Ion Chromatography

Lab Sample ID: MB 600-124938/1-A
Matrix: Solid
Analysis Batch: 125019

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.318	U	5.04	0.318	mg/Kg			01/15/14 03:22	1

Lab Sample ID: LCS 600-124938/2-A
Matrix: Solid
Analysis Batch: 125019

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	199	197.2		mg/Kg		99	90 - 110

Method: Moisture - Percent Moisture

Lab Sample ID: 600-85272-1 DU
Matrix: Solid
Analysis Batch: 124724

Client Sample ID: 2013-FFTA-03 (0-2')
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	23		23		%		0.7	20
Percent Solids	77		77		%		0.2	20

Lab Sample ID: 600-85272-12 DU
Matrix: Solid
Analysis Batch: 124724

Client Sample ID: MW-45 (0-0.5')
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	23		22		%		3	20
Percent Solids	77		78		%		1	20

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85272-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	MQL	MDL	Units	Method
1,1,1-Trichloroethane	0.00500	0.000740	mg/Kg	8260B
1,1,1-Trichloroethane	0.00500	0.000980	mg/L	8260B
1,1,2,2-Tetrachloroethane	0.00500	0.000870	mg/Kg	8260B
1,1,2,2-Tetrachloroethane	0.00500	0.000800	mg/L	8260B
1,1,2-Trichloroethane	0.00500	0.000730	mg/Kg	8260B
1,1,2-Trichloroethane	0.00500	0.000530	mg/L	8260B
1,1-Dichloroethane	0.00500	0.000870	mg/Kg	8260B
1,1-Dichloroethane	0.00500	0.000500	mg/L	8260B
1,1-Dichloroethene	0.00500	0.00122	mg/Kg	8260B
1,1-Dichloroethene	0.00500	0.000760	mg/L	8260B
1,2-Dichloroethane	0.00500	0.000900	mg/Kg	8260B
1,2-Dichloroethane	0.00500	0.00101	mg/L	8260B
1,2-Dichloroethene, Total	0.0100	0.00190	mg/Kg	8260B
1,2-Dichloroethene, Total	0.0100	0.000840	mg/L	8260B
1,2-Dichloropropane	0.00500	0.000710	mg/Kg	8260B
1,2-Dichloropropane	0.00500	0.00141	mg/L	8260B
2-Butanone (MEK)	0.0100	0.00190	mg/Kg	8260B
2-Butanone (MEK)	0.0100	0.00157	mg/L	8260B
2-Hexanone	0.0100	0.00101	mg/Kg	8260B
2-Hexanone	0.0100	0.00142	mg/L	8260B
4-Methyl-2-pentanone (MIBK)	0.0100	0.00147	mg/Kg	8260B
4-Methyl-2-pentanone (MIBK)	0.0100	0.00111	mg/L	8260B
Acetone	0.0100	0.00166	mg/Kg	8260B
Acetone	0.0100	0.00227	mg/L	8260B
Benzene	0.00500	0.000630	mg/Kg	8260B
Benzene	0.00500	0.000560	mg/L	8260B
Bromodichloromethane	0.00500	0.000660	mg/Kg	8260B
Bromodichloromethane	0.00500	0.000760	mg/L	8260B
Bromoform	0.00500	0.00137	mg/Kg	8260B
Bromoform	0.00500	0.000770	mg/L	8260B
Bromomethane	0.0100	0.000830	mg/Kg	8260B
Bromomethane	0.0100	0.00215	mg/L	8260B
Carbon disulfide	0.0100	0.000550	mg/Kg	8260B
Carbon disulfide	0.00500	0.00170	mg/L	8260B
Carbon tetrachloride	0.00500	0.00113	mg/Kg	8260B
Carbon tetrachloride	0.00500	0.000920	mg/L	8260B
Chlorobenzene	0.00500	0.000960	mg/Kg	8260B
Chlorobenzene	0.00500	0.000820	mg/L	8260B
Chlorobromomethane	0.00500	0.00178	mg/Kg	8260B
Chlorobromomethane	0.00500	0.000810	mg/L	8260B
Chloroethane	0.0100	0.00140	mg/Kg	8260B
Chloroethane	0.0100	0.00173	mg/L	8260B
Chloroform	0.00500	0.000660	mg/Kg	8260B
Chloroform	0.00500	0.000820	mg/L	8260B
Chloromethane	0.0100	0.00166	mg/Kg	8260B
Chloromethane	0.0100	0.000850	mg/L	8260B
cis-1,2-Dichloroethene	0.00500	0.000830	mg/Kg	8260B
cis-1,2-Dichloroethene	0.00500	0.000560	mg/L	8260B
cis-1,3-Dichloropropene	0.00500	0.000540	mg/Kg	8260B
cis-1,3-Dichloropropene	0.00500	0.000970	mg/L	8260B
Dibromochloromethane	0.00500	0.000940	mg/Kg	8260B
Dibromochloromethane	0.00500	0.000920	mg/L	8260B

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	MQL	MDL	Units	Method
Ethylbenzene	0.00500	0.00102	mg/Kg	8260B
Ethylbenzene	0.00500	0.00129	mg/L	8260B
Methylene Chloride	0.0100	0.00219	mg/Kg	8260B
Methylene Chloride	0.0100	0.00143	mg/L	8260B
m-Xylene & p-Xylene	0.0100	0.00152	mg/Kg	8260B
m-Xylene & p-Xylene	0.0100	0.00126	mg/L	8260B
o-Xylene	0.00500	0.00113	mg/Kg	8260B
o-Xylene	0.00500	0.000930	mg/L	8260B
Styrene	0.00500	0.000710	mg/Kg	8260B
Styrene	0.00500	0.000560	mg/L	8260B
Tetrachloroethene	0.00500	0.000710	mg/Kg	8260B
Tetrachloroethene	0.00500	0.00124	mg/L	8260B
Toluene	0.00500	0.00138	mg/Kg	8260B
Toluene	0.00500	0.000550	mg/L	8260B
trans-1,2-Dichloroethene	0.00500	0.00114	mg/Kg	8260B
trans-1,2-Dichloroethene	0.00500	0.000880	mg/L	8260B
trans-1,3-Dichloropropene	0.00500	0.000580	mg/Kg	8260B
trans-1,3-Dichloropropene	0.00500	0.000590	mg/L	8260B
Trichloroethene	0.00500	0.00140	mg/Kg	8260B
Trichloroethene	0.00500	0.00158	mg/L	8260B
Vinyl acetate	0.00500	0.000930	mg/Kg	8260B
Vinyl acetate	0.0100	0.000600	mg/L	8260B
Vinyl chloride	0.0100	0.000900	mg/Kg	8260B
Vinyl chloride	0.00500	0.000850	mg/L	8260B
Xylenes, Total	0.00500	0.00113	mg/Kg	8260B
Xylenes, Total	0.00500	0.00198	mg/L	8260B

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	MQL	MDL	Units	Method
1,2,4-Trichlorobenzene	0.0167	0.00210	mg/Kg	8270C LL
1,2,4-Trichlorobenzene	0.000500	0.000160	mg/L	8270C LL
1,2-Dichlorobenzene	0.0167	0.00302	mg/Kg	8270C LL
1,2-Dichlorobenzene	0.000500	0.000210	mg/L	8270C LL
1,3-Dichlorobenzene	0.0167	0.00154	mg/Kg	8270C LL
1,3-Dichlorobenzene	0.000500	0.000100	mg/L	8270C LL
1,4-Dichlorobenzene	0.0167	0.00225	mg/Kg	8270C LL
1,4-Dichlorobenzene	0.000500	0.000160	mg/L	8270C LL
2,4,5-Trichlorophenol	0.0167	0.0100	mg/Kg	8270C LL
2,4,5-Trichlorophenol	0.000500	0.000290	mg/L	8270C LL
2,4,6-Trichlorophenol	0.0167	0.00268	mg/Kg	8270C LL
2,4,6-Trichlorophenol	0.000500	0.000330	mg/L	8270C LL
2,4-Dichlorophenol	0.0167	0.00387	mg/Kg	8270C LL
2,4-Dichlorophenol	0.000500	0.000260	mg/L	8270C LL
2,4-Dimethylphenol	0.0167	0.00858	mg/Kg	8270C LL
2,4-Dimethylphenol	0.000500	0.000180	mg/L	8270C LL
2,4-Dinitrophenol	0.100	0.00472	mg/Kg	8270C LL
2,4-Dinitrophenol	0.00100	0.000400	mg/L	8270C LL
2,4-Dinitrotoluene	0.0167	0.00361	mg/Kg	8270C LL
2,4-Dinitrotoluene	0.000500	0.000320	mg/L	8270C LL
2,6-Dinitrotoluene	0.0167	0.00295	mg/Kg	8270C LL
2,6-Dinitrotoluene	0.000500	0.000290	mg/L	8270C LL

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	MQL	MDL	Units	Method
2-Chloronaphthalene	0.0167	0.00121	mg/Kg	8270C LL
2-Chloronaphthalene	0.000500	0.000190	mg/L	8270C LL
2-Chlorophenol	0.0167	0.00197	mg/Kg	8270C LL
2-Chlorophenol	0.000500	0.000220	mg/L	8270C LL
2-Methylnaphthalene	0.0167	0.00274	mg/Kg	8270C LL
2-Methylnaphthalene	0.000500	0.000140	mg/L	8270C LL
2-Methylphenol	0.0167	0.00323	mg/Kg	8270C LL
2-Methylphenol	0.000500	0.000190	mg/L	8270C LL
2-Nitroaniline	0.0167	0.00489	mg/Kg	8270C LL
2-Nitroaniline	0.000500	0.000350	mg/L	8270C LL
2-Nitrophenol	0.0167	0.00389	mg/Kg	8270C LL
2-Nitrophenol	0.000500	0.000220	mg/L	8270C LL
3 & 4 Methylphenol	0.0333	0.00279	mg/Kg	8270C LL
3 & 4 Methylphenol	0.00100	0.000160	mg/L	8270C LL
3,3'-Dichlorobenzidine	0.0167	0.0102	mg/Kg	8270C LL
3,3'-Dichlorobenzidine	0.000500	0.000320	mg/L	8270C LL
3-Nitroaniline	0.0167	0.00715	mg/Kg	8270C LL
3-Nitroaniline	0.000500	0.000130	mg/L	8270C LL
4,6-Dinitro-2-methylphenol	0.0167	0.00498	mg/Kg	8270C LL
4,6-Dinitro-2-methylphenol	0.00100	0.000160	mg/L	8270C LL
4-Bromophenyl phenyl ether	0.0167	0.00284	mg/Kg	8270C LL
4-Bromophenyl phenyl ether	0.000500	0.000250	mg/L	8270C LL
4-Chloro-3-methylphenol	0.0167	0.0156	mg/Kg	8270C LL
4-Chloro-3-methylphenol	0.000500	0.000250	mg/L	8270C LL
4-Chloroaniline	0.0167	0.00582	mg/Kg	8270C LL
4-Chloroaniline	0.000500	0.000110	mg/L	8270C LL
4-Chlorophenyl phenyl ether	0.0167	0.00180	mg/Kg	8270C LL
4-Chlorophenyl phenyl ether	0.000500	0.000230	mg/L	8270C LL
4-Nitroaniline	0.0167	0.0112	mg/Kg	8270C LL
4-Nitroaniline	0.000500	0.000230	mg/L	8270C LL
4-Nitrophenol	0.0167	0.00508	mg/Kg	8270C LL
4-Nitrophenol	0.00100	0.000330	mg/L	8270C LL
Acenaphthene	0.0167	0.00144	mg/Kg	8270C LL
Acenaphthene	0.000500	0.000160	mg/L	8270C LL
Acenaphthylene	0.0167	0.00100	mg/Kg	8270C LL
Acenaphthylene	0.000500	0.000160	mg/L	8270C LL
Anthracene	0.0167	0.00128	mg/Kg	8270C LL
Anthracene	0.000500	0.000440	mg/L	8270C LL
Benzidine	0.0833	0.00902	mg/Kg	8270C LL
Benzidine	0.0500	0.0179	mg/L	8270C LL
Benzo[a]anthracene	0.0167	0.00138	mg/Kg	8270C LL
Benzo[a]anthracene	0.000500	0.000250	mg/L	8270C LL
Benzo[a]pyrene	0.0167	0.00161	mg/Kg	8270C LL
Benzo[a]pyrene	0.000500	0.000130	mg/L	8270C LL
Benzo[b]fluoranthene	0.0167	0.00172	mg/Kg	8270C LL
Benzo[b]fluoranthene	0.000500	0.000180	mg/L	8270C LL
Benzo[g,h,i]perylene	0.0167	0.00507	mg/Kg	8270C LL
Benzo[g,h,i]perylene	0.000500	0.000350	mg/L	8270C LL
Benzo[k]fluoranthene	0.0167	0.00149	mg/Kg	8270C LL
Benzo[k]fluoranthene	0.000500	0.000160	mg/L	8270C LL
Benzyl alcohol	0.0167	0.00583	mg/Kg	8270C LL
Benzyl alcohol	0.000500	0.000510	mg/L	8270C LL

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	MQL	MDL	Units	Method
bis (2-Chloroisopropyl) ether	0.0167	0.00884	mg/Kg	8270C LL
bis (2-Chloroisopropyl) ether	0.000500	0.000180	mg/L	8270C LL
Bis(2-chloroethoxy)methane	0.0167	0.00142	mg/Kg	8270C LL
Bis(2-chloroethoxy)methane	0.000500	0.000190	mg/L	8270C LL
Bis(2-chloroethyl)ether	0.0167	0.00165	mg/Kg	8270C LL
Bis(2-chloroethyl)ether	0.000500	0.000180	mg/L	8270C LL
Bis(2-ethylhexyl) phthalate	0.0667	0.00537	mg/Kg	8270C LL
Bis(2-ethylhexyl) phthalate	0.00150	0.000590	mg/L	8270C LL
Butyl benzyl phthalate	0.0667	0.00619	mg/Kg	8270C LL
Butyl benzyl phthalate	0.00250	0.000850	mg/L	8270C LL
Carbazole	0.0167	0.00312	mg/Kg	8270C LL
Carbazole	0.000500	0.000350	mg/L	8270C LL
Chrysene	0.0167	0.00102	mg/Kg	8270C LL
Chrysene	0.000500	0.000240	mg/L	8270C LL
Dibenz(a,h)anthracene	0.0167	0.00363	mg/Kg	8270C LL
Dibenz(a,h)anthracene	0.000500	0.000290	mg/L	8270C LL
Dibenzofuran	0.0167	0.00178	mg/Kg	8270C LL
Dibenzofuran	0.000500	0.000160	mg/L	8270C LL
Diethyl phthalate	0.0667	0.00843	mg/Kg	8270C LL
Diethyl phthalate	0.00500	0.00419	mg/L	8270C LL
Dimethyl phthalate	0.0667	0.00489	mg/Kg	8270C LL
Dimethyl phthalate	0.00500	0.000180	mg/L	8270C LL
Di-n-butyl phthalate	0.0667	0.00259	mg/Kg	8270C LL
Di-n-butyl phthalate	0.00500	0.00187	mg/L	8270C LL
Di-n-octyl phthalate	0.0667	0.00190	mg/Kg	8270C LL
Di-n-octyl phthalate	0.00500	0.000160	mg/L	8270C LL
Fluoranthene	0.0167	0.00311	mg/Kg	8270C LL
Fluoranthene	0.000500	0.000310	mg/L	8270C LL
Fluorene	0.0167	0.00236	mg/Kg	8270C LL
Fluorene	0.000500	0.000120	mg/L	8270C LL
Hexachlorobenzene	0.0167	0.00152	mg/Kg	8270C LL
Hexachlorobenzene	0.000500	0.000250	mg/L	8270C LL
Hexachlorobutadiene	0.0167	0.00192	mg/Kg	8270C LL
Hexachlorobutadiene	0.000500	0.000190	mg/L	8270C LL
Hexachlorocyclopentadiene	0.0167	0.00461	mg/Kg	8270C LL
Hexachlorocyclopentadiene	0.000500	0.000150	mg/L	8270C LL
Hexachloroethane	0.0167	0.00231	mg/Kg	8270C LL
Hexachloroethane	0.000500	0.000170	mg/L	8270C LL
Indeno[1,2,3-cd]pyrene	0.0167	0.00350	mg/Kg	8270C LL
Indeno[1,2,3-cd]pyrene	0.000500	0.000290	mg/L	8270C LL
Isophorone	0.0167	0.00100	mg/Kg	8270C LL
Isophorone	0.000500	0.000150	mg/L	8270C LL
Naphthalene	0.0167	0.00135	mg/Kg	8270C LL
Naphthalene	0.000500	0.000160	mg/L	8270C LL
Nitrobenzene	0.0167	0.00296	mg/Kg	8270C LL
Nitrobenzene	0.000500	0.000200	mg/L	8270C LL
N-Nitrosodimethylamine	0.0167	0.00419	mg/Kg	8270C LL
N-Nitrosodimethylamine	0.000500	0.000160	mg/L	8270C LL
N-Nitrosodi-n-propylamine	0.0167	0.00222	mg/Kg	8270C LL
N-Nitrosodi-n-propylamine	0.000500	0.000240	mg/L	8270C LL
N-Nitrosodiphenylamine	0.0167	0.00189	mg/Kg	8270C LL
N-Nitrosodiphenylamine	0.000500	0.000330	mg/L	8270C LL

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	MQL	MDL	Units	Method
Pentachlorophenol	0.167	0.00400	mg/Kg	8270C LL
Pentachlorophenol	0.00100	0.000960	mg/L	8270C LL
Phenanthrene	0.0167	0.00495	mg/Kg	8270C LL
Phenanthrene	0.000500	0.000290	mg/L	8270C LL
Phenol	0.0167	0.00424	mg/Kg	8270C LL
Phenol	0.000500	0.000140	mg/L	8270C LL
Pyrene	0.0167	0.00183	mg/Kg	8270C LL
Pyrene	0.000500	0.000330	mg/L	8270C LL

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	MQL	MDL	Units	Method
>C12-C28	10.0	4.06	mg/Kg	TX 1005
>C12-C28	5.00	0.960	mg/L	TX 1005
>C28-C35	10.0	4.06	mg/Kg	TX 1005
>C28-C35	5.00	0.960	mg/L	TX 1005
C6-C12	10.0	3.80	mg/Kg	TX 1005
C6-C12	5.00	0.830	mg/L	TX 1005
C6-C35	10.0	7.48	mg/Kg	TX 1005
C6-C35	5.00	1.56	mg/L	TX 1005

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Arsenic	1.00	0.218	mg/Kg	6010B
Cadmium	0.250	0.0256	mg/Kg	6010B
Lead	0.500	0.105	mg/Kg	6010B
Selenium	2.00	0.259	mg/Kg	6010B

General Chemistry

Analyte	MQL	MDL	Units	Method
Percent Moisture	1.0	1.0	%	Moisture
Percent Solids	1.0	1.0	%	Moisture

General Chemistry - Soluble

Analyte	MQL	MDL	Units	Method
Sulfate	5.00	0.315	mg/Kg	9056

GC/MS VOA

Analysis Batch: 124806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-1	2013-FFTA-03 (0-2')	Total/NA	Solid	8260B	
600-85272-3	2013-FFTA-03 (14-16')	Total/NA	Solid	8260B	
600-85272-5	2013-FFTA-02 (0.25-2')	Total/NA	Solid	8260B	
600-85272-8	MW-43 (0-2')	Total/NA	Solid	8260B	
600-85272-10	MW-43 (8-10')	Total/NA	Solid	8260B	
600-85272-11	MW-43 (17-20')	Total/NA	Solid	8260B	
600-85272-11 MS	MW-43 (17-20')	Total/NA	Solid	8260B	
600-85272-11 MSD	MW-43 (17-20')	Total/NA	Solid	8260B	
LCS 600-124806/3	Lab Control Sample	Total/NA	Solid	8260B	
MB 600-124806/4	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 124815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-7	Field Blank	Total/NA	Water	8260B	
600-85272-18	RINSE BLANK- GEOPROBE	Total/NA	Water	8260B	
600-85272-19	RINSE BLANK- CME	Total/NA	Water	8260B	
600-85272-20	TRIP BLANK	Total/NA	Water	8260B	
600-85272-21	TRIP BLANK	Total/NA	Water	8260B	
LCS 600-124815/3	Lab Control Sample	Total/NA	Water	8260B	
MB 600-124815/4	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 124830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-18	RINSE BLANK- GEOPROBE	Total/NA	Water	3510C	
600-85272-19	RINSE BLANK- CME	Total/NA	Water	3510C	
LCS 600-124830/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCS 600-124830/3-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 600-124830/4-A	Lab Control Sample Dup	Total/NA	Water	3510C	
MB 600-124830/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 125073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-18	RINSE BLANK- GEOPROBE	Total/NA	Water	8270C LL	124830
600-85272-19	RINSE BLANK- CME	Total/NA	Water	8270C LL	124830
LCS 600-124830/2-A	Lab Control Sample	Total/NA	Water	8270C LL	124830
LCS 600-124830/3-A	Lab Control Sample	Total/NA	Water	8270C LL	124830
LCSD 600-124830/4-A	Lab Control Sample Dup	Total/NA	Water	8270C LL	124830
MB 600-124830/1-A	Method Blank	Total/NA	Water	8270C LL	124830

Prep Batch: 125220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-1	2013-FFTA-03 (0-2')	Total/NA	Solid	3546	
600-85272-1 MS	2013-FFTA-03 (0-2')	Total/NA	Solid	3546	
600-85272-1 MSD	2013-FFTA-03 (0-2')	Total/NA	Solid	3546	
600-85272-3	2013-FFTA-03 (14-16')	Total/NA	Solid	3546	
600-85272-5	2013-FFTA-02 (0.25-2')	Total/NA	Solid	3546	
600-85272-8	MW-43 (0-2')	Total/NA	Solid	3546	
600-85272-10	MW-43 (8-10')	Total/NA	Solid	3546	

GC/MS Semi VOA (Continued)

Prep Batch: 125220 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-11	MW-43 (17-20')	Total/NA	Solid	3546	
LCS 600-125220/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 600-125220/1-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 125471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-1	2013-FFTA-03 (0-2')	Total/NA	Solid	8270C LL	125220
600-85272-1 MS	2013-FFTA-03 (0-2')	Total/NA	Solid	8270C LL	125220
600-85272-1 MSD	2013-FFTA-03 (0-2')	Total/NA	Solid	8270C LL	125220
600-85272-3	2013-FFTA-03 (14-16')	Total/NA	Solid	8270C LL	125220
600-85272-5	2013-FFTA-02 (0.25-2')	Total/NA	Solid	8270C LL	125220
600-85272-10	MW-43 (8-10')	Total/NA	Solid	8270C LL	125220
600-85272-11	MW-43 (17-20')	Total/NA	Solid	8270C LL	125220
LCS 600-125220/2-A	Lab Control Sample	Total/NA	Solid	8270C LL	125220
MB 600-125220/1-A	Method Blank	Total/NA	Solid	8270C LL	125220

Analysis Batch: 125638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-8	MW-43 (0-2')	Total/NA	Solid	8270C LL	125220

GC Semi VOA

Prep Batch: 124855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-18	RINSE BLANK- GEOPROBE	Total/NA	Water	TX_1005_W_Prep	
600-85272-19	RINSE BLANK- CME	Total/NA	Water	TX_1005_W_Prep	
LCS 600-124855/2-A	Lab Control Sample	Total/NA	Water	TX_1005_W_Prep	
MB 600-124855/1-A	Method Blank	Total/NA	Water	TX_1005_W_Prep	

Analysis Batch: 124903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-18	RINSE BLANK- GEOPROBE	Total/NA	Water	TX 1005	124855
600-85272-19	RINSE BLANK- CME	Total/NA	Water	TX 1005	124855
LCS 600-124855/2-A	Lab Control Sample	Total/NA	Water	TX 1005	124855
MB 600-124855/1-A	Method Blank	Total/NA	Water	TX 1005	124855

Prep Batch: 124912

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-1	2013-FFTA-03 (0-2')	Total/NA	Solid	TX_1005_S_Prep	
600-85272-3	2013-FFTA-03 (14-16')	Total/NA	Solid	TX_1005_S_Prep	
600-85272-5	2013-FFTA-02 (0.25-2')	Total/NA	Solid	TX_1005_S_Prep	
600-85272-8	MW-43 (0-2')	Total/NA	Solid	TX_1005_S_Prep	
600-85272-10	MW-43 (8-10')	Total/NA	Solid	TX_1005_S_Prep	

GC Semi VOA (Continued)

Prep Batch: 124912 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-11	MW-43 (17-20')	Total/NA	Solid	TX_1005_S_Prep	
LCS 600-124912/2-A	Lab Control Sample	Total/NA	Solid	TX_1005_S_Prep	
MB 600-124912/1-A	Method Blank	Total/NA	Solid	TX_1005_S_Prep	

Analysis Batch: 124998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-1	2013-FFTA-03 (0-2')	Total/NA	Solid	TX 1005	124912
600-85272-3	2013-FFTA-03 (14-16')	Total/NA	Solid	TX 1005	124912
600-85272-5	2013-FFTA-02 (0.25-2')	Total/NA	Solid	TX 1005	124912
600-85272-8	MW-43 (0-2')	Total/NA	Solid	TX 1005	124912
600-85272-10	MW-43 (8-10')	Total/NA	Solid	TX 1005	124912
600-85272-11	MW-43 (17-20')	Total/NA	Solid	TX 1005	124912
LCS 600-124912/2-A	Lab Control Sample	Total/NA	Solid	TX 1005	124912
MB 600-124912/1-A	Method Blank	Total/NA	Solid	TX 1005	124912

Metals

Analysis Batch: 124683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-12	MW-45 (0-0.5')	Total/NA	Solid	6010B	124717
600-85272-15	MW-45 (15-17')	Total/NA	Solid	6010B	124717
600-85272-16	MW-45 (17-18')	Total/NA	Solid	6010B	124717
600-85272-17	MW-45 (18-20')	Total/NA	Solid	6010B	124717
LCSSRM 600-124717/2-A	Lab Control Sample	Total/NA	Solid	6010B	124717
MB 600-124717/1-A	Method Blank	Total/NA	Solid	6010B	124717

Prep Batch: 124717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-12	MW-45 (0-0.5')	Total/NA	Solid	3050B	
600-85272-15	MW-45 (15-17')	Total/NA	Solid	3050B	
600-85272-16	MW-45 (17-18')	Total/NA	Solid	3050B	
600-85272-17	MW-45 (18-20')	Total/NA	Solid	3050B	
LCSSRM 600-124717/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-124717/1-A	Method Blank	Total/NA	Solid	3050B	

General Chemistry

Analysis Batch: 124724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-1	2013-FFTA-03 (0-2')	Total/NA	Solid	Moisture	
600-85272-1 DU	2013-FFTA-03 (0-2')	Total/NA	Solid	Moisture	
600-85272-3	2013-FFTA-03 (14-16')	Total/NA	Solid	Moisture	
600-85272-5	2013-FFTA-02 (0.25-2')	Total/NA	Solid	Moisture	
600-85272-6	2013-FFTA-02 (2-4')	Total/NA	Solid	Moisture	
600-85272-8	MW-43 (0-2')	Total/NA	Solid	Moisture	
600-85272-10	MW-43 (8-10')	Total/NA	Solid	Moisture	
600-85272-11	MW-43 (17-20')	Total/NA	Solid	Moisture	
600-85272-12	MW-45 (0-0.5')	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 124724 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-12 DU	MW-45 (0-0.5')	Total/NA	Solid	Moisture	
600-85272-15	MW-45 (15-17')	Total/NA	Solid	Moisture	
600-85272-16	MW-45 (17-18')	Total/NA	Solid	Moisture	
600-85272-17	MW-45 (18-20')	Total/NA	Solid	Moisture	

Leach Batch: 124938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-15	MW-45 (15-17')	Soluble	Solid	DI Leach	
600-85272-16	MW-45 (17-18')	Soluble	Solid	DI Leach	
600-85272-17	MW-45 (18-20')	Soluble	Solid	DI Leach	
LCS 600-124938/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
MB 600-124938/1-A	Method Blank	Soluble	Solid	DI Leach	

Analysis Batch: 125019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-15	MW-45 (15-17')	Soluble	Solid	9056	124938
600-85272-16	MW-45 (17-18')	Soluble	Solid	9056	124938
600-85272-17	MW-45 (18-20')	Soluble	Solid	9056	124938
LCS 600-124938/2-A	Lab Control Sample	Soluble	Solid	9056	124938
MB 600-124938/1-A	Method Blank	Soluble	Solid	9056	124938

Client Sample ID: 2013-FFTA-03 (0-2')

Lab Sample ID: 600-85272-1

Date Collected: 01/07/14 13:16

Matrix: Solid

Date Received: 01/10/14 07:50

Percent Solids: 76.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	124806	01/13/14 11:08	WS1	TAL HOU
Total/NA	Prep	3546			15.03 g	1.0 mL	125220	01/17/14 13:18	RLK	TAL HOU
Total/NA	Analysis	8270C LL		1	15.03 g	1.0 mL	125471	01/20/14 20:43	MBB	TAL HOU
Total/NA	Prep	TX_1005_S_Prep			10.08 g	10.00 mL	124912	01/14/14 11:28	NVP	TAL HOU
Total/NA	Analysis	TX 1005		1	10.08 g	10.00 mL	124998	01/14/14 16:41	RJV	TAL HOU
Total/NA	Analysis	Moisture		1			124724	01/10/14 13:13	AYS	TAL HOU

Client Sample ID: 2013-FFTA-03 (14-16')

Lab Sample ID: 600-85272-3

Date Collected: 01/07/14 13:20

Matrix: Solid

Date Received: 01/10/14 07:50

Percent Solids: 77.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	124806	01/13/14 12:21	WS1	TAL HOU
Total/NA	Prep	3546			15.08 g	1.0 mL	125220	01/17/14 13:18	RLK	TAL HOU
Total/NA	Analysis	8270C LL		1	15.08 g	1.0 mL	125471	01/20/14 22:03	MBB	TAL HOU
Total/NA	Prep	TX_1005_S_Prep			10.07 g	10.00 mL	124912	01/14/14 11:28	NVP	TAL HOU
Total/NA	Analysis	TX 1005		1	10.07 g	10.00 mL	124998	01/14/14 17:17	RJV	TAL HOU
Total/NA	Analysis	Moisture		1			124724	01/10/14 13:13	AYS	TAL HOU

Client Sample ID: 2013-FFTA-02 (0.25-2')

Lab Sample ID: 600-85272-5

Date Collected: 01/07/14 15:30

Matrix: Solid

Date Received: 01/10/14 07:50

Percent Solids: 86.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	124806	01/13/14 12:45	WS1	TAL HOU
Total/NA	Prep	3546			15.03 g	1.0 mL	125220	01/17/14 13:18	RLK	TAL HOU
Total/NA	Analysis	8270C LL		1	15.03 g	1.0 mL	125471	01/21/14 00:18	MBB	TAL HOU
Total/NA	Prep	TX_1005_S_Prep			10.00 g	10.00 mL	124912	01/14/14 11:28	NVP	TAL HOU
Total/NA	Analysis	TX 1005		1	10.00 g	10.00 mL	124998	01/15/14 09:02	RJV	TAL HOU
Total/NA	Analysis	Moisture		1			124724	01/10/14 13:13	AYS	TAL HOU

Client Sample ID: 2013-FFTA-02 (2-4')

Lab Sample ID: 600-85272-6

Date Collected: 01/07/14 15:45

Matrix: Solid

Date Received: 01/10/14 07:50

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			124724	01/10/14 13:13	AYS	TAL HOU

Client Sample ID: Field Blank

Lab Sample ID: 600-85272-7

Date Collected: 01/07/14 17:20

Matrix: Water

Date Received: 01/10/14 07:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	124815	01/11/14 14:59	DT1	TAL HOU

Client Sample ID: MW-43 (0-2')

Lab Sample ID: 600-85272-8

Date Collected: 01/07/14 12:00

Matrix: Solid

Date Received: 01/10/14 07:50

Percent Solids: 85.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	124806	01/13/14 13:10	WS1	TAL HOU
Total/NA	Prep	3546			15.07 g	1.0 mL	125220	01/17/14 13:18	RLK	TAL HOU
Total/NA	Analysis	8270C LL		100	15.07 g	1.0 mL	125638	01/22/14 21:03	MBB	TAL HOU
Total/NA	Prep	TX_1005_S_Prep			10.03 g	10.00 mL	124912	01/14/14 11:28	NVP	TAL HOU
Total/NA	Analysis	TX 1005		1	10.03 g	10.00 mL	124998	01/14/14 18:25	RJV	TAL HOU
Total/NA	Analysis	Moisture		1			124724	01/10/14 13:13	AYS	TAL HOU

Client Sample ID: MW-43 (8-10')

Lab Sample ID: 600-85272-10

Date Collected: 01/07/14 12:20

Matrix: Solid

Date Received: 01/10/14 07:50

Percent Solids: 84.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	124806	01/13/14 13:34	WS1	TAL HOU
Total/NA	Prep	3546			15.06 g	1.0 mL	125220	01/17/14 13:18	RLK	TAL HOU
Total/NA	Analysis	8270C LL		1	15.06 g	1.0 mL	125471	01/20/14 23:24	MBB	TAL HOU
Total/NA	Prep	TX_1005_S_Prep			10.03 g	10.00 mL	124912	01/14/14 11:28	NVP	TAL HOU
Total/NA	Analysis	TX 1005		1	10.03 g	10.00 mL	124998	01/14/14 19:00	RJV	TAL HOU
Total/NA	Analysis	Moisture		1			124724	01/10/14 13:13	AYS	TAL HOU

Client Sample ID: MW-43 (17-20')

Lab Sample ID: 600-85272-11

Date Collected: 01/07/14 12:30

Matrix: Solid

Date Received: 01/10/14 07:50

Percent Solids: 88.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	124806	01/13/14 10:43	WS1	TAL HOU
Total/NA	Prep	3546			15.02 g	1.0 mL	125220	01/17/14 13:18	RLK	TAL HOU
Total/NA	Analysis	8270C LL		1	15.02 g	1.0 mL	125471	01/20/14 23:51	MBB	TAL HOU
Total/NA	Prep	TX_1005_S_Prep			10.04 g	10.00 mL	124912	01/14/14 11:28	NVP	TAL HOU
Total/NA	Analysis	TX 1005		1	10.04 g	10.00 mL	124998	01/14/14 19:35	RJV	TAL HOU
Total/NA	Analysis	Moisture		1			124724	01/10/14 13:13	AYS	TAL HOU

Client Sample ID: MW-45 (0-0.5')

Lab Sample ID: 600-85272-12

Date Collected: 01/07/14 14:06
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 77.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.07 g	50 mL	124717	01/10/14 12:37	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	124683	01/10/14 15:32	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124724	01/10/14 13:13	AYS	TAL HOU

Client Sample ID: MW-45 (15-17')

Lab Sample ID: 600-85272-15

Date Collected: 01/07/14 15:10
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 77.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	124717	01/10/14 12:37	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	124683	01/10/14 15:35	DCL	TAL HOU
Soluble	Leach	DI Leach			5.02 g	50 mL	124938	01/14/14 14:17	DAW	TAL HOU
Soluble	Analysis	9056		1	5 mL	5 mL	125019	01/15/14 05:12	DAW	TAL HOU
Total/NA	Analysis	Moisture		1			124724	01/10/14 13:13	AYS	TAL HOU

Client Sample ID: MW-45 (17-18')

Lab Sample ID: 600-85272-16

Date Collected: 01/07/14 15:20
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 77.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	50 mL	124717	01/10/14 12:37	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	124683	01/10/14 15:37	DCL	TAL HOU
Soluble	Leach	DI Leach			4.99 g	50 mL	124938	01/14/14 14:17	DAW	TAL HOU
Soluble	Analysis	9056		1	5 mL	5 mL	125019	01/15/14 05:28	DAW	TAL HOU
Total/NA	Analysis	Moisture		1			124724	01/10/14 13:13	AYS	TAL HOU

Client Sample ID: MW-45 (18-20')

Lab Sample ID: 600-85272-17

Date Collected: 01/07/14 15:30
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 76.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	124717	01/10/14 12:37	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	124683	01/10/14 15:39	DCL	TAL HOU
Soluble	Leach	DI Leach			4.95 g	50 mL	124938	01/14/14 14:17	DAW	TAL HOU
Soluble	Analysis	9056		1	5 mL	5 mL	125019	01/15/14 05:44	DAW	TAL HOU
Total/NA	Analysis	Moisture		1			124724	01/10/14 13:13	AYS	TAL HOU

Client Sample ID: RINSE BLANK- GEOPROBE

Lab Sample ID: 600-85272-18

Date Collected: 01/07/14 09:15

Matrix: Water

Date Received: 01/10/14 07:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	124815	01/11/14 15:22	DT1	TAL HOU
Total/NA	Prep	3510C			250 mL	1.0 mL	124830	01/13/14 13:39	LER	TAL HOU
Total/NA	Analysis	8270C LL		1	250 mL	1.0 mL	125073	01/14/14 20:10	MBB	TAL HOU
Total/NA	Prep	TX_1005_W_Prep			30.64 mL	3.00 mL	124855	01/13/14 15:36	NVP	TAL HOU
Total/NA	Analysis	TX 1005		1	30.64 mL	3.00 mL	124903	01/13/14 17:43	RJV	TAL HOU

Client Sample ID: RINSE BLANK- CME

Lab Sample ID: 600-85272-19

Date Collected: 01/07/14 09:15

Matrix: Water

Date Received: 01/10/14 07:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	124815	01/11/14 15:45	DT1	TAL HOU
Total/NA	Prep	3510C			250 mL	1.0 mL	124830	01/13/14 13:39	LER	TAL HOU
Total/NA	Analysis	8270C LL		1	250 mL	1.0 mL	125073	01/14/14 20:36	MBB	TAL HOU
Total/NA	Prep	TX_1005_W_Prep			30.73 mL	3.00 mL	124855	01/13/14 15:36	NVP	TAL HOU
Total/NA	Analysis	TX 1005		1	30.73 mL	3.00 mL	124903	01/13/14 18:18	RJV	TAL HOU

Client Sample ID: TRIP BLANK

Lab Sample ID: 600-85272-20

Date Collected: 01/07/14 00:00

Matrix: Water

Date Received: 01/09/14 11:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	124815	01/11/14 14:13	DT1	TAL HOU

Client Sample ID: TRIP BLANK

Lab Sample ID: 600-85272-21

Date Collected: 01/07/14 00:00

Matrix: Water

Date Received: 01/09/14 11:08

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	124815	01/11/14 14:36	DT1	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85272-1

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0759	08-04-14
Louisiana	NELAP	6	30643	06-30-14
Oklahoma	State Program	6	1309	08-31-14
Texas	NELAP	6	T104704223	10-31-14
USDA	Federal		P330-08-00217	04-01-14 *
Utah	NELAP	8	TX00083	10-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: Chris Trevino	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 1
Company: Golder Associates Inc.				Job #:
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: Exide Frisco	SSOW#:			

600-85272 Chain of Custody

Codes:
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2SO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - ph 4-5
Z - other (specify)
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
2013-FFTA-03 (0-2')	1/7/14	1316	G	Solid			X	X	X	X								
2013-FFTA-03 (2-4')	1/7/14	1317	G	Solid			X	X	X	X								Hold
2013-FFTA-03 (14-16')	1/7/14	1320	G	Solid			X	X	X	X								
2013-FFTA-03 (16-18')	1/7/14	1323	G	Solid			X	X	X	X								Hold
2013-FFTA-02 (0-2')	1/7/14	1530	G	Solid			X	X	X	X								
2013-FFTA-02 (2-4')	1/7/14	1545	G	Solid			X	X	X	X								Hold
Field Blank	1/7/14	1720	G	~~Solid~~ W			X											
MW-43 (0-2')	1/7/14	1200	G	Solid			X	X	X	X								
MW-43 (2-4')	1/7/14	1210	G	Solid			X	X	X	X								Hold
MW-43 (8-10')	1/7/14	1220	G	Solid			X	X	X	X								
MW-43 (17-20')	1/7/14	1230	G	Solid			X	X	X	X								

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOSHUA JANZEN	01/08/14 1330	GOLDER	McGowen	01/8/14 1330	TAL
2	M McGowen	1/8/14 1700	TAL			
3					1/8/14 1108	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

4/14/2014

Client Information	Sampler: Chris Trevino	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 2
Company: Golder Associates Inc.				Job #:

Address: 500 Century Plaza Drive Suite 190	Due Date Requested:	
City: Houston	TAT Requested (days): 5 WD TRRP	
State, Zip: TX, 77073		
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested	
Email: Christina_Higginbotham@golder.com	WO #:	
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831	
Site: Exide Frisco	SSOW#:	

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Se			Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N					
MW-45 (0-0.5')	1/7/14	1430	G	Solid										X							
MW-45 (1-2')	1/7/14	1440	G	Solid										X							hold
MW-45 (4-5')	1/7/14	1450	G	Solid										X							hold
MW-45 (15-17')	1/7/14	1510	G	Solid								X					X				
MW-45 (17-18')	1/7/14	1520	G	Solid								X					X				
MW-45 (18-20')	1/7/14	1530	G	Solid								X					X				
RINSE BLANK - GEOPROBE	1/8/14	915	G	Solid W			X	X	X	X											
RINSE BLANK - CME	1/8/14	915	G	Solid W			X	X	X	X											
			G	Solid																	
			G	Solid																	
			G	Solid																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by: JOSHUA JANZEN	01/08/14 1330	GOLDER	Received by: McCowen	01/08/14 1330	TAL
Relinquished by: McCowen	1/8/14 1700	TAL	Received by:	/ /	
Relinquished by:			Received by:	1/14/14 1108	

Custody Seals Intact: △ Yes △ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1 / /

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-85272-1

Login Number: 85272

List Source: TestAmerica Houston

List Number: 1

Creator: Lopez, Sandro R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	4.3
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.	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.	False	Samples received in bulk jars
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	Check done at department level as required.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-85272-2
Client Project/Site: Exide Recycling Center PFC

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
1/24/2014 3:14:37 PM
Sophia Shah, Project Management Assistant I
sophia.shah@testamericainc.com

Designee for

Dean Joiner, Project Manager II
(713)690-4444
dean.joiner@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: 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.

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-85272-2 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☑ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☑ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Sophia Shah		1/22/2014
Name (printed)	Signature	Date

Project Management Assistant
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	1/22/2014
Project Name:	Exide Recycling Center PFC	Laboratory Job Number:	600-85272-2
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		X			R01A
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			R07C
		Were MS/MSD RPDs within laboratory QC limits?		X			R07D
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	1/22/2014
Project Name:	Exide Recycling Center PFC	Laboratory Job Number:	600-85272-2
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?			X		
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?			X		
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
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5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	1/22/2014
Project Name:	Exide Recycling Center PFC	Laboratory Job Number:	600-85272-2
Reviewer Name:	Dean A Joiner		

ER #[1]	Description
R01A	The following samples were collected in bulk containers: 600-85272-1, 600-85272-1 MS, 600-85272-1 MSD, 600-85272-6.
R07C	Method DV-LC-0012: 600-85272-1 MS failed the recovery criteria for the following analyte(s): Perfluorotetradecanoic acid. Matrix interference is suspected. Method DV-LC-0012: 600-85272-1 MSD failed the recovery criteria for the following analyte(s): Perfluorooctanoic Sulfonate, Perfluorotetradecanoic acid, Perfluorotridecanoic acid. Matrix interference is suspected.
R07D	Method DV-LC-0012: 600-85272-1 MSD failed the RPD criteria for the following analyte(s): Perfluorotetradecanoic acid. Matrix interference is suspected.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Matrix:	Solid
Method:	PFC
Prep Method:	PFC_Leach
Date Analyzed:	11/8/2013
Job #:	280-48653
TALS Batch:	199956
Units:	ug/Kg

Analyte	Instrument #	MDL	DCS Spike	Measured Result	MQL
Perfluorobutane Sulfonate	LC_LCMS5	0.140	0.310	0.309	0.8
Perfluorobutyric acid	LC_LCMS5	0.120	0.350	0.323	0.8
Perfluorodecane Sulfonate	LC_LCMS5	0.300	0.338	0.315	0.8
Perfluorodecanoic acid	LC_LCMS5	0.270	0.350	0.391	0.8
Perfluorododecanoic acid	LC_LCMS5	0.570	1.000	1.095	2
Perfluoroheptanoic acid	LC_LCMS5	0.120	0.350	0.212	0.8
Perfluorohexane Sulfonate	LC_LCMS5	0.120	0.331	0.353	0.8
Perfluorohexanoic acid	LC_LCMS5	0.150	0.350	0.225	0.8
Perfluorononanoic acid	LC_LCMS5	0.220	0.350	0.072	0.8
Perfluorooctane Sulfonamide	LC_LCMS5	0.098	0.350	0.340	0.8
Perfluorooctanoic acid	LC_LCMS5	0.230	0.350	0.356	0.8
Perfluorooctanoic Sulfonate	LC_LCMS5	0.140	0.334	0.391	0.8
Perfluoropentanoic acid	LC_LCMS5	0.240	0.350	0.251	0.8
Perfluorotetradecanoic acid	LC_LCMS5	1.000	1.000	0.786	2
Perfluorotridecanoic acid	LC_LCMS5	0.320	0.350	0.253	0.8
Perfluoroundecanoic acid	LC_LCMS5	0.320	0.350	0.167	0.8

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center PFC

TestAmerica Job ID: 600-85272-2

Job ID: 600-85272-2

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-85272-2

Comments
No additional comments.

Receipt
The samples were received on 1/9/2014 11:08 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.3º C.

Except:

The following sample(s) was collected in improper containers: Samples received in bulk jars.

LCMS
No analytical or quality issues were noted.

General Chemistry
No analytical or quality issues were noted.

Organic Prep
Method(s) PFC leach: A deviation from the Standard Operating Procedure (SOP) occurred. Details are as follows: under the current SOP it states that these samples are to be sonicated for three hours before the 24 hour tumbling step. However, this three hour sonication step will be skipped due to the current SOP being revised(to include the lack of this three hour sonication step).

Batch 208646
PFCLeach(PFC)

Method(s) PFC leach: These samples would not adjust to a pH less than 7.

Batch 208646
PFC_Leach(PFC)

No other analytical or quality issues were noted.

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center PFC

TestAmerica Job ID: 600-85272-2

Method	Method Description	Protocol	Laboratory
DV-LC-0012	Perfluorinated Hydrocarbons	TAL-DEN	TAL DEN
Moisture	Percent Moisture	EPA	TAL DEN

Protocol References:

EPA = US Environmental Protection Agency

TAL-DEN = TestAmerica Laboratories, Denver, Facility Standard Operating Procedure.

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center PFC

TestAmerica Job ID: 600-85272-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-85272-1	2013-FFTA-03 (0.25-2')	Solid	01/07/14 13:16	01/10/14 07:50
600-85272-6	2013-FFTA-02 (2-4')	Solid	01/07/14 15:45	01/10/14 07:50

Client Sample ID: 2013-FFTA-03 (0.25-2')

Lab Sample ID: 600-85272-1

Date Collected: 01/07/14 13:16
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 74.9

Method: DV-LC-0012 - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutane Sulfonate	0.000179	U	0.00102	0.000179	mg/Kg	☼	01/15/14 16:30	01/17/14 15:45	1
Perfluorobutyric acid	0.000153	U	0.00102	0.000153	mg/Kg	☼	01/15/14 16:30	01/17/14 15:45	1
Perfluorodecane Sulfonate	0.000383	U	0.00102	0.000383	mg/Kg	☼	01/15/14 16:30	01/17/14 15:45	1
Perfluorodecanoic acid	0.000345	U	0.00102	0.000345	mg/Kg	☼	01/15/14 16:30	01/17/14 15:45	1
Perfluorododecanoic acid	0.000728	U	0.00255	0.000728	mg/Kg	☼	01/15/14 16:30	01/17/14 15:45	1
Perfluoroheptanoic acid	**0.000181**	**J**	0.00102	0.000153	mg/Kg	☼	01/15/14 16:30	01/17/14 15:45	1
Perfluorohexane Sulfonate	**0.000537**	**J**	0.00102	0.000153	mg/Kg	☼	01/15/14 16:30	01/17/14 15:45	1
Perfluorohexanoic acid	**0.000579**	**J**	0.00102	0.000192	mg/Kg	☼	01/15/14 16:30	01/17/14 15:45	1
Perfluorononanoic acid	**0.000614**	**J**	0.00102	0.000281	mg/Kg	☼	01/15/14 16:30	01/17/14 15:45	1
Perfluorooctane Sulfonamide	0.000125	U	0.00102	0.000125	mg/Kg	☼	01/15/14 16:30	01/17/14 15:45	1
Perfluorooctanoic acid	**0.000910**	**J**	0.00102	0.000294	mg/Kg	☼	01/15/14 16:30	01/17/14 15:45	1
Perfluorooctanoic Sulfonate	**0.00737**		0.00102	0.000179	mg/Kg	☼	01/15/14 16:30	01/17/14 15:45	1
Perfluoropentanoic acid	**0.000538**	**J**	0.00102	0.000307	mg/Kg	☼	01/15/14 16:30	01/17/14 15:45	1
Perfluorotetradecanoic acid	0.00128	U	0.00255	0.00128	mg/Kg	☼	01/15/14 16:30	01/17/14 15:45	1
Perfluorotridecanoic acid	0.000409	U	0.00102	0.000409	mg/Kg	☼	01/15/14 16:30	01/17/14 15:45	1
Perfluoroundecanoic acid	0.000409	U	0.00102	0.000409	mg/Kg	☼	01/15/14 16:30	01/17/14 15:45	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**25**		0.10	0.10	%			01/11/14 13:21	1
Percent Solids	**75**		0.10	0.10	%			01/11/14 13:21	1

Client Sample ID: 2013-FFTA-02 (2-4')

Lab Sample ID: 600-85272-6

Date Collected: 01/07/14 15:45
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 74.2

Method: DV-LC-0012 - Perfluorinated Hydrocarbons

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutane Sulfonate	0.000180	U	0.00103	0.000180	mg/Kg	☼	01/15/14 16:30	01/17/14 16:22	1
Perfluorobutyric acid	0.000155	U	0.00103	0.000155	mg/Kg	☼	01/15/14 16:30	01/17/14 16:22	1
Perfluorodecane Sulfonate	0.000386	U	0.00103	0.000386	mg/Kg	☼	01/15/14 16:30	01/17/14 16:22	1
Perfluorodecanoic acid	0.000348	U	0.00103	0.000348	mg/Kg	☼	01/15/14 16:30	01/17/14 16:22	1
Perfluorododecanoic acid	0.000734	U	0.00258	0.000734	mg/Kg	☼	01/15/14 16:30	01/17/14 16:22	1
Perfluoroheptanoic acid	0.000155	U	0.00103	0.000155	mg/Kg	☼	01/15/14 16:30	01/17/14 16:22	1
Perfluorohexane Sulfonate	0.000155	U	0.00103	0.000155	mg/Kg	☼	01/15/14 16:30	01/17/14 16:22	1
Perfluorohexanoic acid	0.000193	U	0.00103	0.000193	mg/Kg	☼	01/15/14 16:30	01/17/14 16:22	1
Perfluorononanoic acid	0.000283	U	0.00103	0.000283	mg/Kg	☼	01/15/14 16:30	01/17/14 16:22	1
Perfluorooctane Sulfonamide	0.000126	U	0.00103	0.000126	mg/Kg	☼	01/15/14 16:30	01/17/14 16:22	1
Perfluorooctanoic acid	0.000296	U	0.00103	0.000296	mg/Kg	☼	01/15/14 16:30	01/17/14 16:22	1
Perfluorooctanoic Sulfonate	**0.000555**	**J**	0.00103	0.000180	mg/Kg	☼	01/15/14 16:30	01/17/14 16:22	1
Perfluoropentanoic acid	0.000309	U	0.00103	0.000309	mg/Kg	☼	01/15/14 16:30	01/17/14 16:22	1
Perfluorotetradecanoic acid	0.00129	U	0.00258	0.00129	mg/Kg	☼	01/15/14 16:30	01/17/14 16:22	1
Perfluorotridecanoic acid	0.000412	U	0.00103	0.000412	mg/Kg	☼	01/15/14 16:30	01/17/14 16:22	1
Perfluoroundecanoic acid	0.000412	U	0.00103	0.000412	mg/Kg	☼	01/15/14 16:30	01/17/14 16:22	1

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**26**		0.10	0.10	%			01/14/14 13:25	1
Percent Solids	**74**		0.10	0.10	%			01/14/14 13:25	1

Qualifiers

LCMS

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N	MS, MSD: Spike recovery exceeds upper or lower control limits.
N	RPD of the MS and MSD exceeds the control limits

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
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)

Method: DV-LC-0012 - Perfluorinated Hydrocarbons

Lab Sample ID: DLCK 280-207217/13
Matrix: Solid
Analysis Batch: 207217

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

Analyte	Spike Added	DLCK Result	DLCK Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutane Sulfonate	0.443	0.4725	J	ug/L		107	70 - 130
Perfluorobutyric acid	0.500	0.4999	J	ug/L		100	70 - 130
Perfluorodecane Sulfonate	0.483	0.5298	J	ug/L		110	70 - 130
Perfluorodecanoic acid	0.500	0.4824	J	ug/L		96	70 - 130
Perfluorododecanoic acid	0.500	0.746	U	ug/L		95	70 - 130
Perfluoroheptanoic acid	0.500	0.658	U	ug/L		107	70 - 130
Perfluorohexane Sulfonate	0.473	0.4504	J	ug/L		95	70 - 130
Perfluorohexanoic acid	0.500	0.4208	J	ug/L		84	70 - 130
Perfluorononanoic acid	0.500	0.872	U	ug/L		114	70 - 130
Perfluorooctane Sulfonamide	0.500	0.4297	J	ug/L		86	70 - 130
Perfluorooctanoic acid	0.500	0.5559	J	ug/L		111	70 - 130
Perfluorooctanoic Sulfonate	0.478	0.666	U	ug/L		103	70 - 130
Perfluoropentanoic acid	0.500	0.547	U	ug/L		109	70 - 130
Perfluorotetradecanoic acid	0.500	0.728	U	ug/L		79	70 - 130
Perfluorotridecanoic acid	0.500	0.886	U	ug/L		103	70 - 130
Perfluoroundecanoic acid	0.500	0.4552	J	ug/L		91	70 - 130

Lab Sample ID: MB 280-208646/1-A
Matrix: Solid
Analysis Batch: 209210

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 208646

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutane Sulfonate	0.000133	U	0.000762	0.000133	mg/Kg		01/15/14 16:30	01/17/14 15:21	1
Perfluorobutyric acid	0.000114	U	0.000762	0.000114	mg/Kg		01/15/14 16:30	01/17/14 15:21	1
Perfluorodecane Sulfonate	0.000286	U	0.000762	0.000286	mg/Kg		01/15/14 16:30	01/17/14 15:21	1
Perfluorodecanoic acid	0.000257	U	0.000762	0.000257	mg/Kg		01/15/14 16:30	01/17/14 15:21	1
Perfluorododecanoic acid	0.000543	U	0.00190	0.000543	mg/Kg		01/15/14 16:30	01/17/14 15:21	1
Perfluoroheptanoic acid	0.000114	U	0.000762	0.000114	mg/Kg		01/15/14 16:30	01/17/14 15:21	1
Perfluorohexane Sulfonate	0.000114	U	0.000762	0.000114	mg/Kg		01/15/14 16:30	01/17/14 15:21	1
Perfluorohexanoic acid	0.000143	U	0.000762	0.000143	mg/Kg		01/15/14 16:30	01/17/14 15:21	1
Perfluorononanoic acid	0.000210	U	0.000762	0.000210	mg/Kg		01/15/14 16:30	01/17/14 15:21	1
Perfluorooctane Sulfonamide	0.0000933	U	0.000762	0.0000933	mg/Kg		01/15/14 16:30	01/17/14 15:21	1
Perfluorooctanoic acid	0.000219	U	0.000762	0.000219	mg/Kg		01/15/14 16:30	01/17/14 15:21	1
Perfluorooctanoic Sulfonate	0.000133	U	0.000762	0.000133	mg/Kg		01/15/14 16:30	01/17/14 15:21	1
Perfluoropentanoic acid	0.000229	U	0.000762	0.000229	mg/Kg		01/15/14 16:30	01/17/14 15:21	1
Perfluorotetradecanoic acid	0.000952	U	0.00190	0.000952	mg/Kg		01/15/14 16:30	01/17/14 15:21	1
Perfluorotridecanoic acid	0.000305	U	0.000762	0.000305	mg/Kg		01/15/14 16:30	01/17/14 15:21	1
Perfluoroundecanoic acid	0.000305	U	0.000762	0.000305	mg/Kg		01/15/14 16:30	01/17/14 15:21	1

Lab Sample ID: LCS 280-208646/2-A
Matrix: Solid
Analysis Batch: 209210

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 208646

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutane Sulfonate	0.0176	0.01585		mg/Kg		90	68 - 130
Perfluorobutyric acid	0.0199	0.02160		mg/Kg		109	65 - 130
Perfluorodecane Sulfonate	0.0192	0.01904		mg/Kg		99	70 - 130
Perfluorodecanoic acid	0.0199	0.02037		mg/Kg		102	70 - 130

Method: DV-LC-0012 - Perfluorinated Hydrocarbons (Continued)

Lab Sample ID: LCS 280-208646/2-A
Matrix: Solid
Analysis Batch: 209210

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 208646

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorododecanoic acid	0.0199	0.01930		mg/Kg		97	70 - 130
Perfluoroheptanoic acid	0.0199	0.02061		mg/Kg		104	70 - 130
Perfluorohexane Sulfonate	0.0188	0.01683		mg/Kg		90	70 - 135
Perfluorohexanoic acid	0.0199	0.01939		mg/Kg		98	70 - 130
Perfluorononanoic acid	0.0199	0.02001		mg/Kg		101	64 - 138
Perfluorooctane Sulfonamide	0.0199	0.02034		mg/Kg		102	70 - 130
Perfluorooctanoic acid	0.0199	0.02025		mg/Kg		102	70 - 131
Perfluorooctanoic Sulfonate	0.0190	0.01825		mg/Kg		96	70 - 130
Perfluoropentanoic acid	0.0199	0.01955		mg/Kg		98	62 - 130
Perfluorotetradecanoic acid	0.0199	0.01943		mg/Kg		98	61 - 130
Perfluorotridecanoic acid	0.0199	0.01831		mg/Kg		92	70 - 130
Perfluoroundecanoic acid	0.0199	0.02127		mg/Kg		107	70 - 130

Lab Sample ID: 600-85272-1 MS
Matrix: Solid
Analysis Batch: 209210

Client Sample ID: 2013-FFTA-03 (0-2')
Prep Type: Total/NA
Prep Batch: 208646

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Perfluorobutane Sulfonate	0.000179	U	0.0251	0.02528		mg/Kg	☼	101	68 - 130
Perfluorobutyric acid	0.000153	U	0.0284	0.03275		mg/Kg	☼	115	65 - 130
Perfluorodecane Sulfonate	0.000383	U	0.0274	0.02608		mg/Kg	☼	95	70 - 130
Perfluorodecanoic acid	0.000345	U	0.0284	0.02862		mg/Kg	☼	101	70 - 130
Perfluorododecanoic acid	0.000728	U	0.0284	0.02886		mg/Kg	☼	102	70 - 130
Perfluoroheptanoic acid	0.000181	J	0.0284	0.03007		mg/Kg	☼	105	70 - 130
Perfluorohexane Sulfonate	0.000537	J	0.0268	0.02705		mg/Kg	☼	99	70 - 135
Perfluorohexanoic acid	0.000579	J	0.0284	0.02914		mg/Kg	☼	101	70 - 130
Perfluorononanoic acid	0.000614	J	0.0284	0.02824		mg/Kg	☼	97	64 - 138
Perfluorooctane Sulfonamide	0.000125	U	0.0284	0.02845		mg/Kg	☼	100	70 - 130
Perfluorooctanoic acid	0.000910	J	0.0284	0.02938		mg/Kg	☼	100	70 - 131
Perfluorooctanoic Sulfonate	0.00737		0.0271	0.03379		mg/Kg	☼	97	70 - 130
Perfluoropentanoic acid	0.000538	J	0.0284	0.02501		mg/Kg	☼	86	62 - 130
Perfluorotetradecanoic acid	0.00128	U	0.0284	0.01361	N	mg/Kg	☼	48	61 - 130
Perfluorotridecanoic acid	0.000409	U	0.0284	0.02077		mg/Kg	☼	73	70 - 130
Perfluoroundecanoic acid	0.000409	U	0.0284	0.03014		mg/Kg	☼	106	70 - 130

Lab Sample ID: 600-85272-1 MSD
Matrix: Solid
Analysis Batch: 209210

Client Sample ID: 2013-FFTA-03 (0-2')
Prep Type: Total/NA
Prep Batch: 208646

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorobutane Sulfonate	0.000179	U	0.0241	0.02049		mg/Kg	☼	85	68 - 130	21	30
Perfluorobutyric acid	0.000153	U	0.0272	0.03105		mg/Kg	☼	114	65 - 130	5	30
Perfluorodecane Sulfonate	0.000383	U	0.0263	0.02240		mg/Kg	☼	85	70 - 130	15	30
Perfluorodecanoic acid	0.000345	U	0.0272	0.02835		mg/Kg	☼	104	70 - 130	1	30
Perfluorododecanoic acid	0.000728	U	0.0272	0.02756		mg/Kg	☼	101	70 - 130	5	30
Perfluoroheptanoic acid	0.000181	J	0.0272	0.02686		mg/Kg	☼	98	70 - 130	11	30
Perfluorohexane Sulfonate	0.000537	J	0.0257	0.02252		mg/Kg	☼	85	70 - 135	18	30
Perfluorohexanoic acid	0.000579	J	0.0272	0.02844		mg/Kg	☼	102	70 - 130	2	30
Perfluorononanoic acid	0.000614	J	0.0272	0.02830		mg/Kg	☼	102	64 - 138	0	30

Method: DV-LC-0012 - Perfluorinated Hydrocarbons (Continued)

Lab Sample ID: 600-85272-1 MSD
Matrix: Solid
Analysis Batch: 209210

Client Sample ID: 2013-FFTA-03 (0-2')
Prep Type: Total/NA
Prep Batch: 208646

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perfluorooctane Sulfonamide	0.000125	U	0.0272	0.02788		mg/Kg	☼	102	70 - 130	2	30
Perfluorooctanoic acid	0.000910	J	0.0272	0.02875		mg/Kg	☼	102	70 - 131	2	30
Perfluorooctanoic Sulfonate	0.00737		0.0260	0.04364	N	mg/Kg	☼	139	70 - 130	25	30
Perfluoropentanoic acid	0.000538	J	0.0272	0.02314		mg/Kg	☼	83	62 - 130	8	30
Perfluorotetradecanoic acid	0.00128	U	0.0272	0.009804	N	mg/Kg	☼	36	61 - 130	32	30
Perfluorotridecanoic acid	0.000409	U	0.0272	0.01817	N	mg/Kg	☼	67	70 - 130	13	30
Perfluoroundecanoic acid	0.000409	U	0.0272	0.02965		mg/Kg	☼	109	70 - 130	2	30

Method: Moisture - Percent Moisture

Lab Sample ID: 600-85272-1 DU
Matrix: Solid
Analysis Batch: 208164

Client Sample ID: 2013-FFTA-03 (0.25-2')
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	25		24		%		3	20
Percent Solids	75		76		%		1	20

LCMS

Analysis Batch: 207217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
DLCK 280-207217/13	Lab Control Sample	Total/NA	Solid	DV-LC-0012	

Prep Batch: 208646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-1	2013-FFTA-03 (0.25-2')	Total/NA	Solid	PFC leach	
600-85272-1 MS	2013-FFTA-03 (0-2')	Total/NA	Solid	PFC leach	
600-85272-1 MSD	2013-FFTA-03 (0-2')	Total/NA	Solid	PFC leach	
600-85272-6	2013-FFTA-02 (2-4')	Total/NA	Solid	PFC leach	
LCS 280-208646/2-A	Lab Control Sample	Total/NA	Solid	PFC leach	
MB 280-208646/1-A	Method Blank	Total/NA	Solid	PFC leach	

Analysis Batch: 209210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-1	2013-FFTA-03 (0.25-2')	Total/NA	Solid	DV-LC-0012	208646
600-85272-1 MS	2013-FFTA-03 (0-2')	Total/NA	Solid	DV-LC-0012	208646
600-85272-1 MSD	2013-FFTA-03 (0-2')	Total/NA	Solid	DV-LC-0012	208646
600-85272-6	2013-FFTA-02 (2-4')	Total/NA	Solid	DV-LC-0012	208646
LCS 280-208646/2-A	Lab Control Sample	Total/NA	Solid	DV-LC-0012	208646
MB 280-208646/1-A	Method Blank	Total/NA	Solid	DV-LC-0012	208646

General Chemistry

Analysis Batch: 208164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-1	2013-FFTA-03 (0.25-2')	Total/NA	Solid	Moisture	
600-85272-1 DU	2013-FFTA-03 (0.25-2')	Total/NA	Solid	Moisture	
600-85272-1 MS	2013-FFTA-03 (0-2')	Total/NA	Solid	Moisture	
600-85272-1 MSD	2013-FFTA-03 (0-2')	Total/NA	Solid	Moisture	

Analysis Batch: 208447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85272-6	2013-FFTA-02 (2-4')	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center PFC

TestAmerica Job ID: 600-85272-2

Client Sample ID: 2013-FFTA-03 (0.25-2')

Lab Sample ID: 600-85272-1

Date Collected: 01/07/14 13:16
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 74.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFC leach			10.45 g	20 mL	208646	01/15/14 16:30	CDC	TAL DEN
Total/NA	Analysis	DV-LC-0012		1	10.45 g	20 mL	209210	01/17/14 15:45	MK	TAL DEN
Total/NA	Analysis	Moisture		1			208164	01/11/14 13:21	AFB	TAL DEN

Client Sample ID: 2013-FFTA-02 (2-4')

Lab Sample ID: 600-85272-6

Date Collected: 01/07/14 15:45
Matrix: Solid
Date Received: 01/10/14 07:50
Percent Solids: 74.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PFC leach			10.47 g	20 mL	208646	01/15/14 16:30	CDC	TAL DEN
Total/NA	Analysis	DV-LC-0012		1	10.47 g	20 mL	209210	01/17/14 16:22	MK	TAL DEN
Total/NA	Analysis	Moisture		1			208447	01/14/14 13:25	AFB	TAL DEN

Laboratory References:

TAL DEN = TestAmerica Denver, 4955 Yarrow Street, Arvada, CO 80002, TEL (303)736-0100

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center PFC

TestAmerica Job ID: 600-85272-2

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0759	08-04-14
Louisiana	NELAP	6	30643	06-30-14
Oklahoma	State Program	6	1309	08-31-14
Texas	NELAP	6	T104704223	10-31-14
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	TX00083	10-31-14

Laboratory: TestAmerica Denver

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

Authority	Program	EPA Region	Certification ID	Expiration Date
A2LA	DoD ELAP		2907.01	10-31-15
A2LA	ISO/IEC 17025		2907.01	10-31-15
Alabama	State Program	4	40730	09-30-12 *
Alaska (UST)	State Program	10	UST-30	04-05-14
Arizona	State Program	9	AZ0713	12-19-14
Arkansas DEQ	State Program	6	88-0687	06-01-14
California	ELAP	9	2513	08-31-14
Colorado	State Program	8	N/A	09-30-14
Connecticut	State Program	1	PH-0686	09-30-14
Florida	NELAP	4	E87667	06-30-14
Illinois	NELAP	5	200017	04-30-14
Iowa	State Program	7	370	12-01-14
Kansas	NELAP	7	E-10166	04-30-14
Louisiana	NELAP	6	30785	06-30-14 *
Maine	State Program	1	CO0002	03-03-15
Maryland	State Program	3	268	03-31-14
Minnesota	NELAP	5	8-999-405	12-31-13 *
Nevada	State Program	9	CO0026	07-31-14
New Hampshire	NELAP	1	205310	04-28-14
New Jersey	NELAP	2	CO004	06-30-14
New Mexico	State Program	6	CO00026	06-30-14
New York	NELAP	2	11964	04-01-14
North Carolina DENR	State Program	4	358	12-31-14
North Dakota	State Program	8	R-034	06-30-14
Oklahoma	State Program	6	8614	08-31-14
Oregon	NELAP	10	CO200001	01-09-15
Pennsylvania	NELAP	3	68-00664	07-30-14 *
South Carolina	State Program	4	72002	06-30-14
Texas	NELAP	6	T104704183-08-TX	10-01-14
USDA	Federal		P330-13-00202	07-02-16
Utah	NELAP	8	CO000262012-4	07-31-14
Virginia	NELAP	3	460232	06-14-14
Washington	State Program	10	C583	08-03-14
West Virginia DEP	State Program	3	354	11-30-14
Wisconsin	State Program	5	999615430	08-31-14
Wyoming (UST)	A2LA	8	2907.01	10-31-15

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

1/24/2014

Client Information	Sampler: Chris Trevino	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 1
Company: Golder Associates Inc.				Job #:
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: Exide Frisco	SSOW#:			

600-85272 Chain of Custody

Codes:
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2SO3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - ph 4-5
Z - other (specify)

H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
2013-FFTA-03 (0-2')	1/7/14	1316	G	Solid			X	X	X	X								
2013-FFTA-03 (2-4')	1/7/14	1317	G	Solid			X	X	X	X								Hold
2013-FFTA-03 (14-16')	1/7/14	1320	G	Solid			X	X	X	X								
2013-FFTA-03 (16-18')	1/7/14	1323	G	Solid			X	X	X	X								Hold
2013-FFTA-02 (0-2')	1/7/14	1530	G	Solid			X	X	X	X								
2013-FFTA-02 (2-4')	1/7/14	1545	G	Solid			X	X	X	X								Hold
Field Blank	1/7/14	1720	G	~~Solid~~ W			X											
MW-43 (0-2')	1/7/14	1200	G	Solid			X	X	X	X								
MW-43 (2-4')	1/7/14	1210	G	Solid			X	X	X	X								Hold
MW-43 (8-10')	1/7/14	1220	G	Solid			X	X	X	X								
MW-43 (17-20')	1/7/14	1230	G	Solid			X	X	X	X								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOSHUA JANZEN	01/08/14 1330	GOLDER	McGowen	01/8/14 1330	TAL
2	M McGowen	1/8/14 1700	TAL			
3					1/8/14 1108	

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

1/24/2014

Client Information	Sampler: Chris Trevino	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 2
Company: Golder Associates Inc.				Job #:
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: Exide Frisco	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Se			Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N					
MW-45 (0-0.5')	1/7/14	1430	G	Solid										X							
MW-45 (1-2')	1/7/14	1440	G	Solid										X							hold
MW-45 (4-5')	1/7/14	1450	G	Solid										X							hold
MW-45 (15-17')	1/7/14	1510	G	Solid								X					X				
MW-45 (17-18')	1/7/14	1520	G	Solid								X					X				
MW-45 (18-20')	1/7/14	1530	G	Solid								X					X				
RINSE BLANK-GEOPROBE	1/8/14	915	G	Solid W			X	X	X	X											
RINSE BLANK-CME	1/8/14	915	G	Solid W			X	X	X	X											
			G	Solid																	
			G	Solid																	
			G	Solid																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	JOSHUA JANZEN	01/08/14 1330	GOLDER	McCowen	01/08/14 1330	TAL
2	McCowen	1/8/14 1700	TAL		/ /	
3					1/14/14 1108	

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1 / 1

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-85272-2

Login Number: 85272

List Source: TestAmerica Houston

List Number: 1

Creator: Lopez, Sandro R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	4.3
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.	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.	False	Samples received in bulk jars
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	Check done at department level as required.

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-85272-2

Login Number: 85272
List Number: 1
Creator: O'Tormey, Stephanie R

List Source: TestAmerica Denver
List Creation: 01/10/14 05:13 PM

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

Data Usability Summary
Test America Work Orders: 600-85318-1, 600-85318-2, 600-85318-3, 600-85318-4

Sample Dates:	January 8 & 9, 2014	**Project No.:**	1302086
Laboratory:	Test America (Houston TLAP Certification T104704223)	**Client:**	Exide Technologies Inc.
Work Orders:	Work Orders: 600-85318-1, 600-85318-2, 600-85318-3, 600-85318-4		
Intended Use	Affected Property Assessment Report (APAR)		
Site:	Exide Former Operating Plant (FOP), 7471 5th Street, Frisco, TX		

TESTS/ METHODS

Volatile Organic Compounds (VOCs) by SW-846 8260B – Gas Chromatography (GC)/Mass Spectrometry (MS)

Low Level Semivolatile Organic Compounds by SW-846 8270C – GC/MS

Texas Total Petroleum Hydrocarbons (TPH) by TX1005 – GC

Polychlorinated Biphenyls (PCBs) by SW-846 8082 – Gas Chromatography (GC)

Total Metals by SW-846 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP)

SAMPLES

28 soil samples (1 of which was subjected to the Synthetic Precipitation Leaching Procedure (SPLP)), 1 field duplicate, 2 equipment rinsate blanks, 1 field blank, 1 trip blank, and 1 field MS/MSD pair. See Table 1 for a complete cross-referenced listing of samples. Thirteen additional soil samples were collected but archived by the laboratory for possible future analysis.

Golder completed a review of the above chemical analysis data for conformance with the requirements of the Texas Risk Reduction Program (TRRP) guidance document, Review and Reporting of COC Concentration Data (RGG-366/TRRP-13 Revised May 2010) and for adherence to project objectives. The results of the review are discussed in this data usability summary (DUS).

Golder completed the review using the following laboratory and project submittals:

- Laboratory reportable data as defined in TRRP-13;
- Laboratory review checklists (LRC) with the associated exception reports;
- Laboratory Electronic Data Deliverable (EDD); and
- Project field notes from the sampling event.

The review of the reportable data included the quality control (QC) parameters listed below, as required per TRRP-13, using the applicable analytical method and project requirements:

- Data Completeness
- Chain-of-Custody Procedures
- Sample Condition - Holding Time, Preservation, and Containers
- Field Procedures
- Results Reporting Procedures
- Laboratory and Field QC Blanks
- Laboratory Control Spike and Matrix Spike Recoveries
- Surrogate Recoveries
- Laboratory and Field Duplicate Precision

Additionally, Golder used the LRC to evaluate the following QC parameters:

- Method Quantitation Limits (MQLs)
- Method Detection Limits (MDLs)
- Instrument Tuning, Calibration, and Performance
- Internal Standards

Criteria used for this data usability review are as follows:

- Organics: 60-140% spike recovery (and not less than 10% or data is rejected) and +MQL difference or 40% RPD (for laboratory duplicates) as recommended in TRRP-13;
- Inorganics: 70-130% spike recovery (and not less than 30% or data is rejected) and +MQL difference or 30% RPD (for laboratory duplicates) as recommended in TRRP-13; and
- Soil Samples: + 3x MQL difference (if either result is less than 5x MQL) or 50% RPD (for field duplicates) as recommended in TRRP-13.

If an item was found outside of the review criteria, the reviewer applied a data qualifier (DQ) and bias code to the results for the affected samples in accordance with TRRP-13. A list of all qualified results and definitions of the qualifier and bias codes are given in Table 2.

GLOSSARY OF TERMS

The following definitions apply for terms related to analyte reporting limits:

MDL (Method Detection Limit) – the minimum concentration of an analyte that the laboratory can measure and report with 99% confidence that the analyte concentration is greater than zero. The MDL is

determined by the laboratory for each analyte in a given reagent matrix (water or soil) generally using the procedures specified in 40 CFR Part 136, Appendix B. It is a measure of the concentration an instrument can detect or 'see' in a given reagent matrix. TRRP-13 requires that the laboratory routinely check the MDL for reasonableness.

SDL (Sample Detection Limit) – the MDL adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes than prescribed in the analytical method, and taking into account sample characteristics, sample preparation, and analytical adjustments including dry-weight adjustments. It is a measure of the concentration an instrument can detect or 'see' in a given sample. For TRRP, non-detects are reported using the SDL. This term was originally called the SQL (Sample Quantitation Limit) before the TRRP rule revisions effective March 19, 2007.

Unadjusted MQL (Method Quantitation Limit) – the lowest non-zero concentration standard in the laboratory's initial calibration curve calculated using the normal aliquot sizes and final volumes prescribed in the analytical method. The unadjusted MQL is reported by the laboratory for each analyte in a given matrix (water or soil). It is a measure of the concentration an instrument can accurately measure in a typical sample. Per TRRP, the Unadjusted MQLs should be below the Levels of Required Performance (LORPs) for purposes of assessment as well as demonstration of conformance with critical Protective Concentration Levels (PCLs).

MQL – the unadjusted MQL adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes than prescribed in the analytical method, and takes into account sample characteristics, sample preparation, and analytical adjustments including dry-weight adjustments. It is a measure of the concentration an instrument can accurately measure in a given sample. Analytes with concentrations above the SDL but below the MQL, though present in the sample, may not be accurately measured and are thus flagged as estimated (J).

LABORATORY CERTIFICATION

At the time the laboratory data were generated for this project, the laboratory was NELAC accredited under the Texas Laboratory Accreditation Program (TLAP) for the matrices, methods and parameters of analysis requested on the chain-of-custody forms. A copy of the applicable pages of the laboratory's National Environmental Laboratory Accreditation Program (NELAP) certificate valid during the period in which the laboratory generated the data in this report is included in Appendix 10.5.

USABILITY SUMMARY

1. Usability of Unqualified Non-Detects – Non-detects are reported at the sample detection limit (SDL) as required per TRRP. Additionally, according to the LRC, an MDL study was performed for each analyte and the MDLs were checked for reasonableness for each applicable analyte. The levels of required performance (LORPs) have been established by Golder/PBW as the Residential Assessment Levels (RALs), which are the minimum of the TRRP residential Tier 1 $^{Tot}Soil_{Comb}$ and Tier 1, 2 or 3 $^{GW}Soil_{Ing}$ PCLs for a 30-acre source area for metals, or 0.5 acre source area for organics. As needed per TRRP, the Unadjusted MQL stated by the laboratory is at or below the LORP for each applicable analyte, and thus the analytical methods are appropriate and the results can be used to demonstrate conformance with the criteria. The MQLs for some SVOCs, although the low-level method was used, did not meet LORPs for the following: 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Nitroaniline, 2-Nitrophenol, 3,3'-Dichlorobenzidine, 3-Nitroaniline, 4,6-Dinitro-2-methylphenol, 4-Chloroaniline, 4-Chlorophenyl-phenylether, 4-Nitroaniline, 4-Nitrophenol, Benzidine, Bis(2-chloroethoxy)methane, Bis(2-chloroethyl) Ether, Bis(2-chloroisopropyl) Ether, N-Nitrosodimethylamine, N-Nitroso-di-n-propylamine, and Pentachlorophenol.
2. Usability of Qualified Data – There are no major QC deficiencies, and thus all data is usable as qualified for the intended use. As shown in Table 2, the reviewer qualified some detects as estimated (J) due to minor QC deficiencies. Detects that are biased high can be used; however, the reported concentration may be high. Detects that are estimated may be either low or high. Results with a laboratory J-flag (i.e., at a concentration between the SDL and MQL) should be considered estimates. The actual value is not expected to exceed the sample MQL.

Reviewer: Jing Song Xi 5/19/14

QUALITY CONTROL PARAMETERS AND OUTCOMES

Data Completeness

The laboratory data packages contain all necessary data (i.e., the laboratory reportable data per TRRP-13) and the EDD contain all sample results in acceptable format. Minor revisions were required for work orders 600-85318-1. All revisions are detailed in the laboratory narratives.

Chain-of-Custody

Proper sample custody procedures were used, which confirms that the integrity of the samples was maintained. Additionally, the information on the custody records is complete and agrees with that in the field notes and laboratory reports, except as follows:

- Minor instances of container labels not matching information listed on the COC, or samples being listed on the COC but not received by the laboratory. These inconsistencies have been addressed by the laboratory and do not affect sample results.

Sample Condition

Samples were collected in appropriate containers, properly preserved in the field, and prepared and analyzed within the holding times as required in the analytical methods, which ensures that the samples were not affected by analyte degradation:

- For 600-85318, the temperatures of the coolers at receipt were 3.0°C and 3.9°C.

Field Procedures

The samples were collected and placed immediately into sterilized jars provided by the laboratory and then into a cooler with ice for overnight delivery to the laboratory.

1 field duplicate, 2 equipment rinsate blanks, 1 field blank, 1 trip blank, and 1 field MS/MSD pair were collected with the 28 investigative samples.

Results Reporting Procedures

The hardcopy analytical results include a Result, MQL (adjusted), and SDL. The EDD includes the MDL, SDL (under the SQL column per previously used terminology) and the MQL, which is not adjusted for sample specific factors.

Results are reported in mg/kg with dry-weight correction for the metals. Non-detects are reported using the SDL as specified per TRRP and detects between the SDL and MQL are reported with a laboratory J-flag. The concentration reported for detects between the SDL and MQL is below the calibration range and thus is considered estimated.

MQLs- The LORPs have been established by Golder/PBW as the Residential Assessment Levels (RALs), which are the minimum of the TRRP residential Tier 1 Tier 1 $^{Tot}Soil_{Comb}$ and Tier 1, 2 or 3 $^{GW}Soil_{Ing}$ PCLs for a 30-acre source area for metals or 0.5 acre source area for organics. The Unadjusted MQLs for the laboratory are at or below the LORPs for each applicable analyte, except for some SVOCs as previously stated.

MDLs- According to the LRC, an MDL study was performed for each analyte, and the MDLs were checked for reasonableness and either adjusted or supported by the analysis of detectability check standards (DCS) for each applicable analyte as required per TRRP-13. Results for the DCS are included in the data packages.

Laboratory Blanks – Results for samples prepared in the same QC batch as a contaminated method blank may be affected by laboratory contamination. Laboratory blanks did not exhibit analytes above the MDL, except as follows:

- Batch 124919 contained cadmium above the MDL. Cadmium concentrations in associated preparation batch samples -16 -30, -31 were greater than 5x the MB concentration; therefore no qualification was required.
- Batch 125242 contained toluene above the MDL. The toluene concentration in the preparation batch sample -08 was detected at <5x MB concentration and is qualified as undetected in Table 2.
- Batch 125220 contained butyl benzyl phthalate, diethyl phthalate, and di-n-butyl phthalate above the MDL. Diethyl phthalate, and di-n-butyl phthalate concentrations in the preparation batch samples -03 and -07 that were detected at <10x MB concentration are qualified as undetected in Table 2.
- Batch 124797 contained arsenic above the MDL. Arsenic was not detected in the associated preparation batch samples.

Field QC Blanks

Two equipment rinsate blanks were collected to document sufficient field decontamination procedures for soil sampling devices. Results for samples collected with a contaminated rinsate blank may be affected by field contamination. One field blank was collected to document if contamination is present in the surrounding air at time of sampling. A field blank with detected analytes may indicate the presence of contamination in the surrounding air not representative of the sample collected. No analytes were detected in the field QC blanks, except for the following:

Lab Package	Field Sample ID	Sample Date	Analyte	Blank Concentration
600-85318-23	Rinse Blank CME	1-9-2014	Cadmium	0.0006 J mg/L
600-85272-40	Rinse Blank aeo	1-9-2014	Acetone	0.0149 mg/L
			Toluene	0.00227 J mg/L

Results for samples collected with a contaminated rinsate blank may be affected by field contamination. These samples were prepared in batches separate from the analysis of solids. Samples 600-85318-24, -25, -26, and -27 exhibited detections of some combination of the analytes mentioned above, however, a direct correlation cannot be made. Results for the above mentioned analytes are qualified as J in Table 2. No VOCs were detected in the trip blank.

Laboratory Control Sample

The laboratory prepared one laboratory control sample (LCS) for each analytical batch and reported recoveries for all of the analytes for each test. The LCS recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on a sample, free of matrix effects, except for the following:

- Benzidine was recovered outside the TRRP specifications for preparation batch 125220. All associated samples in the preparation batch are qualified as UJ in Table 2.

Matrix Spike Recovery

The laboratory prepared one or more matrix spike (MS) and matrix spike duplicate (MSD) with each analytical batch plus a Post Digestion Spike (PDS) with each metals analytical batch. MS/MSD recoveries are reported for the same analytes as the LCS for MS/MSD prepared using a sample from the site, which includes 1 MS/MSD, as shown in Table 1.

PDS outcomes are given on the LRC for each job package; however PDS data are not reportable data per TRRP-13. According to the LRC, the PDS met method requirements, which indicates good accuracy for the analysis technique on the given sample matrix.

The MS/MSD recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on a sample free of matrix effects, except as follows:

QC Batch	Lab Sample ID	MS/MSD ID	Analyte	Parent Amount (mg/kg)	Spike Amount for MS/MSD (mg/kg)	MS % Recovery	MSD % Recovery	Qual
124836	600-85318-14	MW-27D (0.5-2)	Antimony	2.05	63.9, 62.6	39	41	JL
124836	600-85318-14	MW-27D (0.5-2)	Lead	315	63.9, 62.6	377	146	-
124836	600-85318-20	MW-42 (0.5-2)	Antimony	0.287	63.6, 61.9	26	24	JL
124836	600-85318-20	MW-42 (0.5-2)	Lead	241	63.6, 61.9	-253	-268	-
125018	600-85318-36	2013-BSA-2A (0-2)	Antimony	17.1	61.4, 60.2	24	18	JL
125018	600-85318-36	2013-BSA-2A (0-2)	Arsenic	34.9	61.4, 60.2	52	49	JL
125018	600-85318-36	2013-BSA-2A (0-2)	Lead	2880	61.4, 60.2	-1628	-2420	-

NA – Not available. The PDS for this batch was performed using another sample

In all cases where the spike amount is less than four times the result in the unspiked parent sample such as with lead, the data are considered inconclusive and the MS/MSD recovery check is waived.

Surrogate Recovery

Surrogate recoveries were within acceptable limits, except for the following:

- For Method 8270C, Sample 600-85318-3 recovered low for Phenol-d5. The laboratory's standard operating practice allows 1 base and 1 acid of the six surrogates used to be outside acceptance criteria without performing re-extraction/re-analysis according to the laboratory. Since only one compound was outside of control limits, qualification was not required per TRRP-13.
- For Method 8270C, samples 600-85318-1, 600-85318-8, 600-85318-24 required a dilution due to the nature of the sample matrix, therefore the surrogate spike concentration was reduced to a level where the recovery calculation does not provide

useful information. Qualification was not performed due to the dilution of the surrogates out of the matrix.

- For Method TX1005, Sample 600-85318-8 recovered high for o-Terphenyl. Evidence of matrix interference is present, therefore, re-extraction/re-analysis was not performed according to the laboratory. Since this is the only surrogate spike compound for this Method, this sample has been qualified accordingly as JH.

Laboratory Duplicate Precision

The laboratory prepared one or more Matrix Spike Duplicate (MSD) with each analytical batch for each test. Additionally, the laboratory prepared one Matrix Duplicate (MD) with each metals batch. RPDs are reported for the same analytes as the LCS for MSD/MD prepared using a sample from the site, which includes 1 MSD (and MD for Total Metals). Non-homogenous samples can impact the apparent method precision.

The MSD and MD RPDs are within the TRRP recommended criteria, which indicates good precision for the preparation and analysis technique for the given sample matrix, except as follows:

QC Batch	Lab Sample ID	MS/MSD ID	Analyte	Parent Amount (mg/kg)	MSD RPD	MD RPD	Qual
125018	600-85318-36	2013-BSA-2A (0-2)	Arsenic	34.9	4	82	J
125018	600-85318-36	2013-BSA-2A (0-2)	Selenium	1.07 J	1	35	J
124836	600-85318-20	MW-42 (0.5-2)	Cadmium	1.82	2	118	J
124836	600-85318-20	MW-42 (0.5-2)	Lead	241	7	166	J

Field Duplicate Precision

One field duplicate was collected with the samples and analyzed for arsenic, cadmium, lead and selenium. Results are summarized in Table 3. The RPDs (or the absolute difference between results for concentrations <5x MQL and for non-detects) are within the TRRP criteria, which indicates good precision for the sampling, preparation, and analysis technique on the given sample matrix, except as follows:

- The results for Total arsenic, cadmium, and lead are outside the criteria for the pair collected at MW-42 (0.5-2). These results have been qualified as J accordingly in Table 2.

Instrument Tuning

According to the LRC, instrument tuning met method requirements for the samples, which indicates the GC/MS instrument was properly set up to identify analytes.

Instrument Calibration

According to the LRC, initial and continuing calibration data met method requirements for all reported results, which indicates the instruments were properly calibrated to measure analyte concentrations, except for the following:

- For Method 8270C, the continuing calibration verification (CCV) associated with batch 125471 recovered above the upper control limit for benzyl alcohol. The samples associated with this CCV were non-detect for the affected analyte and qualified as UJ in Table 2.

Instrument Performance

According to the LRC, the serial dilution and ICP interference check samples met method requirements, which indicates that no significant matrix interference exists, except as follows:

- The interference check standard solution associated with batch 125051 showed results for arsenic, cadmium, and lead at a level greater than 2 times the LOD. Since this analyte was not detected in the field sample associated with the batch, no qualification was required.

Internal Standards

According to the LRC, area counts and retention times were within method requirements, except for the following:

- For Method 8270C, various internal standards responses were outside of acceptance limits. Affected samples were reanalyzed (including dilutions) but sample matrix appeared to impact responses. Chrysene response was outside of the method required acceptance limit for MW-27A (0-2). Phenanthrene response was outside of the method required acceptance limit for 2013-MB-5 (10-12). These analytes have been qualified as JH accordingly on Table 2.

TABLE 1
CROSS REFERENCE OF FIELD SAMPLE IDENTIFICATIONS AND LABORATORY IDENTIFICATIONS

Lab Sample ID	Field Sample ID	Prep Batch/ Analysis Batch	Sample Date	Matrix	Comments
600-85318-1	2013-FFTA-01 (0.25-2)	/125013 124920/125003	1/8/2014	Soil	
600-85318-2	2013-FFTA-02 (2-4)		1/8/2014	Soil	Not reported
600-85318-3	2013-FFTA-03 (18-19)	/125071 125220/125471 124920/125003	1/8/2014	Soil	
600-85318-4	2013-MB-3 (0.75-1.25)	/125071 124836/124882	1/8/2014	Soil	
600-85318-5	2013-MB-3 (1.25-2)	127810/127873	1/8/2014	Soil	
600-85318-6	2013-MB-3 (2-4)		1/8/2014	Soil	Not reported
600-85318-7	2013-MB-5 (0.5-5)	/125071 125220/125471 124920/125003 124836/124882 128791/128837	1/8/2014	Soil	
600-85318-8	2013-MB-5 (10-12)	/125242 124920/125003 124836/124882	1/8/2014	Soil	
600-85318-9	2013-MB-5 (14-16)	127709/127767	1/8/2014	Soil	
600-85318-10	2013-MB-5 (18-20)		1/8/2014	Soil	Not reported
600-85318-11	2013-MB-4 (0.83-1.33)	/125071 124836/124882	1/8/2014	Soil	
600-85318-12	2013-MB-4 (1.33-2)		1/8/2014	Soil	Not reported
600-85318-13	2013-MB-4 (2-4)		1/8/2014	Soil	Not reported
600-85318-14	MW-27D (0.5-2)	/125071 125220/125471 124920/125003 124836/124882	1/8/2014	Soil	
600-85318-15	MW-27D (2-4)	127709/127767	1/8/2014	Soil	
600-85318-16	MW-27C (0-2)	/125071 124982/125404 124920/125003 124919/125010	1/8/2014	Soil	
600-85318-17	MW-41 (0-0.5)	124836/124882	1/8/2014	Soil	
600-85318-18	MW-41 (0.5-2)	124836/124882	1/8/2014	Soil	
600-85318-19	MW-42 (0-0.5)	124836/124882	1/8/2014	Soil	
600-85318-20	MW-42 (0.5-2)	124836/124882	1/8/2014	Soil	site-specific MS/MSD
600-85318-21	DUP-6	124836/124882	1/8/2014	Soil	Duplicate of MW-42 (0.5-2)
600-85318-22	Field Blank	/124815	1/8/2014	Water	Field Blank
600-85318-23	Rinse Blank - CME	124797/125051	1/9/2014	Water	Rinsate Blank
600-85318-24	MW-27B (0-2)	/125071 124920/125003 124836/124882	1/9/2014	Soil	
600-85318-25	MW-27B (2-4)	127709/127767	1/9/2014	Soil	
600-85318-26	MW-27A (0-2)	/125071 124920/125003 124836/124882	1/9/2014	Soil	
600-85318-27	MW-27A (2-4)	127810/127873	1/9/2014	Soil	
600-85318-28	2013-NDA-1A (2-4)	124838/125030 127709/127767	1/9/2014	Soil	
600-85318-29	E-11C (0-0.5)	124836/124882	1/9/2014	Soil	
600-85318-30	D-11A (0-0.5)	124919/125010	1/9/2014	Soil	
600-85318-31	D-12A (0-0.5)	124919/125010	1/9/2014	Soil	
600-85318-32	D-13A (0-0.5)	124836/124882	1/9/2014	Soil	
600-85318-33	2013-C2L-03 (0-0.5)	124836/124882	1/9/2014	Soil	
600-85318-34	2013-C2L-03 (1-2)		1/9/2014	Soil	Not reported
600-85318-35	2013-C2L-03 (4-5)		1/9/2014	Soil	Not reported
600-85318-36	2013-BSA-2A (0-2)	125018/125110	1/9/2014	Soil	
600-85318-37	2013-AD-04 (0-0.5)	124836/124882	1/9/2014	Soil	
600-85318-38	2013-AD-04 (0.5-2)		1/9/2014	Soil	Not reported
600-85318-39	2013-AD-04 (2-4)		1/9/2014	Soil	Not reported
600-85318-40	Rinse Blank - Geo	/124815 124914/125073 124950/124998 124797/125051	1/9/2014	Water	Rinsate Blank
600-85318-41	Trip Blank	/124815	1/9/2014	Water	Trip Blank

TABLE 2 - QUALIFIED DATA

Lab Sample ID	Field Sample ID	Analyte	Result	Units	Qualifer	Explanation
600-85318-1	2013-FFTA-01 (0.25-2)	Benzidine	<0.458 U	mg/kg	UJ	Analyte recovered outside TRRP specifications for preparation batch
600-85318-3	2013-FFTA-03 (18-19)	Benzyl Alcohol	<0.0125 U	mg/kg	UJ	CCV recovered above upper control limit
		Diethyl Phthalate	0.262	mg/kg	<0.9509 U	Analyte detected at less than 10x method blank concentration
		Di-n Butyl Phthalate	0.0914 J	mg/kg	<0.254 U	Analyte detected at less than 10x method blank concentration
		Benzidine	<0.0193 U	mg/kg	UJ	Analyte recovered outside TRRP specifications for preparation batch
600-85318-7	2013-MB-5 (0.5-5)	Benzyl Alcohol	<0.0151 U	mg/kg	UJ	CCV recovered above upper control limit
		Diethyl Phthalate	0.263	mg/kg	<0.9509 U	Analyte detected at less than 10x method blank concentration
		Di-n Butyl Phthalate	0.0770 J	mg/kg	<0.254 U	Analyte detected at less than 10x method blank concentration
		Benzidine	<0.0234 U	mg/kg	UJ	Analyte recovered outside TRRP specifications for preparation batch
600-85318-8	2013-MB-5 (10-12)	Toluene	0.00313 J	mg/kg	<0.01169 U	Analyte detected at less than 5x method blank concentration
		Benzidine	<2.41 U	mg/kg	UJ	Analyte recovered outside TRRP specifications for preparation batch
		TPH	Various	mg/kg	JH	o-Terphenyl recovered outside TRRP specifications
		Phenanthrene	5.36	mg/kg	JH	ISTD recovered above TRRP specifications
600-85318-20	MW-42 (0.5-2)	Antimony	<0.287 U	mg/kg	UJL	MS % recovery below TRRP specifications
		Arsenic	13.9	mg/kg	J	Field duplicate RPD above specifications
		Cadmium	1.82	mg/kg	J	Matrix and field duplicate RPD above specifications
		Lead	241	mg/kg	J	Matrix and field duplicate RPD above specifications
600-85318-24	MW-27B (0-2)	Antimony	6.99	mg/kg	JL	MS % recovery below TRRP specifications
		Cadmium	9.85	mg/kg	J	Analyte detected in field QC blank
600-85318-25	MW-27B (2-4)	Cadmium	0.48	mg/kg	J	Analyte detected in field QC blank
600-85318-26	MW-27A (0-2)	Cadmium	12	mg/kg	J	Analyte detected in field QC blank
		Chrysene	0.0361 J	mg/kg	JH	ISTD recovered above TRRP specifications
600-85318-27	MW-27A (2-4)	Cadmium	0.547	mg/kg	J	Analyte detected in field QC blank
600-85318-36	2013-BSA-2A (0-2)	Antimony	17.1	mg/kg	JL	MS % recovery below TRRP specifications
		Arsenic	34.9	mg/kg	J	Matrix duplicate RPD above specifications
		Selenium	1.07	mg/kg	J	Matrix duplicate RPD above specifications

Note:

Detected results between the SDL and MQL (i.e., results with a laboratory J-flag) have been included in the above table since the reported concentration is below the calibration range.

J Estimated data; The analyte was detected and identified. The associated numerical value (i.e., the reported sample concentration) is the approximate concentration of the analyte in the sample.

NJ Tentatively identified, estimated data; The analysis indicates the presence of the analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.

NS Not selected; Another result (from a secondary dilution, different analytical method, re-sampling, etc.) is selected for use based on QC outcomes and/or reported concentrations.

R Rejected data; The data is unusable. Serious QC deficiencies make it impossible to verify the absence or presence of this analyte.

U Not detected; The analyte was not detected >5x (10x for common contaminants) the level in an associated blank and thus should be considered not detected above the level of the associated numerical value (i.e., the reported sample concentration).

UJ Estimated data; The analyte was not detected above the reported sample detection limit (SDL). The numerical value of the SDL is estimated and may be inaccurate.

H Bias in sample result is likely to be high

L Bias in sample result is likely to be low

TABLE 3 - FIELD DUPLICATE PRECISION CALCULATIONS

Duplicate and Parent Sample Field Identification	Analyte	Sample Result	Duplicate Result	RPD[a]	Accept or Reject	Qualifier Added
DUP-6 / MW-42 (0.5-2)	arsenic	13.9	7.39	61.2	A	J
	cadmium	1.82	0.385	130.2	A	J
	lead	241	15	176.6	A	J
	selenium	0.502 J	0.311 U	-	A	-

[a] RPD = ((SR - DR)*200)/(SR + DR)

A - Acceptable Data

NA - Not Analyzed

The RPD test (<50%) applies if both results are greater than 5x MQL. Otherwise, the absolute difference test (< 3x MQL) applies.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-85318-1
Client Project/Site: Exide Recycling Center
Revision: 5

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
5/9/2014 11:49:39 AM
Cathy Upton, Project Management Assistant II
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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.

LINKS

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Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-85318-1 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☑ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☑ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton		5/9/2014
Name (printed)	Signature	Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	5/9/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85318-1
Reviewer Name:	Cathy Upton		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		X			R01A
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			R04B
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				R05D
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?		X			R06A
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?		X			R07A
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			R07C
		Were MS/MSD RPDs within laboratory QC limits?		X			R07D
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?		X			R08C
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?		X			R10B
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	5/9/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85318-1
Reviewer Name:	Cathy Upton		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?		X			S02B
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?		X			S04A
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?	X				
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?		X			S08A
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

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Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	5/9/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85318-1
Reviewer Name:	Cathy Upton		

ER #[1]	Description
R01A	The following sample(s) was listed on the Chain of Custody (COC); however, no sample(s) was received: . MW-27C(0-2) AND 2013-BSA-2A-(0-2) WERE NOT RECEIVED. The following sample(s) was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): EXTRA SAMPLES: 2013-AD-03-(0-0.5): 1-4oz jar 2013-AD-03-(0.5-2): 1-4oz jar 2013-AD-03-(2-4): 1-4oz jar JX: 2- 4oz jars 2- 2oz jars
R04B	Method 8270C LL: Six surrogates are used for this analysis. The laboratory's SOP allows 1 base and 1 acid of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. Samples 600-85318-3 was biased low for Phenol-d5. These results have been reported and qualified. Method 8270C LL: Surrogate recovery for the following sample(s) was outside control limits: 600-85318-26, 600-85318-26 MS, and 600-85318-26 MSD. Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed. Method 8270C LL: The following sample(s) required a dilution due to the nature of the sample matrix: 600-85318-1, 600-85318-8, and 600-85318-24. Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information. Method TX 1005: Surrogate recovery for the following sample(s) was outside control limits: 600-85318-8. Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.
R05D	Method 6010B: The method blank for batch 124797 contained Arsenic above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. Method 6010B: The method blank for batch 124919 contained Cadmium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. Method 8260B: The method blank for batch 600-125242 contained toluene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. Method 8270C: The method blank for batch 125220 contained Butyl benzyl phthalate, Diethyl phthalate and Di-n-butyl phthalate above the method detection limit. Phthalates are recognized potential laboratory contaminants. These target analyte concentrations were less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.
R06A/ R07A	Method 8082: Since Aroclors are multi-component analytes, it is not possible to include all seven Aroclors of interest into the spiking mix. The only two Aroclors that were spiked were Aroclors 1016 and 1260. Since these two Aroclors essentially contain all analytes found in the other five individual Aroclors of interest, the recovery of Aroclors 1016 and 1260 in the LCS will be representative of the recovery of the other five Aroclors.
R07C	Method 6010B: 600-85318-36 MS and MSD failed the recovery criteria for the following analyte(s): Antimony, Arsenic, Cadmium, Lead. Matrix interference is suspectd due to the high concentration of lead in the parent sample. Method 6010B: 600-85318-14 MS failed the recovery criteria for the following analyte(s): Antimony, Lead. Matrix interference is suspected. Method 6010B: 600-85318-14 MSD failed the recovery criteria for the following analyte(s): Antimony, Cadmium, Lead. Matrix interference is suspected. Method 6010B: 600-85318-20 MS/MSD failed the recovery criteria for the following analyte(s): Lead. Matrix interference is suspected. Method 6010B: 600-85318-20 MSD failed the recovery criteria for the following analyte(s): Arsenic. Matrix interference is suspected. Method 8270C LL: The matrix spike (MS) and matrix spike duplicate (MSD) recoveries associated with batch 125453 were biased high for Benzi[g,h,i]perylene and the MSD was also biased high for Pyrene. Matrix interference is suspected.

R07D	Method 6010B: 600-85318-14 MSD failed the RPD criteria for the following analyte(s): Lead. Non homogeneity of the sample is suspected. Method 6010B: 600-85318-36 MSD failed the RPD criteria for Lead due to the high concentration of this analyte in the parent sample. Method 8082: 600-85318-A-36-C MSD failed the RPD criteria for the following analyte(s): PCB-1260. Non homogeneity of the sample is suspected.
R08C	Method 6010B: 600-85318-14 DU failed the RPD criteria for the following analyte(s): Antimony. Non homogeneity of the sample is suspected. Method 6010B: 600-85318-36 DU failed the RPD criteria for the following analyte(s): Antimony, Arsenic, Selenium. Non homogeneity of the sample is suspected. Method 6010B: 600-85318-20 DU failed the RPD criteria for the following analyte(s): Cadmium and Lead. Non homogeneity of the sample is suspected.
R10B	Method 8270C LL: The following sample(s) was diluted due to the nature of the sample matrix: 600-85318-1, 600-85318-8, and 600-85318-24. Elevated reporting limits (RLs) are provided.
S02B	Method 8270C LL: The continuing calibration verification (CCV) associated with batch 125471 recovered above the upper control limit for Benzyl alcohol. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.
S04A	Method 8270C LL: Various Internal standards (ISTD) responses were outside of acceptance limits. Effected samples were re-analyzed (including dilutions) but matrix still seems to impact ISTD responses.
S08A	Method 6010B: The interference check standard solution (ICSA) associated with batch 125051 showed results for arsenic, cadmium and lead at a level greater than 2 times the limit of detection (LOD). Since the interfering analytes were not detected in the client samples, no corrective action was required.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
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Detection Check Standard

Matrix:	Soil
Method:	6010B
Preparation:	3050
Date Analyzed:	12/30/2013
Date Prepared:	12/27/2013
Instrument:	Thermo 6500
TALS Batches:	123949, 123775p
Prep/Reagent Factor =	50
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.299654	0.5	0.36	25
Antimony	0.231553	0.45	0.5	2.5
Arsenic	0.217923	0.5	0.53	1
Barium	0.011322	0.03	0.04	1
Beryllium	0.014513	0.02	0.015	0.25
Boron	0.385535	0.6	0.56	20
Cadmium	0.025642	0.05	0.05	0.25
Calcium	0.86399	1.5	2.185	100
Chromium	0.050606	0.1	0.135	0.5
Cobalt	0.067622	0.1	0.09	0.5
Copper	0.173703	0.5	0.64	0.5
Iron	2.534007	4	3.76	20
Lead	0.104832	0.2	0.215	0.5
Selenium	0.258884	0.5	0.465	2
Manganese	0.038111	0.05	0.085	1.5
Molybdenum	0.136448	0.35	0.38	0.5
Nickel	0.116599	0.15	0.2	1
Silver	0.118848	0.2	0.15	0.5
Sodium	0.885548	2.4	3.135	100
Thallium	0.276988	0.7	0.73	1.5
Tin	0.08729	0.15	0.19	1
Titanium	0.014529	0.03	0.01	0.5
Vanadium	0.079068	0.15	0.125	0.5
Zinc	0.108432	0.2	0.305	1.5

Detection Check Standard

Matrix:	Water
Method:	200.7/6010
Preparation:	200.7P/3010
Date Analyzed:	12/31/2013
Date Prepared:	12/27/2013
Instrument:	Spectro01
TALs Batches:	124030, 123788p
Units:	mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.028176	0.5
Antimony	0.0063	0.01	0.010016	0.05
Arsenic	0.0033	0.01	0.008253	0.01
Barium	0.0022	0.005	0.004098	0.02
Beryllium	0.00134	0.002	0.004019	0.005
Boron	0.0077	0.02	0.019829	0.2
Cadmium	0.00073	0.001	0.001	0.005
Calcium	0.022	0.05	0.060829	1
Chromium	0.0016	0.002	0.003835	0.01
Cobalt	0.00063	0.001	0.000965	0.01
Copper	0.0014	0.002	0.002451	0.01
Iron	0.087	0.1	0.002258	0.4
Lithium	0.0024	0.005	0.006107	0.2
Lead	0.0029	0.005	0.005478	0.01
Selenium	0.0042	0.01	0.009953	0.04
Manganese	0.00084	0.002	0.001988	0.01
Molybdenum	0.0027	0.005	0.005867	0.01
Nickel	0.00179	0.005	0.005669	0.01
Silver	0.0012	0.0025	0.001901	0.01
Sodium	0.02	0.05	0.088115	1
Strontium	0.0005	0.001	0.000897	0.005
Thallium	0.0078	0.02	0.021503	0.03
Tin	0.0028	0.005	0.005708	0.01
Titanium	0.0011	0.002	0.001905	0.01
Vanadium	0.0017	0.002	0.003578	0.01
Zinc	0.0022	0.005	0.004189	0.01

Detection Check Standard

Matrix: Solid
Method: 8260B
Preparation: Wei Shen
Date Analyzed: 10/16/2013
Date Prepared: 10/16/2013
TALs Batches: 118344
Units: ug/Kg

Analyte	MDL	DCS Spike	Measured Result	MQL
1,1,1,2-Tetrachloroethane	1.4	5	4.8	5
1,1,1-Trichloroethane	0.74	5	3.9	5
1,1,2,2-Tetrachloroethane	0.87	5	4.4	5
1,1,2-Trichloro-1,2,2-trifluoroethane	1.44	5	4.3	5
1,1,2-Trichloroethane	0.73	5	4.3	5
1,1-Dichloroethane	0.87	5	8.7	5
1,1-Dichloroethene	1.22	5	9.1	5
1,1-Dichloropropene	0.65	5	3.4	5
1,2 Dichloroethene, Total	1.9	10	19	10
1,2,3-Trichlorobenzene	0.62	5	4.3	5
1,2,3-Trichloropropane	1.31	5	5.3	5
1,2,3-Trimethylbenzene	1.8	5	5.3	5
1,2,4-Trichlorobenzene	1.97	5	4.3	5
1,2,4-Trimethylbenzene	0.92	5	5.2	5
1,2-Dibromo-3-chloropropane	2.44	5	5.6	10
1,2-Dibromoethane (EDB)	1.02	5	4.4	5
1,2-Dichlorobenzene	0.8	5	4.2	5
1,2-Dichloroethane	0.9	5	5.1	5
1,2-Dichloropropane	0.71	5	4.8	5
1,3,5-Trichlorobenzene	5	5	4.1	5
1,3,5-Trimethylbenzene	1.6	5	5.2	5
1,3-Dichlorobenzene	0.71	5	7.9	5
1,3-Dichloropropane	0.63	5	4.3	5
1,3-Dichloropropane, Total	0.58	10	9.3	5
1,4-Dichlorobenzene	0.66	5	5.6	5
1,4-Dioxane	62.07	100	120	500
2,2-Dichloropropane	1.82	5	9.4	5
2-Butanone (MEK)	1.9	10	9.3	10
2-Chloro-1,3-butadiene	2.71	5	5.4	10
2-Chloroethyl vinylether	0.98	10	8	10
2-Chlorotoluene	0.68	5	7.9	5
2-Hexanone	1.01	10	10.8	10
4-Chlorotoluene	0.83	5	5.3	5
4-Isopropyltoluene	1.02	10	9.1	5
4-Methyl-2-pentanone	1.47	10	10.2	10
Acetone	1.66	10	6.5	10
Acetonitrile	1.39	10	49	10
Acrylonitrile	5.82	50	86	25
Allyl chloride (3-Chloro-1-propene)	1.39	5	8.9	5

Detection Check Standard

Matrix:	Solid
Method:	8260B
Preparation:	Wei Shen
Date Analyzed:	10/16/2013
Date Prepared:	10/16/2013
TALs Batches:	118344
Units:	ug/Kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Benzene	0.63	5	8.6	5
Bromoform	1.37	5	4.3	5
Bromomethane	1.78	5	5.2	10
Carbon Disulfide	0.55	10	9.2	5
Carbon Tetrachloride	1.13	5	4.3	5
Chlorobenzene	0.96	5	8	5
Chlorobromomethane	1.78	5	5.2	5
Chlorodibromomethane	0.94	5	4.4	5
Chloroethane	1.4	5	5.5	10
Chloroform	5.74	5	9.8	5
Chloromethane	1.66	5	5.8	10
cis-1,2-Dichloroethene	0.83	5	9.8	5
cis-1,3-Dichloropropene	0.54	5	5	5
Dibromomethane	0.75	5	4.9	5
Dichlorobromomethane	0.66	5	4.2	5
Dichlorodifluoromethane	1.54	5	4.3	5
Ethyl methacrylate	1.66	5	4.4	5
Ethylbenzene	1.02	5	4.9	5
Hexachlorobutadiene	1.13	5	9	5
Isobutyl alcohol	17.2	50	49	50
Isopropylbenzene	0.92	5	4.9	5
Methacrylonitrile	5	5	0.88	10
Methyl Iodide	2.5	5	8.5	10
Methyl methacrylate	2.86	10	21.9	10
Methyl tert-butyl ether	1.83	5	4.8	5
Methylcyclohexane	1.5	5	4.2	5
Methylene Chloride	2.19	5	7.8	10
m-Xylene & P-Xylene	1.52	5	4.5	10
Naphthalene	2.37	5	4.5	10
n-Butyl acetate	2.4	5	5.3	10
n-Butylbenzene	0.58	5	8.5	5
n-Propylbenzene	0.95	5	5.2	5
o-Xylene	1.13	5	7.8	5
Pentachloroethane	5	5	1.47	5
Propionaldehyde	64	5	4.9	100
Propionitrile	2.36	5	70	10
sec-Butylbenzene	0.7	5	8.6	5
Styrene	0.71	5	8.3	5
tert-Butylbenzene	0.95	5	5	5

Detection Check Standard

Matrix:	Solid
Method:	8260B
Preparation:	Wei Shen
Date Analyzed:	10/16/2013
Date Prepared:	10/16/2013
TALs Batches:	118344
Units:	ug/Kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Tetrachloroethene	1.4	5	4.7	5
Toluene	1.38	5	4.6	5
trans-1,2-Dichloroethene	1.14	5	9.2	5
trans-1,3-Dichloropropene	0.58	5	4.3	5
trans-1,4-Dichloro-2-butene	1.9	5	5	10
Trichloroethene	1.4	5	4.4	5
Trichlorofluoromethane	0.66	5	5.6	5
Trichlorotrifluoroethane	1.44	5	5.6	5
Vinyl Acetate	0.93	5	7.6	10
Vinyl Chloride	0.9	5	4.8	10
Xylenes (total)	1.13	5	12	5

Matrix: Water
Method: 8260B_LL
Date Analyzed: 12/10/2013
TALS Batch: 122598
Units: ug/L

Analyte	MDL	DCS Spike	Measured Result	MQL
1,1,1,2-Tetrachloroethane	0.180	0.500	0.411	1
1,1,1-Trichloroethane	0.150	0.500	0.475	1
1,1,2,2-Tetrachloroethane	0.220	0.500	0.515	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.000	0.250	0.276	1
1,1,2-Trichloroethane	0.280	0.500	0.507	1
1,1-Dichloroethane	0.110	0.250	0.300	1
1,1-Dichloroethene	0.190	0.500	0.439	1
1,1-Dichloropropene	0.210	0.500	0.431	1
1,2,3-Trichlorobenzene	0.570	0.500	0.950	1
1,2,3-Trichloropropane	0.290	0.500	0.568	1
1,2,3-Trimethylbenzene	0.130	0.500	0.449	1
1,2,4-Trichlorobenzene	0.310	0.500	0.713	1
1,2,4-Trimethylbenzene	0.140	0.500	0.434	1
1,2-Dibromo-3-Chloropropane	0.810	0.500	0.665	1
1,2-Dichlorobenzene	0.100	0.250	0.349	1
1,2-Dichloroethane	0.140	0.500	0.500	1
1,2-Dichloroethene, Total	0.300	1.000	0.970	1
1,2-Dichloropropane	0.160	0.500	0.474	1
1,3,5-Trichlorobenzene	1.000	0.500	0.578	1
1,3,5-Trimethylbenzene	0.100	0.250	0.262	1
1,3-Dichlorobenzene	0.130	0.500	0.530	1
1,3-Dichloropropane	0.220	0.500	0.531	1
1,4-Dichlorobenzene	0.110	0.250	0.336	1
1,4-Dioxane	30.790	10.000	11.352	50
1-Chlorohexane	0.260	0.250	0.279	1
2,2-Dichloropropane	0.130	0.500	0.452	1
2-Butanone (MEK)	0.760	1.000	0.963	2
2-Chloro-1,3-butadiene	0.330	0.500	0.406	1
2-Chloroethyl vinyl ether	0.500	1.000	0.798	2
2-Chlorotoluene	0.130	0.500	0.439	1
2-Hexanone	0.350	1.000	0.789	2
3-Chloro-1-propene	0.240	0.500	0.425	2
4-Chlorotoluene	0.140	0.500	0.490	1
4-Isopropyltoluene	0.100	0.250	0.279	1
4-Methyl-2-pentanone (MIBK)	0.450	1.000	0.931	2
Acetone	0.990	1.000	1.452	5
Acrolein	1.630	2.500	2.455	5
Acrylonitrile	0.520	2.500	2.614	5
Benzene	0.080	0.250	0.304	1
Benzyl chloride	0.240	0.500	0.977	1
Bromobenzene	0.190	0.500	0.523	1
Bromoform	0.190	0.500	0.410	1
Bromomethane	0.250	0.500	0.468	2
Butadiene	0.210	0.500	0.496	1
Carbon disulfide	0.240	0.500	0.478	2
Carbon tetrachloride	0.150	0.500	0.378	1
Chlorobenzene	0.120	0.250	0.317	1
Chlorobromomethane	0.180	0.500	0.480	1

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Matrix: Water
Method: 8260B_LL
Date Analyzed: 12/10/2013
TALS Batch: 122598
Units: ug/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Chlorodibromomethane	0.150	0.500	0.403	1
Chloroethane	0.080	0.250	0.313	2
Chloroform	0.130	0.500	0.471	1
Chloromethane	0.180	0.500	0.516	2
cis-1,2-Dichloroethene	0.060	0.250	0.324	1
cis-1,3-Dichloropropene	0.180	0.500	0.371	1
Cyclohexane	0.160	0.500	0.410	1
Cyclohexanone	8.640	25.000	30.305	50
Dibromomethane	0.520	0.500	0.962	1
Dichlorobromomethane	0.160	0.500	0.403	1
Dichlorodifluoromethane	0.120	0.250	0.245	1
Dichlorofluoromethane	1.000	0.500	0.472	1
Ethyl acetate	0.410	1.000	1.448	2
Ethyl acrylate	0.340	0.500	0.640	2
Ethyl ether	0.150	0.500	0.480	1
Ethyl methacrylate	0.260	0.500	0.415	2
Ethylbenzene	0.110	0.250	0.006	1
Ethylene Dibromide	0.180	0.500	0.474	1
Hexachlorobutadiene	0.170	0.500	0.620	1
Hexane	0.160	0.500	0.404	1
Iodomethane	0.158	0.500	0.484	2
Isobutyl alcohol	3.320	12.500	13.826	10
Isooctane	0.330	0.500	1.097	1
Isopropyl alcohol	3.720	5.000	5.417	10
Isopropyl ether	0.090	0.250	0.271	1
Isopropylbenzene	0.180	0.500	0.427	1
Methyl acetate	0.550	1.250	1.371	2
Methyl methacrylate	0.330	1.000	0.835	1
Methyl tert-butyl ether	0.120	0.250	0.287	1
Methylcyclohexane	0.100	0.250	0.292	1
Methylene Chloride	0.150	0.500	0.488	5
m-Xylene & p-Xylene	0.170	0.500	0.442	1
Naphthalene	0.320	0.500	0.776	2
n-Butyl acetate	0.190	0.500	0.384	1
n-Butylbenzene	0.160	0.500	0.423	1
N-Propylbenzene	0.150	0.500	0.418	1
o-Xylene	0.120	0.250	0.265	1
Propionitrile	0.660	2.500	2.335	2
sec-Butylbenzene	0.120	0.250	0.266	1
Styrene	0.070	0.250	0.230	1
tert-Butylbenzene	0.080	0.250	0.290	1
Tetrachloroethene	0.130	0.500	0.598	1
Toluene	0.150	0.500	0.503	1
trans-1,2-Dichloroethene	0.090	0.250	0.287	1
trans-1,3-Dichloropropene	0.210	0.500	0.763	1
Trichloroethene	0.180	0.500	0.481	1
Trichlorofluoromethane	0.080	0.250	0.234	1
Trihalomethanes, Total	1.000	2.000	1.680	5

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Matrix: Water
Method: 8260B_LL
Date Analyzed: 12/10/2013
TALS Batch: 122598
Units: ug/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Vinyl acetate	0.210	0.500	0.428	2
Vinyl chloride	0.110	0.250	0.293	2
Xylenes, Total	0.260	1.000	0.900	1

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Quality Control Report

Detection Check Standard

Matrix:	Soil
Method:	8270C LL
Preparation:	3550B
Date Analyzed:	7/22/2013
Date Prepared:	7/18/2013
Lab Sample ID:	600-111037
Units:	ug/Kg

Analyte	MDL	DCS Spike	DCS Result	MQL
Pyridine	3.52	16.7	2.76	16.67
N-Nitrosodimethylamine	4.19	16.7	11.04	16.67
bis (2-Chloroisopropyl) ether	8.84	16.7	14.71	16.67
Aniline	2.98	16.7	8.2	16.67
Phenol	4.24	8.35	3.56	16.67
bis(2-Chloroethyl)ether	1.65	8.35	2.85	16.67
2-Chlorophenol	1.97	8.35	3.01	16.67
1,3-Dichlorobenzene	1.54	8.35	3.64	16.67
1,4-Dichlorobenzene	2.25	8.35	3.59	16.67
1,2-Dichlorobenzene	3.02	8.35	3.92	16.67
Benzyl alcohol	5.83	16.7	9.65	16.67
2-Methylphenol	3.23	8.35	2.68	16.67
m&p-Cresols	2.79	8.35	2.3	16.67
N-Nitroso-di-n-propylamine	2.22	8.35	5.72	16.67
Hexachloroethane	2.31	8.35	4.09	16.67
Dibenzo(a,h)anthracene	4.56	16.7	13.7	16.67
Indeno(1,2,3-cd)pyrene	3.5	16.7	14.36	16.67
Nitrobenzene	2.96	8.35	3.64	16.67
Isophorone	1	8.35	3.18	16.67
2-Nitrophenol	3.89	8.35	1.96	16.67
Benzoic acid	32.76	83.5	459	83.33
2,4-Dimethylphenol	8.58	16.7	8.13	16.67
bis(2-Chloroethoxy)methane	1.42	8.35	2.82	16.67
2,4-Dichlorophenol	8.58	16.7	8.13	16.67
1,2,4-Trichlorobenzene	2.1	8.35	3.89	16.67
Naphthalene	1.35	8.35	3.43	16.67
Benzo(a)pyrene	1.61	8.35	2.53	16.67
Hexachlorobutadiene	1.92	8.35	3.34	16.67
4-Chloro-3-methylphenol	15.58	16.7	9.43	16.67
2-Methylnaphthalene	2.74	8.35	2.37	16.67
1-Methylnaphthalene	1.57	8.35	2.79	16.67
Benzo(k)fluoranthene	1.49	8.35	3.54	16.67
Hexachlorocyclopentadiene	4.61	8.35	2.19	16.67
2,4,6-Trichlorophenol	2.68	8.35	2.74	16.67
2,4,5-Trichlorophenol	10.01	16.7	12.18	16.67
2-Chloronaphthalene	1.21	8.35	2.84	16.67
2-Nitroaniline	4.89	16.7	11.59	16.67
1,4-Dinitrobenzene	16.67	16.7	14.73	16.67
1,3-Dinitrobenzene	2.96	8.35	2.97	16.67
1,2-Dinitrobenzene	16.67	16.7	12	16.67

Dimethylphthalate	4.89	8.35	3.46	16.67
Acenaphthylene	1	8.35	2.69	16.67
2,6-Dinitrotoluene	2.95	8.35	2.72	16.67
Benzo(b)fluoranthene	1.72	8.35	2.94	16.67
Acenaphthene	1.44	8.35	3.08	16.67
Di-n-octylphthalate	1.9	8.35	1.89	16.67
4-Nitrophenol	5.08	33.34	19.08	16.67
Dibenzofuran	1.85	8.35	3.04	16.67
2,4-Dinitrotoluene	3.61	16.7	2.35	16.67
2,3,4,6-Tetrachlorophenol	16.67	16.7	1.72	16.67
2,3,5,6-Tetrachlorophenol	16.67	16.7	27.43	16.67
Diethylphthalate	8.43	16.7	21.88	16.67
4-Chlorophenyl-phenylether	1.8	8.35	3.07	16.67
Fluorene	2.36	8.35	2.88	16.67
4-Nitroaniline	11.15	16.7	14.59	16.67
Chrysene	1.02	8.35	3.62	16.67
4,6-Dinitro-2-methylphenol	4.98	33.34	21.8	16.67
N-Nitrosodiphenylamine	1.89	16.7	2.87	16.67
Diphenylamine	1.94	16.7	2.86	16.67
1,2-Diphenylhydrazine	1.62	8.35	2.24	16.67
Azobenzene		8.35	2.26	16.67
4-Bromophenyl-phenylether	2.84	8.35	3.39	16.67
Hexachlorobenzene	1.52	8.35	2.94	16.67
Pentachlorophenol	4	33.34	59.74	16.67
Phenanthrene	4.95	16.7	12.04	16.67
Anthracene	1.28	8.35	2.53	16.67
Carbazole	3.12	16.7	12.14	16.67
Di-n-butylphthalate	2.59	8.35	3.24	16.67
Fluoranthene	3.11	8.35	3.28	16.67
Benzidine	9.02	417	318	16.67
Pyrene	1.83	8.35	3.15	16.67
Butylbenzylphthalate	6.19	16.7	10.18	16.67
3,3'-Dichlorobenzidine	16.67	16.7	3.58	16.67
Benzo(a)anthracene	1.38	8.35	3.54	16.67
bis(2-Ethylhexyl)phthalate	5.37	16.7	11.92	16.67
Benzo(g,h,i)perylene	5.07	16.7	15.35	16.67
4-Chloroaniline	4.72	16.7	4.22	16.67
3-Nitroaniline	7.15	16.7	5.07	16.67
2,4-Dinitrophenol	4.72	167	575	83.33

Matrix:	Water
Method:	8270C
Prep Method:	3510C
Date Analyzed:	1/10/2014
Job #:	600-85250
TALS Batch:	124708
Units:	ug/L

Analyte	MDL	DCS Spike	Measured Result	MQL
1,1'-Biphenyl	1.120	2.500	2.599	10
1,2,4,5-Tetrachlorobenzene	1.680	2.500	2.619	10
1,2,4-Trichlorobenzene	1.140	2.500	2.512	10
1,2-Dichlorobenzene	1.090	2.500	2.475	10
1,2-Dinitrobenzene	1.020	2.500	2.003	10
1,2-Diphenylhydrazine	0.900	2.500	2.890	10
1,3-Dichlorobenzene	1.150	2.500	2.580	10
1,3-Dinitrobenzene	3.470	5.000	4.860	10
1,4-Dichlorobenzene	1.260	2.500	2.580	10
1-Methylnaphthalene	0.530	2.500	2.645	10
2,2'-oxybis[1-chloropropane]	1.700	2.500	2.849	10
2,3,4,6-Tetrachlorophenol	0.830	2.500	1.973	10
2,4,5-Trichlorophenol	1.260	2.500	2.284	10
2,4,6-Trichlorophenol	0.920	2.500	2.319	10
2,4-Dichlorophenol	1.540	2.500	2.415	10
2,4-Dimethylphenol	1.340	2.500	2.781	10
2,4-Dinitrophenol	0.890	5.000	8.242	50
2,4-Dinitrotoluene	0.950	2.500	2.491	10
2,6-Dimethylphenol	1.030	2.500	2.249	10
2,6-Dinitrotoluene	0.640	2.500	2.481	10
2-Chloronaphthalene	1.000	2.500	2.695	10
2-Chlorophenol	0.670	2.500	2.420	10
2-Methylnaphthalene	1.100	2.500	2.692	10
2-Methylphenol	1.010	2.500	2.530	10
2-Nitroaniline	1.130	2.500	2.804	50
2-Nitrophenol	0.630	2.500	2.493	10
3 & 4 Methylphenol	1.880	2.500	2.655	20
3,3'-Dichlorobenzidine	0.580	2.500	4.823	20
3-Nitroaniline	0.510	2.500	2.477	50
4,6-Dinitro-2-methylphenol	1.880	5.000	3.164	50
4-Bromophenyl phenyl ether	0.680	2.500	2.519	10
4-Chloro-3-methylphenol	0.820	2.500	2.796	10
4-Chloroaniline	0.980	2.500	2.228	10
4-Chlorophenyl phenyl ether	0.790	2.500	2.875	10
4-Nitroaniline	1.010	2.500	2.276	50
4-Nitrophenol	0.990	5.000	3.057	50
Acenaphthene	0.530	2.500	2.607	10
Acenaphthylene	0.900	2.500	2.580	10
Acetophenone	1.020	2.500	2.738	10
Aniline	1.620	2.500	1.999	10
Anthracene	0.670	2.500	2.528	10
Azobenzene	10	2.500	2.890	10
Benzidine	0.610	25.000	2.670	50
Benzo[a]anthracene	0.580	2.500	2.537	10
Benzo[a]pyrene	0.570	2.500	2.311	10
Benzo[b]fluoranthene	1.050	2.500	2.564	10

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Matrix:	Water
Method:	8270C
Prep Method:	3510C
Date Analyzed:	1/10/2014
Job #:	600-85250
TALS Batch:	124708
Units:	ug/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Benzo[g,h,i]perylene	0.830	2.500	2.142	10
Benzo[k]fluoranthene	0.930	2.500	2.470	10
Benzoic acid	2.510	5.000	2.420	50
Benzyl alcohol	1.180	2.500	2.395	10
Bis(2-chloroethoxy)methane	1.240	2.500	2.776	10
Bis(2-chloroethyl)ether	1.190	2.500	2.577	10
Bis(2-ethylhexyl) phthalate	0.520	2.500	2.735	10
Butyl benzyl phthalate	0.610	2.500	2.781	10
Caprolactam	2.320	5.000	4.190	10
Carbazole	1.140	2.500	2.630	10
Chrysene	0.600	2.500	2.639	10
Dibenz(a,h)anthracene	0.720	2.500	2.244	10
Dibenzofuran	0.990	2.500	2.671	10
Diethyl phthalate	1.140	2.500	2.795	10
Dimethyl phthalate	0.520	2.500	2.597	10
Di-n-butyl phthalate	1.040	2.500	2.836	10
Di-n-octyl phthalate	0.690	2.500	2.335	10
Fluoranthene	0.520	2.500	2.616	10
Fluorene	1.420	2.500	2.748	10
Hexachlorobenzene	0.900	2.500	2.763	10
Hexachlorobutadiene	1.110	2.500	2.591	10
Hexachlorocyclopentadiene	0.580	2.500	1.623	10
Hexachloroethane	1.160	2.500	2.427	10
Indeno[1,2,3-cd]pyrene	0.670	2.500	1.627	10
Isophorone	0.730	2.500	2.806	10
Naphthalene	0.510	2.500	2.664	10
Nitrobenzene	1.180	2.500	3.061	10
N-Nitrosodimethylamine	1.930	2.500	1.988	10
N-Nitrosodi-n-propylamine	0.660	2.500	2.808	10
N-Nitrosodiphenylamine	1.030	2.500	2.590	10
Pentachlorophenol	0.890	5.000	2.274	50
Phenanthrene	0.790	2.500	2.579	10
Phenol	0.950	2.500	2.010	10
Pyrene	1.120	2.500	2.619	10
Pyridine	1.040	2.500	0.536	10
Total Cresols	1.880	5.000	5.200	50

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Detection Check Standard

Matrix:	Soil
Method:	8082
Preparation:	3550
Date Analyzed:	7/18/2013
Date Prepared:	7/18/2013
TALs Batches:	600-111090/2,4,5,6,7,8,9-a
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aroclor 1016	1.6	8.3	7.03	16.7
Aroclor 1221	8.63	16.67	12.33	16.7
Aroclor 1232	6.7	16.67	10.76	16.7
Aroclor 1242	1.6	16.67	9.59	16.7
Aroclor 1248	2.49	16.67	11.92	16.7
Aroclor 1254	2.21	16.67	10.54	16.7
Aroclor 1262	13.5	16.67	14.13	16.7
Aroclor 1260	13.5	8.3	9.16	16.7

Detection Check Standard

Matrix:	Soil
Method:	TX1005
Preparation:	Ray V.
Date Analyzed:	10/3/2013
Date Prepared:	10/4/2013
Data File:	FID-07.I\100313A.b\A100313_029.d
Units:	ug/Kg

Analyte	MDL	DCS Spike	Measured Result	MQL
C6-C12	3.8	10	20.4079	10
>C12-C28	4.06	10	20.8004	10
Total C6-C35	7.48	20	41.2083	10

Detection Check Standard

Matrix: Water
Method: TX1005
Preparation: Raymond
Date Analyzed: 10/7/2013
Date Prepared: 10/4/2013
Data File: FID-07.i\A100413B.b\B100413_031.d
Units: mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
C6-C12	0.83	1	0.633	10
>C12-C28	0.96	1	0.738	10
Total C6-C35	1.56	2	1.37	10

Job ID: 600-85318-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-85318-1

Comments
Report was revised to be in TRRP UDS format on 02/19/14, replacing the final report generated on 01/28/14. The report was revised again on 03/05/14 to add total metals to samples 20, 24, 30 and 36. This final report replaces the one generated on 02/19/14. The report was revised on 03/14/14 to update the TRRP checklist, replacing the final report generated on 03/05/14. The report was revised again on 03/18/14 to update the TRRP checklist for missing ms/msd information, replacing the final report generated on 03/14/14. The report was revised again on 05/09/14 to report As and Se in addition to other metals for samples 17, 18, 19, 21, 31 and 33 per client request. This replaces the final report generated on 03/18/14. See attached email.

Soil samples were received in bulk jars.

Receipt
The samples were received on 1/10/2014 10:31 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.0º C and 3.9º C.

Except:

The following sample(s) was listed on the Chain of Custody (COC); however, no sample(s) was received: .
MW-27C(0-2) AND 2013-BSA-2A-(0-2) WERE NOT RECEIVED.

The following sample(s) was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC):
EXTRA SAMPLES:
2013-AD-03-(0-0.5): 1-4oz jar
2013-AD-03-(0.5-2): 1-4oz jar
2013-AD-03-(2-4): 1-4oz jar

JX:
2- 4oz jars
2- 2oz jars

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL HOU
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL HOU
TX 1005	Texas - Total Petroleum Hydrocarbon (GC)	TCEQ	TAL HOU
6010B	Metals (ICP)	SW846	TAL HOU
Moisture	Percent Moisture	EPA	TAL HOU

Protocol References:

EPA = US Environmental Protection Agency

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

TCEQ = Texas Commission of Environmental Quality

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-85318-1	2013-FFTA-01 (0.25-2)	Solid	01/08/14 10:20	01/10/14 10:31
600-85318-3	2013-FFTA-03 (18-19)	Solid	01/08/14 10:45	01/10/14 10:31
600-85318-4	2013-MB-3 (0.75-1.25)	Solid	01/08/14 12:18	01/10/14 10:31
600-85318-7	2013-MB-5 (0.5-5)	Solid	01/08/14 13:20	01/10/14 10:31
600-85318-8	2013-MB-5 (10-12)	Solid	01/08/14 13:35	01/10/14 10:31
600-85318-11	2013-MB-4 (0.83-1.33)	Solid	01/08/14 15:15	01/10/14 10:31
600-85318-14	MW-27D (0.5-2)	Solid	01/08/14 15:45	01/10/14 10:31
600-85318-16	MW-27C (0-2)	Solid	01/08/14 16:20	01/10/14 10:31
600-85318-17	MW-41 (0-0.5)	Solid	01/08/14 13:40	01/10/14 10:31
600-85318-18	MW-41 (0.5-2)	Solid	01/08/14 13:45	01/10/14 10:31
600-85318-19	MW-42 (0-0.5)	Solid	01/08/14 15:40	01/10/14 10:31
600-85318-20	MW-42 (0.5-2)	Solid	01/08/14 15:45	01/10/14 10:31
600-85318-21	DUP-6	Solid	01/08/14 00:00	01/10/14 10:31
600-85318-22	FIELD BLANK	Water	01/08/14 17:19	01/10/14 10:31
600-85318-23	RINSE BLANK-CME	Water	01/09/14 08:50	01/10/14 10:31
600-85318-24	MW-27B (0-2)	Solid	01/09/14 08:55	01/10/14 10:31
600-85318-26	MW-27A (0-2)	Solid	01/09/14 09:25	01/10/14 10:31
600-85318-28	2013-NDA-1A(2-4)	Solid	01/09/14 10:15	01/10/14 10:31
600-85318-30	D11A (0-0.5)	Solid	01/09/14 10:35	01/10/14 10:31
600-85318-31	D12A (0-0.5)	Solid	01/09/14 10:50	01/10/14 10:31
600-85318-32	D13A (0-0.5)	Solid	01/09/14 11:04	01/10/14 10:31
600-85318-33	2013-C2L-03-(0-0.5)	Solid	01/09/14 11:26	01/10/14 10:31
600-85318-36	2013-BSA-2A(0-2)	Solid	01/09/14 12:50	01/10/14 10:31
600-85318-37	2013-AD-04 (0-0.5)	Solid	01/09/14 13:26	01/10/14 10:31
600-85318-40	RINSE BLANK aeo	Water	01/09/14 08:30	01/10/14 10:31
600-85318-41	TRIP BLANK	Water	01/09/14 00:00	01/10/14 10:31

Client Sample ID: 2013-FFTA-01 (0.25-2)
Date Collected: 01/08/14 10:20
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-1
Matrix: Solid
Percent Solids: 78.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.0111	J	0.0127	0.00212	mg/Kg	☼		01/14/14 15:28	1
Benzene	0.000803	U	0.00637	0.000803	mg/Kg	☼		01/14/14 15:28	1
Chlorobromomethane	0.00227	U	0.00637	0.00227	mg/Kg	☼		01/14/14 15:28	1
Bromoform	0.00175	U	0.00637	0.00175	mg/Kg	☼		01/14/14 15:28	1
Bromomethane	0.00106	U	0.0127	0.00106	mg/Kg	☼		01/14/14 15:28	1
2-Butanone (MEK)	0.00242	U	0.0127	0.00242	mg/Kg	☼		01/14/14 15:28	1
Carbon disulfide	0.000701	U	0.0127	0.000701	mg/Kg	☼		01/14/14 15:28	1
Carbon tetrachloride	0.00144	U	0.00637	0.00144	mg/Kg	☼		01/14/14 15:28	1
Dibromochloromethane	0.00120	U	0.00637	0.00120	mg/Kg	☼		01/14/14 15:28	1
Chlorobenzene	0.00122	U	0.00637	0.00122	mg/Kg	☼		01/14/14 15:28	1
Chloroethane	0.00178	U	0.0127	0.00178	mg/Kg	☼		01/14/14 15:28	1
Chloroform	0.000841	U	0.00637	0.000841	mg/Kg	☼		01/14/14 15:28	1
Chloromethane	0.00212	U	0.0127	0.00212	mg/Kg	☼		01/14/14 15:28	1
1,1-Dichloroethane	0.00111	U	0.00637	0.00111	mg/Kg	☼		01/14/14 15:28	1
1,2-Dichloroethane	0.00115	U	0.00637	0.00115	mg/Kg	☼		01/14/14 15:28	1
1,1-Dichloroethene	0.00155	U	0.00637	0.00155	mg/Kg	☼		01/14/14 15:28	1
cis-1,2-Dichloroethene	0.00106	U	0.00637	0.00106	mg/Kg	☼		01/14/14 15:28	1
trans-1,2-Dichloroethene	0.00145	U	0.00637	0.00145	mg/Kg	☼		01/14/14 15:28	1
1,2-Dichloropropane	0.000905	U	0.00637	0.000905	mg/Kg	☼		01/14/14 15:28	1
cis-1,3-Dichloropropene	0.000688	U	0.00637	0.000688	mg/Kg	☼		01/14/14 15:28	1
trans-1,3-Dichloropropene	0.000739	U	0.00637	0.000739	mg/Kg	☼		01/14/14 15:28	1
Ethylbenzene	0.00130	U	0.00637	0.00130	mg/Kg	☼		01/14/14 15:28	1
2-Hexanone	0.00129	U	0.0127	0.00129	mg/Kg	☼		01/14/14 15:28	1
Methylene Chloride	0.00279	U	0.0127	0.00279	mg/Kg	☼		01/14/14 15:28	1
4-Methyl-2-pentanone (MIBK)	0.00187	U	0.0127	0.00187	mg/Kg	☼		01/14/14 15:28	1
Styrene	0.000905	U	0.00637	0.000905	mg/Kg	☼		01/14/14 15:28	1
1,1,2,2-Tetrachloroethane	0.00111	U	0.00637	0.00111	mg/Kg	☼		01/14/14 15:28	1
Tetrachloroethene	0.000905	U	0.00637	0.000905	mg/Kg	☼		01/14/14 15:28	1
Toluene	0.00176	U	0.00637	0.00176	mg/Kg	☼		01/14/14 15:28	1
1,1,1-Trichloroethane	0.000943	U	0.00637	0.000943	mg/Kg	☼		01/14/14 15:28	1
1,1,2-Trichloroethane	0.000930	U	0.00637	0.000930	mg/Kg	☼		01/14/14 15:28	1
Trichloroethene	0.00178	U	0.00637	0.00178	mg/Kg	☼		01/14/14 15:28	1
Vinyl acetate	0.00119	U	0.00637	0.00119	mg/Kg	☼		01/14/14 15:28	1
Vinyl chloride	0.00115	U	0.0127	0.00115	mg/Kg	☼		01/14/14 15:28	1
o-Xylene	0.00144	U	0.00637	0.00144	mg/Kg	☼		01/14/14 15:28	1
m-Xylene & p-Xylene	0.00194	U	0.0127	0.00194	mg/Kg	☼		01/14/14 15:28	1
Xylenes, Total	0.00144	U	0.00637	0.00144	mg/Kg	☼		01/14/14 15:28	1
Bromodichloromethane	0.000841	U	0.00637	0.000841	mg/Kg	☼		01/14/14 15:28	1
1,2-Dichloroethene, Total	0.00242	U	0.0127	0.00242	mg/Kg	☼		01/14/14 15:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*76*		*50 - 130*		*01/14/14 15:28*	*1*
Dibromofluoromethane	*81*		*68 - 140*		*01/14/14 15:28*	*1*
4-Bromofluorobenzene	*104*		*57 - 140*		*01/14/14 15:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*		*01/14/14 15:28*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0731	U	0.846	0.0731	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Acenaphthylene	0.0508	U	0.846	0.0508	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-1

Client Sample ID: 2013-FFTA-01 (0.25-2)
Date Collected: 01/08/14 10:20
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-1
Matrix: Solid
Percent Solids: 78.5

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	0.0650	U	0.846	0.0650	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Benzidine	0.458	U	4.23	0.458	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Benzo[a]anthracene	0.0701	U	0.846	0.0701	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Benzo[a]pyrene	0.0818	U	0.846	0.0818	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Benzo[b]fluoranthene	0.0873	U	0.846	0.0873	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Benzo[g,h,i]perylene	0.257	U	0.846	0.257	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Benzo[k]fluoranthene	0.0757	U	0.846	0.0757	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Benzyl alcohol	0.296	U	0.846	0.296	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Bis(2-chloroethoxy)methane	0.0721	U	0.846	0.0721	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Bis(2-chloroethyl)ether	0.0838	U	0.846	0.0838	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
bis (2-Chloroisopropyl) ether	0.449	U	0.846	0.449	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Bis(2-ethylhexyl) phthalate	0.273	U	3.39	0.273	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
4-Bromophenyl phenyl ether	0.144	U	0.846	0.144	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Butyl benzyl phthalate	0.314	U	3.39	0.314	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Carbazole	0.158	U	0.846	0.158	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
4-Chloroaniline	0.296	U	0.846	0.296	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
4-Chloro-3-methylphenol	0.791	U	0.846	0.791	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
2-Chloronaphthalene	0.0614	U	0.846	0.0614	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
2-Chlorophenol	0.100	U	0.846	0.100	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
4-Chlorophenyl phenyl ether	0.0914	U	0.846	0.0914	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Chrysene	0.0518	U	0.846	0.0518	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Dibenz(a,h)anthracene	0.184	U	0.846	0.184	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Dibenzofuran	0.0904	U	0.846	0.0904	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
1,2-Dichlorobenzene	0.153	U	0.846	0.153	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
1,3-Dichlorobenzene	0.0782	U	0.846	0.0782	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
1,4-Dichlorobenzene	0.114	U	0.846	0.114	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
3,3'-Dichlorobenzidine	0.516	U	0.846	0.516	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
2,4-Dichlorophenol	0.197	U	0.846	0.197	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Diethyl phthalate	0.428	U	3.39	0.428	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
2,4-Dimethylphenol	0.436	U	0.846	0.436	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Dimethyl phthalate	0.248	U	3.39	0.248	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Di-n-butyl phthalate	0.132	U	3.39	0.132	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
4,6-Dinitro-2-methylphenol	0.253	U	0.846	0.253	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
2,4-Dinitrophenol	0.240	U	5.08	0.240	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
2,4-Dinitrotoluene	0.183	U	0.846	0.183	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
2,6-Dinitrotoluene	0.150	U	0.846	0.150	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Di-n-octyl phthalate	0.0965	U	3.39	0.0965	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Fluoranthene	0.158	U	0.846	0.158	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Fluorene	0.120	U	0.846	0.120	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Hexachlorobenzene	0.0772	U	0.846	0.0772	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Hexachlorobutadiene	0.0975	U	0.846	0.0975	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Hexachlorocyclopentadiene	0.234	U	0.846	0.234	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Hexachloroethane	0.117	U	0.846	0.117	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Indeno[1,2,3-cd]pyrene	0.178	U	0.846	0.178	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Isophorone	0.0508	U	0.846	0.0508	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
2-Methylnaphthalene	0.139	U	0.846	0.139	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
2-Methylphenol	0.164	U	0.846	0.164	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
3 & 4 Methylphenol	**0.355**	**J**	1.69	0.142	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Naphthalene	0.0685	U	0.846	0.0685	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20

Client Sample ID: 2013-FFTA-01 (0.25-2)

Lab Sample ID: 600-85318-1

Date Collected: 01/08/14 10:20
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 78.5

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	0.248	U	0.846	0.248	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
3-Nitroaniline	0.363	U	0.846	0.363	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
4-Nitroaniline	0.566	U	0.846	0.566	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Nitrobenzene	0.150	U	0.846	0.150	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
2-Nitrophenol	0.198	U	0.846	0.198	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
4-Nitrophenol	0.258	U	0.846	0.258	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
N-Nitrosodimethylamine	0.213	U	0.846	0.213	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
N-Nitrosodi-n-propylamine	0.113	U	0.846	0.113	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
N-Nitrosodiphenylamine	0.0960	U	0.846	0.0960	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Pentachlorophenol	0.203	U	8.48	0.203	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Phenanthrene	0.251	U	0.846	0.251	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Phenol	**0.726**	**J**	0.846	0.215	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
Pyrene	0.0929	U	0.846	0.0929	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
1,2,4-Trichlorobenzene	0.107	U	0.846	0.107	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
2,4,5-Trichlorophenol	0.508	U	0.846	0.508	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20
2,4,6-Trichlorophenol	0.136	U	0.846	0.136	mg/Kg	☼	01/17/14 13:18	01/22/14 21:55	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*38 - 127*	*01/17/14 13:18*	*01/22/14 21:55*	*20*
2-Fluorophenol	*0*	*X*	*25 - 132*	*01/17/14 13:18*	*01/22/14 21:55*	*20*
Nitrobenzene-d5	*0*	*X*	*10 - 155*	*01/17/14 13:18*	*01/22/14 21:55*	*20*
Phenol-d5 (Surr)	*0*	*X*	*27 - 123*	*01/17/14 13:18*	*01/22/14 21:55*	*20*
Terphenyl-d14	*0*	*X*	*53 - 134*	*01/17/14 13:18*	*01/22/14 21:55*	*20*
2,4,6-Tribromophenol	*0*	*X*	*10 - 148*	*01/17/14 13:18*	*01/22/14 21:55*	*20*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	4.83	U	12.7	4.83	mg/Kg	☼	01/14/14 12:54	01/14/14 16:07	1
>C12-C28	5.16	U	12.7	5.16	mg/Kg	☼	01/14/14 12:54	01/14/14 16:07	1
>C28-C35	5.16	U	12.7	5.16	mg/Kg	☼	01/14/14 12:54	01/14/14 16:07	1
C6-C35	9.51	U	12.7	9.51	mg/Kg	☼	01/14/14 12:54	01/14/14 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*88*		*70 - 130*	*01/14/14 12:54*	*01/14/14 16:07*	*1*

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**22**		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	**78**		1.0	1.0	%			01/13/14 09:59	1

Client Sample ID: 2013-FFTA-03 (18-19)

Lab Sample ID: 600-85318-3

Date Collected: 01/08/14 10:45
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 93.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.0290**		0.0107	0.00178	mg/Kg	☼		01/15/14 20:16	1
Benzene	0.000675	U	0.00536	0.000675	mg/Kg	☼		01/15/14 20:16	1
Chlorobromomethane	0.00191	U	0.00536	0.00191	mg/Kg	☼		01/15/14 20:16	1
Bromoform	0.00147	U	0.00536	0.00147	mg/Kg	☼		01/15/14 20:16	1
Bromomethane	0.000889	U	0.0107	0.000889	mg/Kg	☼		01/15/14 20:16	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-1

Client Sample ID: 2013-FFTA-03 (18-19)
Date Collected: 01/08/14 10:45
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-3
Matrix: Solid
Percent Solids: 93.4

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	0.00204	U	0.0107	0.00204	mg/Kg	☼		01/15/14 20:16	1
Carbon disulfide	0.000589	U	0.0107	0.000589	mg/Kg	☼		01/15/14 20:16	1
Carbon tetrachloride	0.00121	U	0.00536	0.00121	mg/Kg	☼		01/15/14 20:16	1
Dibromochloromethane	0.00101	U	0.00536	0.00101	mg/Kg	☼		01/15/14 20:16	1
Chlorobenzene	0.00103	U	0.00536	0.00103	mg/Kg	☼		01/15/14 20:16	1
Chloroethane	0.00150	U	0.0107	0.00150	mg/Kg	☼		01/15/14 20:16	1
Chloroform	0.000707	U	0.00536	0.000707	mg/Kg	☼		01/15/14 20:16	1
Chloromethane	0.00178	U	0.0107	0.00178	mg/Kg	☼		01/15/14 20:16	1
1,1-Dichloroethane	0.000932	U	0.00536	0.000932	mg/Kg	☼		01/15/14 20:16	1
1,2-Dichloroethane	0.000964	U	0.00536	0.000964	mg/Kg	☼		01/15/14 20:16	1
1,1-Dichloroethene	0.00131	U	0.00536	0.00131	mg/Kg	☼		01/15/14 20:16	1
cis-1,2-Dichloroethene	0.000889	U	0.00536	0.000889	mg/Kg	☼		01/15/14 20:16	1
trans-1,2-Dichloroethene	0.00122	U	0.00536	0.00122	mg/Kg	☼		01/15/14 20:16	1
1,2-Dichloropropane	0.000761	U	0.00536	0.000761	mg/Kg	☼		01/15/14 20:16	1
cis-1,3-Dichloropropene	0.000578	U	0.00536	0.000578	mg/Kg	☼		01/15/14 20:16	1
trans-1,3-Dichloropropene	0.000621	U	0.00536	0.000621	mg/Kg	☼		01/15/14 20:16	1
Ethylbenzene	0.00109	U	0.00536	0.00109	mg/Kg	☼		01/15/14 20:16	1
2-Hexanone	0.00108	U	0.0107	0.00108	mg/Kg	☼		01/15/14 20:16	1
Methylene Chloride	**0.00366**	**J**	0.0107	0.00235	mg/Kg	☼		01/15/14 20:16	1
4-Methyl-2-pentanone (MIBK)	0.00157	U	0.0107	0.00157	mg/Kg	☼		01/15/14 20:16	1
Styrene	0.000761	U	0.00536	0.000761	mg/Kg	☼		01/15/14 20:16	1
1,1,2,2-Tetrachloroethane	0.000932	U	0.00536	0.000932	mg/Kg	☼		01/15/14 20:16	1
Tetrachloroethene	0.000761	U	0.00536	0.000761	mg/Kg	☼		01/15/14 20:16	1
Toluene	0.00148	U	0.00536	0.00148	mg/Kg	☼		01/15/14 20:16	1
1,1,1-Trichloroethane	0.000793	U	0.00536	0.000793	mg/Kg	☼		01/15/14 20:16	1
1,1,2-Trichloroethane	0.000782	U	0.00536	0.000782	mg/Kg	☼		01/15/14 20:16	1
Trichloroethene	0.00150	U	0.00536	0.00150	mg/Kg	☼		01/15/14 20:16	1
Vinyl acetate	0.000996	U	0.00536	0.000996	mg/Kg	☼		01/15/14 20:16	1
Vinyl chloride	0.000964	U	0.0107	0.000964	mg/Kg	☼		01/15/14 20:16	1
o-Xylene	0.00121	U	0.00536	0.00121	mg/Kg	☼		01/15/14 20:16	1
m-Xylene & p-Xylene	0.00163	U	0.0107	0.00163	mg/Kg	☼		01/15/14 20:16	1
Xylenes, Total	0.00121	U	0.00536	0.00121	mg/Kg	☼		01/15/14 20:16	1
Bromodichloromethane	0.000707	U	0.00536	0.000707	mg/Kg	☼		01/15/14 20:16	1
1,2-Dichloroethene, Total	0.00204	U	0.0107	0.00204	mg/Kg	☼		01/15/14 20:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*50 - 130*		*01/15/14 20:16*	*1*
Dibromofluoromethane	*85*		*68 - 140*		*01/15/14 20:16*	*1*
4-Bromofluorobenzene	*132*		*57 - 140*		*01/15/14 20:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 130*		*01/15/14 20:16*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00308	U	0.0356	0.00308	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Acenaphthylene	0.00214	U	0.0356	0.00214	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Anthracene	0.00274	U	0.0356	0.00274	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Benzidine	0.0193	U	0.178	0.0193	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Benzo[a]anthracene	0.00295	U	0.0356	0.00295	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Benzo[a]pyrene	0.00344	U	0.0356	0.00344	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Benzo[b]fluoranthene	0.00368	U	0.0356	0.00368	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-1

Client Sample ID: 2013-FFTA-03 (18-19)
Date Collected: 01/08/14 10:45
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-3
Matrix: Solid
Percent Solids: 93.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	0.0108	U	0.0356	0.0108	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Benzo[k]fluoranthene	0.00319	U	0.0356	0.00319	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Benzyl alcohol	0.0125	U	0.0356	0.0125	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Bis(2-chloroethoxy)methane	0.00304	U	0.0356	0.00304	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Bis(2-chloroethyl)ether	0.00353	U	0.0356	0.00353	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
bis (2-Chloroisopropyl) ether	0.0189	U	0.0356	0.0189	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Bis(2-ethylhexyl) phthalate	**0.0326**	**J**	0.143	0.0115	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
4-Bromophenyl phenyl ether	0.00607	U	0.0356	0.00607	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Butyl benzyl phthalate	0.0132	U	0.143	0.0132	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Carbazole	0.00667	U	0.0356	0.00667	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
4-Chloroaniline	0.0124	U	0.0356	0.0124	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
4-Chloro-3-methylphenol	0.0333	U	0.0356	0.0333	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
2-Chloronaphthalene	0.00259	U	0.0356	0.00259	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
2-Chlorophenol	0.00421	U	0.0356	0.00421	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
4-Chlorophenyl phenyl ether	0.00385	U	0.0356	0.00385	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Chrysene	0.00218	U	0.0356	0.00218	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Dibenz(a,h)anthracene	0.00776	U	0.0356	0.00776	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Dibenzofuran	0.00381	U	0.0356	0.00381	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
1,2-Dichlorobenzene	0.00646	U	0.0356	0.00646	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
1,3-Dichlorobenzene	0.00329	U	0.0356	0.00329	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
1,4-Dichlorobenzene	0.00481	U	0.0356	0.00481	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
3,3'-Dichlorobenzidine	0.0217	U	0.0356	0.0217	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
2,4-Dichlorophenol	0.00827	U	0.0356	0.00827	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Diethyl phthalate	**0.262**	**b**	0.143	0.0180	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
2,4-Dimethylphenol	0.0183	U	0.0356	0.0183	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Dimethyl phthalate	0.0105	U	0.143	0.0105	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Di-n-butyl phthalate	**0.0914**	**J b**	0.143	0.00554	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
4,6-Dinitro-2-methylphenol	0.0106	U	0.0356	0.0106	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
2,4-Dinitrophenol	0.0101	U	0.214	0.0101	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
2,4-Dinitrotoluene	0.00772	U	0.0356	0.00772	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
2,6-Dinitrotoluene	0.00631	U	0.0356	0.00631	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Di-n-octyl phthalate	0.00406	U	0.143	0.00406	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Fluoranthene	0.00665	U	0.0356	0.00665	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Fluorene	0.00505	U	0.0356	0.00505	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Hexachlorobenzene	0.00325	U	0.0356	0.00325	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Hexachlorobutadiene	0.00411	U	0.0356	0.00411	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Hexachlorocyclopentadiene	0.00986	U	0.0356	0.00986	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Hexachloroethane	0.00494	U	0.0356	0.00494	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Indeno[1,2,3-cd]pyrene	0.00748	U	0.0356	0.00748	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Isophorone	**0.153**		0.0356	0.00214	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
2-Methylnaphthalene	**0.0311**	**J**	0.0356	0.00586	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
2-Methylphenol	0.00691	U	0.0356	0.00691	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
3 & 4 Methylphenol	**0.572**		0.0713	0.00597	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Naphthalene	**0.0150**	**J**	0.0356	0.00289	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
2-Nitroaniline	0.0105	U	0.0356	0.0105	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
3-Nitroaniline	0.0153	U	0.0356	0.0153	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
4-Nitroaniline	0.0238	U	0.0356	0.0238	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Nitrobenzene	0.00633	U	0.0356	0.00633	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
2-Nitrophenol	0.00832	U	0.0356	0.00832	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1

Client Sample ID: 2013-FFTA-03 (18-19)

Date Collected: 01/08/14 10:45
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-3

Matrix: Solid
Percent Solids: 93.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Nitrophenol	0.0109	U	0.0356	0.0109	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
N-Nitrosodimethylamine	0.00896	U	0.0356	0.00896	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
N-Nitrosodi-n-propylamine	0.00475	U	0.0356	0.00475	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
N-Nitrosodiphenylamine	0.00404	U	0.0356	0.00404	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Pentachlorophenol	0.00855	U	0.357	0.00855	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Phenanthrene	**0.0116**	**J**	0.0356	0.0106	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Phenol	**0.247**		0.0356	0.00907	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
Pyrene	0.00391	U	0.0356	0.00391	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
1,2,4-Trichlorobenzene	0.00449	U	0.0356	0.00449	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
2,4,5-Trichlorophenol	0.0214	U	0.0356	0.0214	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1
2,4,6-Trichlorophenol	0.00573	U	0.0356	0.00573	mg/Kg	☼	01/17/14 13:18	01/21/14 02:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*108*		*38 - 127*	*01/17/14 13:18*	*01/21/14 02:32*	*1*
2-Fluorophenol	*51*		*25 - 132*	*01/17/14 13:18*	*01/21/14 02:32*	*1*
Nitrobenzene-d5	*82*		*10 - 155*	*01/17/14 13:18*	*01/21/14 02:32*	*1*
Phenol-d5 (Surr)	*6*	*X*	*27 - 123*	*01/17/14 13:18*	*01/21/14 02:32*	*1*
Terphenyl-d14	*117*		*53 - 134*	*01/17/14 13:18*	*01/21/14 02:32*	*1*
2,4,6-Tribromophenol	*34*		*10 - 148*	*01/17/14 13:18*	*01/21/14 02:32*	*1*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	4.04	U	10.6	4.04	mg/Kg	☼	01/14/14 12:54	01/14/14 16:41	1
>C12-C28	4.32	U	10.6	4.32	mg/Kg	☼	01/14/14 12:54	01/14/14 16:41	1
>C28-C35	4.32	U	10.6	4.32	mg/Kg	☼	01/14/14 12:54	01/14/14 16:41	1
C6-C35	7.96	U	10.6	7.96	mg/Kg	☼	01/14/14 12:54	01/14/14 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*96*		*70 - 130*	*01/14/14 12:54*	*01/14/14 16:41*	*1*

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**6.6**		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	**93**		1.0	1.0	%			01/13/14 09:59	1

Client Sample ID: 2013-MB-3 (0.75-1.25)

Date Collected: 01/08/14 12:18
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-4

Matrix: Solid
Percent Solids: 77.2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.306**		0.0130	0.00215	mg/Kg	☼		01/15/14 20:41	1
Benzene	0.000816	U	0.00648	0.000816	mg/Kg	☼		01/15/14 20:41	1
Chlorobromomethane	0.00231	U	0.00648	0.00231	mg/Kg	☼		01/15/14 20:41	1
Bromoform	0.00178	U	0.00648	0.00178	mg/Kg	☼		01/15/14 20:41	1
Bromomethane	0.00108	U	0.0130	0.00108	mg/Kg	☼		01/15/14 20:41	1
2-Butanone (MEK)	**0.0392**		0.0130	0.00246	mg/Kg	☼		01/15/14 20:41	1
Carbon disulfide	**0.00168**	**J**	0.0130	0.000713	mg/Kg	☼		01/15/14 20:41	1
Carbon tetrachloride	0.00146	U	0.00648	0.00146	mg/Kg	☼		01/15/14 20:41	1
Dibromochloromethane	0.00122	U	0.00648	0.00122	mg/Kg	☼		01/15/14 20:41	1
Chlorobenzene	0.00124	U	0.00648	0.00124	mg/Kg	☼		01/15/14 20:41	1

Client Sample ID: 2013-MB-3 (0.75-1.25)
Date Collected: 01/08/14 12:18
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-4
Matrix: Solid
Percent Solids: 77.2

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	0.00181	U	0.0130	0.00181	mg/Kg	☼		01/15/14 20:41	1
Chloroform	0.000855	U	0.00648	0.000855	mg/Kg	☼		01/15/14 20:41	1
Chloromethane	0.00215	U	0.0130	0.00215	mg/Kg	☼		01/15/14 20:41	1
1,1-Dichloroethane	0.00113	U	0.00648	0.00113	mg/Kg	☼		01/15/14 20:41	1
1,2-Dichloroethane	0.00117	U	0.00648	0.00117	mg/Kg	☼		01/15/14 20:41	1
1,1-Dichloroethene	0.00158	U	0.00648	0.00158	mg/Kg	☼		01/15/14 20:41	1
cis-1,2-Dichloroethene	0.00108	U	0.00648	0.00108	mg/Kg	☼		01/15/14 20:41	1
trans-1,2-Dichloroethene	0.00148	U	0.00648	0.00148	mg/Kg	☼		01/15/14 20:41	1
1,2-Dichloropropane	0.000920	U	0.00648	0.000920	mg/Kg	☼		01/15/14 20:41	1
cis-1,3-Dichloropropene	0.000700	U	0.00648	0.000700	mg/Kg	☼		01/15/14 20:41	1
trans-1,3-Dichloropropene	0.000752	U	0.00648	0.000752	mg/Kg	☼		01/15/14 20:41	1
Ethylbenzene	0.00132	U	0.00648	0.00132	mg/Kg	☼		01/15/14 20:41	1
2-Hexanone	0.00131	U	0.0130	0.00131	mg/Kg	☼		01/15/14 20:41	1
Methylene Chloride	0.00284	U	0.0130	0.00284	mg/Kg	☼		01/15/14 20:41	1
4-Methyl-2-pentanone (MIBK)	0.00191	U	0.0130	0.00191	mg/Kg	☼		01/15/14 20:41	1
Styrene	0.000920	U	0.00648	0.000920	mg/Kg	☼		01/15/14 20:41	1
1,1,2,2-Tetrachloroethane	0.00113	U	0.00648	0.00113	mg/Kg	☼		01/15/14 20:41	1
Tetrachloroethene	0.000920	U	0.00648	0.000920	mg/Kg	☼		01/15/14 20:41	1
Toluene	0.00179	U	0.00648	0.00179	mg/Kg	☼		01/15/14 20:41	1
1,1,1-Trichloroethane	0.000959	U	0.00648	0.000959	mg/Kg	☼		01/15/14 20:41	1
1,1,2-Trichloroethane	0.000946	U	0.00648	0.000946	mg/Kg	☼		01/15/14 20:41	1
Trichloroethene	0.00181	U	0.00648	0.00181	mg/Kg	☼		01/15/14 20:41	1
Vinyl acetate	0.00121	U	0.00648	0.00121	mg/Kg	☼		01/15/14 20:41	1
Vinyl chloride	0.00117	U	0.0130	0.00117	mg/Kg	☼		01/15/14 20:41	1
o-Xylene	0.00146	U	0.00648	0.00146	mg/Kg	☼		01/15/14 20:41	1
m-Xylene & p-Xylene	0.00197	U	0.0130	0.00197	mg/Kg	☼		01/15/14 20:41	1
Xylenes, Total	0.00146	U	0.00648	0.00146	mg/Kg	☼		01/15/14 20:41	1
Bromodichloromethane	0.000855	U	0.00648	0.000855	mg/Kg	☼		01/15/14 20:41	1
1,2-Dichloroethene, Total	0.00246	U	0.0130	0.00246	mg/Kg	☼		01/15/14 20:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*93*		*50 - 130*		*01/15/14 20:41*	*1*
Dibromofluoromethane	*93*		*68 - 140*		*01/15/14 20:41*	*1*
4-Bromofluorobenzene	*133*		*57 - 140*		*01/15/14 20:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*61 - 130*		*01/15/14 20:41*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**2.19**		0.306	0.0313	mg/Kg	☼	01/13/14 14:19	01/14/14 08:28	1
Lead	**732**		0.611	0.128	mg/Kg	☼	01/13/14 14:19	01/14/14 08:28	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**23**		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	**77**		1.0	1.0	%			01/13/14 09:59	1

Client Sample ID: 2013-MB-5 (0.5-5)
Date Collected: 01/08/14 13:20
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-7
Matrix: Solid
Percent Solids: 76.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.127**		0.0130	0.00217	mg/Kg	☼		01/15/14 21:06	1
Benzene	0.000822	U	0.00652	0.000822	mg/Kg	☼		01/15/14 21:06	1
Chlorobromomethane	0.00232	U	0.00652	0.00232	mg/Kg	☼		01/15/14 21:06	1
Bromoform	0.00179	U	0.00652	0.00179	mg/Kg	☼		01/15/14 21:06	1
Bromomethane	0.00108	U	0.0130	0.00108	mg/Kg	☼		01/15/14 21:06	1
2-Butanone (MEK)	**0.0135**		0.0130	0.00248	mg/Kg	☼		01/15/14 21:06	1
Carbon disulfide	**0.00180**	**J**	0.0130	0.000717	mg/Kg	☼		01/15/14 21:06	1
Carbon tetrachloride	0.00147	U	0.00652	0.00147	mg/Kg	☼		01/15/14 21:06	1
Dibromochloromethane	0.00123	U	0.00652	0.00123	mg/Kg	☼		01/15/14 21:06	1
Chlorobenzene	0.00125	U	0.00652	0.00125	mg/Kg	☼		01/15/14 21:06	1
Chloroethane	0.00183	U	0.0130	0.00183	mg/Kg	☼		01/15/14 21:06	1
Chloroform	0.000861	U	0.00652	0.000861	mg/Kg	☼		01/15/14 21:06	1
Chloromethane	0.00217	U	0.0130	0.00217	mg/Kg	☼		01/15/14 21:06	1
1,1-Dichloroethane	0.00113	U	0.00652	0.00113	mg/Kg	☼		01/15/14 21:06	1
1,2-Dichloroethane	0.00117	U	0.00652	0.00117	mg/Kg	☼		01/15/14 21:06	1
1,1-Dichloroethene	0.00159	U	0.00652	0.00159	mg/Kg	☼		01/15/14 21:06	1
cis-1,2-Dichloroethene	0.00108	U	0.00652	0.00108	mg/Kg	☼		01/15/14 21:06	1
trans-1,2-Dichloroethene	0.00149	U	0.00652	0.00149	mg/Kg	☼		01/15/14 21:06	1
1,2-Dichloropropane	0.000926	U	0.00652	0.000926	mg/Kg	☼		01/15/14 21:06	1
cis-1,3-Dichloropropene	0.000704	U	0.00652	0.000704	mg/Kg	☼		01/15/14 21:06	1
trans-1,3-Dichloropropene	0.000756	U	0.00652	0.000756	mg/Kg	☼		01/15/14 21:06	1
Ethylbenzene	0.00133	U	0.00652	0.00133	mg/Kg	☼		01/15/14 21:06	1
2-Hexanone	0.00132	U	0.0130	0.00132	mg/Kg	☼		01/15/14 21:06	1
Methylene Chloride	**0.00505**	**J**	0.0130	0.00286	mg/Kg	☼		01/15/14 21:06	1
4-Methyl-2-pentanone (MIBK)	0.00192	U	0.0130	0.00192	mg/Kg	☼		01/15/14 21:06	1
Styrene	0.000926	U	0.00652	0.000926	mg/Kg	☼		01/15/14 21:06	1
1,1,2,2-Tetrachloroethane	0.00113	U	0.00652	0.00113	mg/Kg	☼		01/15/14 21:06	1
Tetrachloroethene	0.000926	U	0.00652	0.000926	mg/Kg	☼		01/15/14 21:06	1
Toluene	0.00180	U	0.00652	0.00180	mg/Kg	☼		01/15/14 21:06	1
1,1,1-Trichloroethane	0.000965	U	0.00652	0.000965	mg/Kg	☼		01/15/14 21:06	1
1,1,2-Trichloroethane	0.000952	U	0.00652	0.000952	mg/Kg	☼		01/15/14 21:06	1
Trichloroethene	0.00183	U	0.00652	0.00183	mg/Kg	☼		01/15/14 21:06	1
Vinyl acetate	0.00121	U	0.00652	0.00121	mg/Kg	☼		01/15/14 21:06	1
Vinyl chloride	0.00117	U	0.0130	0.00117	mg/Kg	☼		01/15/14 21:06	1
o-Xylene	0.00147	U	0.00652	0.00147	mg/Kg	☼		01/15/14 21:06	1
m-Xylene & p-Xylene	0.00198	U	0.0130	0.00198	mg/Kg	☼		01/15/14 21:06	1
Xylenes, Total	0.00147	U	0.00652	0.00147	mg/Kg	☼		01/15/14 21:06	1
Bromodichloromethane	0.000861	U	0.00652	0.000861	mg/Kg	☼		01/15/14 21:06	1
1,2-Dichloroethene, Total	0.00248	U	0.0130	0.00248	mg/Kg	☼		01/15/14 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*50 - 130*		*01/15/14 21:06*	*1*
Dibromofluoromethane	*87*		*68 - 140*		*01/15/14 21:06*	*1*
4-Bromofluorobenzene	*138*		*57 - 140*		*01/15/14 21:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*61 - 130*		*01/15/14 21:06*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00374	U	0.0433	0.00374	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Acenaphthylene	0.00259	U	0.0433	0.00259	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-1

Client Sample ID: 2013-MB-5 (0.5-5)
Date Collected: 01/08/14 13:20
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-7
Matrix: Solid
Percent Solids: 76.7

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	0.00332	U	0.0433	0.00332	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Benzidine	0.0234	U	0.216	0.0234	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Benzo[a]anthracene	**0.00823**	**J**	0.0433	0.00358	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Benzo[a]pyrene	0.00418	U	0.0433	0.00418	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Benzo[b]fluoranthene	0.00446	U	0.0433	0.00446	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Benzo[g,h,i]perylene	0.0132	U	0.0433	0.0132	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Benzo[k]fluoranthene	0.00387	U	0.0433	0.00387	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Benzyl alcohol	0.0151	U	0.0433	0.0151	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Bis(2-chloroethoxy)methane	0.00368	U	0.0433	0.00368	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Bis(2-chloroethyl)ether	0.00428	U	0.0433	0.00428	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
bis (2-Chloroisopropyl) ether	0.0229	U	0.0433	0.0229	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Bis(2-ethylhexyl) phthalate	**0.0788**	**J**	0.173	0.0139	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
4-Bromophenyl phenyl ether	0.00737	U	0.0433	0.00737	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Butyl benzyl phthalate	0.0161	U	0.173	0.0161	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Carbazole	**0.0224**	**J**	0.0433	0.00810	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
4-Chloroaniline	0.0151	U	0.0433	0.0151	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
4-Chloro-3-methylphenol	0.0404	U	0.0433	0.0404	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
2-Chloronaphthalene	0.00314	U	0.0433	0.00314	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
2-Chlorophenol	0.00511	U	0.0433	0.00511	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
4-Chlorophenyl phenyl ether	0.00467	U	0.0433	0.00467	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Chrysene	**0.0183**	**J**	0.0433	0.00265	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Dibenz(a,h)anthracene	0.00942	U	0.0433	0.00942	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Dibenzofuran	0.00462	U	0.0433	0.00462	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
1,2-Dichlorobenzene	0.00784	U	0.0433	0.00784	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
1,3-Dichlorobenzene	0.00400	U	0.0433	0.00400	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
1,4-Dichlorobenzene	0.00584	U	0.0433	0.00584	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
3,3'-Dichlorobenzidine	0.0264	U	0.0433	0.0264	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
2,4-Dichlorophenol	0.0100	U	0.0433	0.0100	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Diethyl phthalate	**0.263**	**b**	0.173	0.0219	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
2,4-Dimethylphenol	0.0223	U	0.0433	0.0223	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Dimethyl phthalate	0.0127	U	0.173	0.0127	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Di-n-butyl phthalate	**0.0770**	**J b**	0.173	0.00672	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
4,6-Dinitro-2-methylphenol	0.0129	U	0.0433	0.0129	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
2,4-Dinitrophenol	0.0122	U	0.259	0.0122	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
2,4-Dinitrotoluene	0.00937	U	0.0433	0.00937	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
2,6-Dinitrotoluene	0.00765	U	0.0433	0.00765	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Di-n-octyl phthalate	0.00493	U	0.173	0.00493	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Fluoranthene	**0.0184**	**J**	0.0433	0.00807	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Fluorene	0.00612	U	0.0433	0.00612	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Hexachlorobenzene	0.00394	U	0.0433	0.00394	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Hexachlorobutadiene	0.00498	U	0.0433	0.00498	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Hexachlorocyclopentadiene	0.0120	U	0.0433	0.0120	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Hexachloroethane	0.00599	U	0.0433	0.00599	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Indeno[1,2,3-cd]pyrene	0.00908	U	0.0433	0.00908	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Isophorone	0.00259	U	0.0433	0.00259	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
2-Methylnaphthalene	**0.0887**		0.0433	0.00711	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
2-Methylphenol	0.00838	U	0.0433	0.00838	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
3 & 4 Methylphenol	**0.0929**		0.0865	0.00724	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Naphthalene	**0.0746**		0.0433	0.00350	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1

Client Sample ID: 2013-MB-5 (0.5-5)
Date Collected: 01/08/14 13:20
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-7
Matrix: Solid
Percent Solids: 76.7

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	0.0127	U	0.0433	0.0127	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
3-Nitroaniline	0.0186	U	0.0433	0.0186	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
4-Nitroaniline	0.0289	U	0.0433	0.0289	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Nitrobenzene	0.00768	U	0.0433	0.00768	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
2-Nitrophenol	0.0101	U	0.0433	0.0101	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
4-Nitrophenol	0.0132	U	0.0433	0.0132	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
N-Nitrosodimethylamine	0.0109	U	0.0433	0.0109	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
N-Nitrosodi-n-propylamine	0.00576	U	0.0433	0.00576	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
N-Nitrosodiphenylamine	0.00490	U	0.0433	0.00490	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Pentachlorophenol	0.0104	U	0.433	0.0104	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Phenanthrene	**0.0321**	**J**	0.0433	0.0128	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Phenol	**0.241**		0.0433	0.0110	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
Pyrene	**0.0181**	**J**	0.0433	0.00475	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
1,2,4-Trichlorobenzene	0.00545	U	0.0433	0.00545	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
2,4,5-Trichlorophenol	0.0260	U	0.0433	0.0260	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1
2,4,6-Trichlorophenol	0.00695	U	0.0433	0.00695	mg/Kg	☼	01/17/14 13:18	01/21/14 02:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*112*		*38 - 127*	*01/17/14 13:18*	*01/21/14 02:59*	*1*
2-Fluorophenol	*126*		*25 - 132*	*01/17/14 13:18*	*01/21/14 02:59*	*1*
Nitrobenzene-d5	*19*		*10 - 155*	*01/17/14 13:18*	*01/21/14 02:59*	*1*
Phenol-d5 (Surr)	*114*		*27 - 123*	*01/17/14 13:18*	*01/21/14 02:59*	*1*
Terphenyl-d14	*128*		*53 - 134*	*01/17/14 13:18*	*01/21/14 02:59*	*1*
2,4,6-Tribromophenol	*98*		*10 - 148*	*01/17/14 13:18*	*01/21/14 02:59*	*1*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	4.95	U	13.0	4.95	mg/Kg	☼	01/14/14 12:54	01/14/14 17:17	1
>C12-C28	5.28	U	13.0	5.28	mg/Kg	☼	01/14/14 12:54	01/14/14 17:17	1
>C28-C35	5.28	U	13.0	5.28	mg/Kg	☼	01/14/14 12:54	01/14/14 17:17	1
C6-C35	9.74	U	13.0	9.74	mg/Kg	☼	01/14/14 12:54	01/14/14 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*81*		*70 - 130*	*01/14/14 12:54*	*01/14/14 17:17*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**46.6**		0.311	0.0319	mg/Kg	☼	01/13/14 14:19	01/14/14 08:52	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**21200**		6.21	1.30	mg/Kg	☼	01/13/14 14:19	01/15/14 10:39	10

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**23**		1.0	1.0	%			01/13/14 09:59	1
Percent Moisture	**23**		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	**77**		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	**77**		1.0	1.0	%			01/13/14 09:59	1

Client Sample ID: 2013-MB-5 (10-12)
Date Collected: 01/08/14 13:35
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-8
Matrix: Solid
Percent Solids: 75.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.0671**		0.0133	0.00221	mg/Kg	☼		01/17/14 12:32	1
Benzene	0.000840	U	0.00667	0.000840	mg/Kg	☼		01/17/14 12:32	1
Chlorobromomethane	0.00237	U	0.00667	0.00237	mg/Kg	☼		01/17/14 12:32	1
Bromoform	0.00183	U	0.00667	0.00183	mg/Kg	☼		01/17/14 12:32	1
Bromomethane	0.00111	U	0.0133	0.00111	mg/Kg	☼		01/17/14 12:32	1
2-Butanone (MEK)	**0.0101**	**J**	0.0133	0.00253	mg/Kg	☼		01/17/14 12:32	1
Carbon disulfide	**0.000745**	**J**	0.0133	0.000733	mg/Kg	☼		01/17/14 12:32	1
Carbon tetrachloride	0.00151	U	0.00667	0.00151	mg/Kg	☼		01/17/14 12:32	1
Dibromochloromethane	0.00125	U	0.00667	0.00125	mg/Kg	☼		01/17/14 12:32	1
Chlorobenzene	0.00128	U	0.00667	0.00128	mg/Kg	☼		01/17/14 12:32	1
Chloroethane	0.00187	U	0.0133	0.00187	mg/Kg	☼		01/17/14 12:32	1
Chloroform	0.000880	U	0.00667	0.000880	mg/Kg	☼		01/17/14 12:32	1
Chloromethane	0.00221	U	0.0133	0.00221	mg/Kg	☼		01/17/14 12:32	1
1,1-Dichloroethane	0.00116	U	0.00667	0.00116	mg/Kg	☼		01/17/14 12:32	1
1,2-Dichloroethane	0.00120	U	0.00667	0.00120	mg/Kg	☼		01/17/14 12:32	1
1,1-Dichloroethene	0.00163	U	0.00667	0.00163	mg/Kg	☼		01/17/14 12:32	1
cis-1,2-Dichloroethene	0.00111	U	0.00667	0.00111	mg/Kg	☼		01/17/14 12:32	1
trans-1,2-Dichloroethene	0.00152	U	0.00667	0.00152	mg/Kg	☼		01/17/14 12:32	1
1,2-Dichloropropane	0.000947	U	0.00667	0.000947	mg/Kg	☼		01/17/14 12:32	1
cis-1,3-Dichloropropene	0.000720	U	0.00667	0.000720	mg/Kg	☼		01/17/14 12:32	1
trans-1,3-Dichloropropene	0.000773	U	0.00667	0.000773	mg/Kg	☼		01/17/14 12:32	1
Ethylbenzene	0.00136	U	0.00667	0.00136	mg/Kg	☼		01/17/14 12:32	1
2-Hexanone	0.00135	U	0.0133	0.00135	mg/Kg	☼		01/17/14 12:32	1
Methylene Chloride	**0.00549**	**J**	0.0133	0.00292	mg/Kg	☼		01/17/14 12:32	1
4-Methyl-2-pentanone (MIBK)	0.00196	U	0.0133	0.00196	mg/Kg	☼		01/17/14 12:32	1
Styrene	0.000947	U	0.00667	0.000947	mg/Kg	☼		01/17/14 12:32	1
1,1,2,2-Tetrachloroethane	0.00116	U	0.00667	0.00116	mg/Kg	☼		01/17/14 12:32	1
Tetrachloroethene	0.000947	U	0.00667	0.000947	mg/Kg	☼		01/17/14 12:32	1
Toluene	**0.00313**	**J b**	0.00667	0.00184	mg/Kg	☼		01/17/14 12:32	1
1,1,1-Trichloroethane	0.000987	U	0.00667	0.000987	mg/Kg	☼		01/17/14 12:32	1
1,1,2-Trichloroethane	0.000973	U	0.00667	0.000973	mg/Kg	☼		01/17/14 12:32	1
Trichloroethene	0.00187	U	0.00667	0.00187	mg/Kg	☼		01/17/14 12:32	1
Vinyl acetate	0.00124	U	0.00667	0.00124	mg/Kg	☼		01/17/14 12:32	1
Vinyl chloride	0.00120	U	0.0133	0.00120	mg/Kg	☼		01/17/14 12:32	1
o-Xylene	0.00151	U	0.00667	0.00151	mg/Kg	☼		01/17/14 12:32	1
m-Xylene & p-Xylene	0.00203	U	0.0133	0.00203	mg/Kg	☼		01/17/14 12:32	1
Xylenes, Total	0.00151	U	0.00667	0.00151	mg/Kg	☼		01/17/14 12:32	1
Bromodichloromethane	0.000880	U	0.00667	0.000880	mg/Kg	☼		01/17/14 12:32	1
1,2-Dichloroethene, Total	0.00253	U	0.0133	0.00253	mg/Kg	☼		01/17/14 12:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*50 - 130*		*01/17/14 12:32*	*1*
Dibromofluoromethane	*101*		*68 - 140*		*01/17/14 12:32*	*1*
4-Bromofluorobenzene	*101*		*57 - 140*		*01/17/14 12:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*61 - 130*		*01/17/14 12:32*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.384	U	4.45	0.384	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Acenaphthylene	0.267	U	4.45	0.267	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100

Client Sample ID: 2013-MB-5 (10-12)
Date Collected: 01/08/14 13:35
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-8
Matrix: Solid
Percent Solids: 75.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	0.341	U *	4.45	0.341	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Benzidine	2.41	U *	22.2	2.41	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Benzo[a]anthracene	0.368	U	4.45	0.368	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Benzo[a]pyrene	0.429	U	4.45	0.429	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Benzo[b]fluoranthene	0.459	U	4.45	0.459	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Benzo[g,h,i]perylene	1.35	U	4.45	1.35	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Benzo[k]fluoranthene	0.397	U	4.45	0.397	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Benzyl alcohol	1.55	U	4.45	1.55	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Bis(2-chloroethoxy)methane	0.379	U	4.45	0.379	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Bis(2-chloroethyl)ether	0.440	U	4.45	0.440	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
bis (2-Chloroisopropyl) ether	2.36	U	4.45	2.36	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Bis(2-ethylhexyl) phthalate	1.43	U	17.8	1.43	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
4-Bromophenyl phenyl ether	0.757	U *	4.45	0.757	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Butyl benzyl phthalate	1.65	U	17.8	1.65	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Carbazole	0.832	U *	4.45	0.832	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
4-Chloroaniline	1.55	U	4.45	1.55	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
4-Chloro-3-methylphenol	4.16	U	4.45	4.16	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
2-Chloronaphthalene	0.323	U	4.45	0.323	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
2-Chlorophenol	0.525	U	4.45	0.525	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
4-Chlorophenyl phenyl ether	0.480	U	4.45	0.480	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Chrysene	0.272	U	4.45	0.272	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Dibenz(a,h)anthracene	0.968	U	4.45	0.968	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Dibenzofuran	**6.33**		4.45	0.475	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
1,2-Dichlorobenzene	0.805	U	4.45	0.805	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
1,3-Dichlorobenzene	0.411	U	4.45	0.411	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
1,4-Dichlorobenzene	0.600	U	4.45	0.600	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
3,3'-Dichlorobenzidine	2.71	U	4.45	2.71	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
2,4-Dichlorophenol	1.03	U	4.45	1.03	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Diethyl phthalate	2.25	U	17.8	2.25	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
2,4-Dimethylphenol	2.29	U	4.45	2.29	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Dimethyl phthalate	1.30	U	17.8	1.30	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Di-n-butyl phthalate	0.691	U *	17.8	0.691	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
4,6-Dinitro-2-methylphenol	1.33	U *	4.45	1.33	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
2,4-Dinitrophenol	1.26	U	26.7	1.26	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
2,4-Dinitrotoluene	0.963	U	4.45	0.963	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
2,6-Dinitrotoluene	0.787	U	4.45	0.787	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Di-n-octyl phthalate	0.507	U	17.8	0.507	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Fluoranthene	0.829	U *	4.45	0.829	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Fluorene	**6.48**		4.45	0.629	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Hexachlorobenzene	0.405	U *	4.45	0.405	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Hexachlorobutadiene	0.512	U	4.45	0.512	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Hexachlorocyclopentadiene	1.23	U	4.45	1.23	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Hexachloroethane	0.616	U	4.45	0.616	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Indeno[1,2,3-cd]pyrene	0.933	U	4.45	0.933	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Isophorone	0.267	U	4.45	0.267	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
2-Methylnaphthalene	**3.19**	**J**	4.45	0.731	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
2-Methylphenol	0.861	U	4.45	0.861	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
3 & 4 Methylphenol	0.744	U	8.89	0.744	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Naphthalene	0.360	U	4.45	0.360	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100

Client Sample ID: 2013-MB-5 (10-12)
Date Collected: 01/08/14 13:35
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-8
Matrix: Solid
Percent Solids: 75.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	1.30	U	4.45	1.30	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
3-Nitroaniline	1.91	U	4.45	1.91	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
4-Nitroaniline	2.97	U	4.45	2.97	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Nitrobenzene	0.789	U	4.45	0.789	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
2-Nitrophenol	1.04	U	4.45	1.04	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
4-Nitrophenol	1.35	U	4.45	1.35	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
N-Nitrosodimethylamine	1.12	U	4.45	1.12	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
N-Nitrosodi-n-propylamine	0.592	U	4.45	0.592	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
N-Nitrosodiphenylamine	0.504	U *	4.45	0.504	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Pentachlorophenol	1.07	U *	44.5	1.07	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Phenanthrene	**5.36**	*	4.45	1.32	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Phenol	1.13	U	4.45	1.13	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
Pyrene	**1.26**	J	4.45	0.488	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
1,2,4-Trichlorobenzene	0.560	U	4.45	0.560	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
2,4,5-Trichlorophenol	2.67	U	4.45	2.67	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100
2,4,6-Trichlorophenol	0.715	U	4.45	0.715	mg/Kg	☼	01/17/14 13:18	01/22/14 22:21	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*0*	*X*	*38 - 127*	*01/17/14 13:18*	*01/22/14 22:21*	*100*
2-Fluorophenol	*0*	*X*	*25 - 132*	*01/17/14 13:18*	*01/22/14 22:21*	*100*
Nitrobenzene-d5	*0*	*X*	*10 - 155*	*01/17/14 13:18*	*01/22/14 22:21*	*100*
Phenol-d5 (Surr)	*0*	*X*	*27 - 123*	*01/17/14 13:18*	*01/22/14 22:21*	*100*
Terphenyl-d14	*0*	*X*	*53 - 134*	*01/17/14 13:18*	*01/22/14 22:21*	*100*
2,4,6-Tribromophenol	*0*	*X*	*10 - 148*	*01/17/14 13:18*	*01/22/14 22:21*	*100*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	**299**		66.5	25.3	mg/Kg	☼	01/14/14 12:54	01/15/14 09:36	5
>C12-C28	**2410**		66.5	27.0	mg/Kg	☼	01/14/14 12:54	01/15/14 09:36	5
>C28-C35	**334**		66.5	27.0	mg/Kg	☼	01/14/14 12:54	01/15/14 09:36	5
C6-C35	**3050**		66.5	49.7	mg/Kg	☼	01/14/14 12:54	01/15/14 09:36	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*218*	*X*	*70 - 130*	*01/14/14 12:54*	*01/15/14 09:36*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**2.15**		0.330	0.0339	mg/Kg	☼	01/13/14 14:19	01/14/14 08:55	1
Lead	**2390**		0.660	0.138	mg/Kg	☼	01/13/14 14:19	01/14/14 08:55	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**25**		1.0	1.0	%			01/13/14 09:59	1
Percent Moisture	**25**		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	**75**		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	**75**		1.0	1.0	%			01/13/14 09:59	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-1

Client Sample ID: 2013-MB-4 (0.83-1.33)
Date Collected: 01/08/14 15:15
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-11
Matrix: Solid
Percent Solids: 76.4

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.298**		0.0131	0.00217	mg/Kg	☼		01/15/14 21:55	1
Benzene	0.000824	U	0.00654	0.000824	mg/Kg	☼		01/15/14 21:55	1
Chlorobromomethane	0.00233	U	0.00654	0.00233	mg/Kg	☼		01/15/14 21:55	1
Bromoform	0.00179	U	0.00654	0.00179	mg/Kg	☼		01/15/14 21:55	1
Bromomethane	0.00109	U	0.0131	0.00109	mg/Kg	☼		01/15/14 21:55	1
2-Butanone (MEK)	**0.0358**		0.0131	0.00249	mg/Kg	☼		01/15/14 21:55	1
Carbon disulfide	**0.00386**	**J**	0.0131	0.000719	mg/Kg	☼		01/15/14 21:55	1
Carbon tetrachloride	0.00148	U	0.00654	0.00148	mg/Kg	☼		01/15/14 21:55	1
Dibromochloromethane	0.00123	U	0.00654	0.00123	mg/Kg	☼		01/15/14 21:55	1
Chlorobenzene	0.00126	U	0.00654	0.00126	mg/Kg	☼		01/15/14 21:55	1
Chloroethane	0.00183	U	0.0131	0.00183	mg/Kg	☼		01/15/14 21:55	1
Chloroform	0.000863	U	0.00654	0.000863	mg/Kg	☼		01/15/14 21:55	1
Chloromethane	0.00217	U	0.0131	0.00217	mg/Kg	☼		01/15/14 21:55	1
1,1-Dichloroethane	0.00114	U	0.00654	0.00114	mg/Kg	☼		01/15/14 21:55	1
1,2-Dichloroethane	0.00118	U	0.00654	0.00118	mg/Kg	☼		01/15/14 21:55	1
1,1-Dichloroethene	0.00160	U	0.00654	0.00160	mg/Kg	☼		01/15/14 21:55	1
cis-1,2-Dichloroethene	0.00109	U	0.00654	0.00109	mg/Kg	☼		01/15/14 21:55	1
trans-1,2-Dichloroethene	0.00149	U	0.00654	0.00149	mg/Kg	☼		01/15/14 21:55	1
1,2-Dichloropropane	0.000929	U	0.00654	0.000929	mg/Kg	☼		01/15/14 21:55	1
cis-1,3-Dichloropropene	0.000706	U	0.00654	0.000706	mg/Kg	☼		01/15/14 21:55	1
trans-1,3-Dichloropropene	0.000759	U	0.00654	0.000759	mg/Kg	☼		01/15/14 21:55	1
Ethylbenzene	0.00133	U	0.00654	0.00133	mg/Kg	☼		01/15/14 21:55	1
2-Hexanone	0.00132	U	0.0131	0.00132	mg/Kg	☼		01/15/14 21:55	1
Methylene Chloride	0.00286	U	0.0131	0.00286	mg/Kg	☼		01/15/14 21:55	1
4-Methyl-2-pentanone (MIBK)	0.00192	U	0.0131	0.00192	mg/Kg	☼		01/15/14 21:55	1
Styrene	0.000929	U	0.00654	0.000929	mg/Kg	☼		01/15/14 21:55	1
1,1,2,2-Tetrachloroethane	0.00114	U	0.00654	0.00114	mg/Kg	☼		01/15/14 21:55	1
Tetrachloroethene	0.000929	U	0.00654	0.000929	mg/Kg	☼		01/15/14 21:55	1
Toluene	0.00181	U	0.00654	0.00181	mg/Kg	☼		01/15/14 21:55	1
1,1,1-Trichloroethane	0.000968	U	0.00654	0.000968	mg/Kg	☼		01/15/14 21:55	1
1,1,2-Trichloroethane	0.000955	U	0.00654	0.000955	mg/Kg	☼		01/15/14 21:55	1
Trichloroethene	0.00183	U	0.00654	0.00183	mg/Kg	☼		01/15/14 21:55	1
Vinyl acetate	0.00122	U	0.00654	0.00122	mg/Kg	☼		01/15/14 21:55	1
Vinyl chloride	0.00118	U	0.0131	0.00118	mg/Kg	☼		01/15/14 21:55	1
o-Xylene	0.00148	U	0.00654	0.00148	mg/Kg	☼		01/15/14 21:55	1
m-Xylene & p-Xylene	0.00199	U	0.0131	0.00199	mg/Kg	☼		01/15/14 21:55	1
Xylenes, Total	0.00148	U	0.00654	0.00148	mg/Kg	☼		01/15/14 21:55	1
Bromodichloromethane	0.000863	U	0.00654	0.000863	mg/Kg	☼		01/15/14 21:55	1
1,2-Dichloroethene, Total	0.00249	U	0.0131	0.00249	mg/Kg	☼		01/15/14 21:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*86*		*50 - 130*		*01/15/14 21:55*	*1*
Dibromofluoromethane	*92*		*68 - 140*		*01/15/14 21:55*	*1*
4-Bromofluorobenzene	*99*		*57 - 140*		*01/15/14 21:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*61 - 130*		*01/15/14 21:55*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**0.495**		0.318	0.0326	mg/Kg	☼	01/13/14 14:19	01/14/14 08:57	1
Lead	**24.4**		0.635	0.133	mg/Kg	☼	01/13/14 14:19	01/14/14 08:57	1

Client Sample ID: 2013-MB-4 (0.83-1.33)

Lab Sample ID: 600-85318-11

Date Collected: 01/08/14 15:15

Matrix: Solid

Date Received: 01/10/14 10:31

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**24**		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	**76**		1.0	1.0	%			01/13/14 09:59	1

Client Sample ID: MW-27D (0.5-2)

Lab Sample ID: 600-85318-14

Date Collected: 01/08/14 15:45

Matrix: Solid

Date Received: 01/10/14 10:31

Percent Solids: 77.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.0549**		0.0129	0.00214	mg/Kg	☼		01/15/14 22:19	1
Benzene	0.000813	U	0.00645	0.000813	mg/Kg	☼		01/15/14 22:19	1
Chlorobromomethane	0.00230	U	0.00645	0.00230	mg/Kg	☼		01/15/14 22:19	1
Bromoform	0.00177	U	0.00645	0.00177	mg/Kg	☼		01/15/14 22:19	1
Bromomethane	0.00107	U	0.0129	0.00107	mg/Kg	☼		01/15/14 22:19	1
2-Butanone (MEK)	**0.0165**		0.0129	0.00245	mg/Kg	☼		01/15/14 22:19	1
Carbon disulfide	**0.00364**	**J**	0.0129	0.000710	mg/Kg	☼		01/15/14 22:19	1
Carbon tetrachloride	0.00146	U	0.00645	0.00146	mg/Kg	☼		01/15/14 22:19	1
Dibromochloromethane	0.00121	U	0.00645	0.00121	mg/Kg	☼		01/15/14 22:19	1
Chlorobenzene	0.00124	U	0.00645	0.00124	mg/Kg	☼		01/15/14 22:19	1
Chloroethane	0.00181	U	0.0129	0.00181	mg/Kg	☼		01/15/14 22:19	1
Chloroform	0.000852	U	0.00645	0.000852	mg/Kg	☼		01/15/14 22:19	1
Chloromethane	0.00214	U	0.0129	0.00214	mg/Kg	☼		01/15/14 22:19	1
1,1-Dichloroethane	0.00112	U	0.00645	0.00112	mg/Kg	☼		01/15/14 22:19	1
1,2-Dichloroethane	0.00116	U	0.00645	0.00116	mg/Kg	☼		01/15/14 22:19	1
1,1-Dichloroethene	0.00157	U	0.00645	0.00157	mg/Kg	☼		01/15/14 22:19	1
cis-1,2-Dichloroethene	0.00107	U	0.00645	0.00107	mg/Kg	☼		01/15/14 22:19	1
trans-1,2-Dichloroethene	0.00147	U	0.00645	0.00147	mg/Kg	☼		01/15/14 22:19	1
1,2-Dichloropropane	0.000916	U	0.00645	0.000916	mg/Kg	☼		01/15/14 22:19	1
cis-1,3-Dichloropropene	0.000697	U	0.00645	0.000697	mg/Kg	☼		01/15/14 22:19	1
trans-1,3-Dichloropropene	0.000748	U	0.00645	0.000748	mg/Kg	☼		01/15/14 22:19	1
Ethylbenzene	0.00132	U	0.00645	0.00132	mg/Kg	☼		01/15/14 22:19	1
2-Hexanone	0.00130	U	0.0129	0.00130	mg/Kg	☼		01/15/14 22:19	1
Methylene Chloride	**0.00932**	**J**	0.0129	0.00283	mg/Kg	☼		01/15/14 22:19	1
4-Methyl-2-pentanone (MIBK)	0.00190	U	0.0129	0.00190	mg/Kg	☼		01/15/14 22:19	1
Styrene	0.000916	U	0.00645	0.000916	mg/Kg	☼		01/15/14 22:19	1
1,1,2,2-Tetrachloroethane	0.00112	U	0.00645	0.00112	mg/Kg	☼		01/15/14 22:19	1
Tetrachloroethene	0.000916	U	0.00645	0.000916	mg/Kg	☼		01/15/14 22:19	1
Toluene	**0.00197**	**J**	0.00645	0.00178	mg/Kg	☼		01/15/14 22:19	1
1,1,1-Trichloroethane	0.000955	U	0.00645	0.000955	mg/Kg	☼		01/15/14 22:19	1
1,1,2-Trichloroethane	0.000942	U	0.00645	0.000942	mg/Kg	☼		01/15/14 22:19	1
Trichloroethene	0.00181	U	0.00645	0.00181	mg/Kg	☼		01/15/14 22:19	1
Vinyl acetate	0.00120	U	0.00645	0.00120	mg/Kg	☼		01/15/14 22:19	1
Vinyl chloride	0.00116	U	0.0129	0.00116	mg/Kg	☼		01/15/14 22:19	1
o-Xylene	0.00146	U	0.00645	0.00146	mg/Kg	☼		01/15/14 22:19	1
m-Xylene & p-Xylene	0.00196	U	0.0129	0.00196	mg/Kg	☼		01/15/14 22:19	1
Xylenes, Total	0.00146	U	0.00645	0.00146	mg/Kg	☼		01/15/14 22:19	1
Bromodichloromethane	0.000852	U	0.00645	0.000852	mg/Kg	☼		01/15/14 22:19	1
1,2-Dichloroethene, Total	0.00245	U	0.0129	0.00245	mg/Kg	☼		01/15/14 22:19	1

Client Sample ID: MW-27D (0.5-2)
Date Collected: 01/08/14 15:45
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-14
Matrix: Solid
Percent Solids: 77.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*50 - 130*		*01/15/14 22:19*	*1*
Dibromofluoromethane	*88*		*68 - 140*		*01/15/14 22:19*	*1*
4-Bromofluorobenzene	*102*		*57 - 140*		*01/15/14 22:19*	*1*
1,2-Dichloroethane-d4 (Surr)	*77*		*61 - 130*		*01/15/14 22:19*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.00347	U	0.0429	0.00347	mg/Kg	☼	01/17/14 13:18	01/21/14 03:53	1
2-Methylnaphthalene	0.00704	U	0.0429	0.00704	mg/Kg	☼	01/17/14 13:18	01/21/14 03:53	1
1-Methylnaphthalene	0.00404	U	0.0429	0.00404	mg/Kg	☼	01/17/14 13:18	01/21/14 03:53	1
Acenaphthylene	0.00257	U	0.0429	0.00257	mg/Kg	☼	01/17/14 13:18	01/21/14 03:53	1
Acenaphthene	0.00370	U	0.0429	0.00370	mg/Kg	☼	01/17/14 13:18	01/21/14 03:53	1
Fluorene	0.00607	U	0.0429	0.00607	mg/Kg	☼	01/17/14 13:18	01/21/14 03:53	1
Phenanthrene	0.0127	U	0.0429	0.0127	mg/Kg	☼	01/17/14 13:18	01/21/14 03:53	1
Anthracene	0.00329	U	0.0429	0.00329	mg/Kg	☼	01/17/14 13:18	01/21/14 03:53	1
Fluoranthene	**0.0155**	**J**	0.0429	0.00799	mg/Kg	☼	01/17/14 13:18	01/21/14 03:53	1
Pyrene	**0.0166**	**J**	0.0429	0.00470	mg/Kg	☼	01/17/14 13:18	01/21/14 03:53	1
Benzo[a]anthracene	0.00355	U	0.0429	0.00355	mg/Kg	☼	01/17/14 13:18	01/21/14 03:53	1
Chrysene	0.00262	U	0.0429	0.00262	mg/Kg	☼	01/17/14 13:18	01/21/14 03:53	1
Benzo[b]fluoranthene	0.00442	U	0.0429	0.00442	mg/Kg	☼	01/17/14 13:18	01/21/14 03:53	1
Benzo[k]fluoranthene	0.00383	U	0.0429	0.00383	mg/Kg	☼	01/17/14 13:18	01/21/14 03:53	1
Benzo[a]pyrene	0.00414	U	0.0429	0.00414	mg/Kg	☼	01/17/14 13:18	01/21/14 03:53	1
Indeno[1,2,3-cd]pyrene	0.00900	U	0.0429	0.00900	mg/Kg	☼	01/17/14 13:18	01/21/14 03:53	1
Dibenz(a,h)anthracene	0.00933	U	0.0429	0.00933	mg/Kg	☼	01/17/14 13:18	01/21/14 03:53	1
Benzo[g,h,i]perylene	0.0130	U	0.0429	0.0130	mg/Kg	☼	01/17/14 13:18	01/21/14 03:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*55*		*25 - 132*	*01/17/14 13:18*	*01/21/14 03:53*	*1*
Nitrobenzene-d5	*18*		*10 - 155*	*01/17/14 13:18*	*01/21/14 03:53*	*1*
2-Fluorobiphenyl	*92*		*38 - 127*	*01/17/14 13:18*	*01/21/14 03:53*	*1*
2,4,6-Tribromophenol	*59*		*10 - 148*	*01/17/14 13:18*	*01/21/14 03:53*	*1*
Terphenyl-d14	*121*		*53 - 134*	*01/17/14 13:18*	*01/21/14 03:53*	*1*
Phenol-d5 (Surr)	*121*		*27 - 123*	*01/17/14 13:18*	*01/21/14 03:53*	*1*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	4.87	U	12.8	4.87	mg/Kg	☼	01/14/14 12:54	01/14/14 18:25	1
>C12-C28	5.20	U	12.8	5.20	mg/Kg	☼	01/14/14 12:54	01/14/14 18:25	1
>C28-C35	5.20	U	12.8	5.20	mg/Kg	☼	01/14/14 12:54	01/14/14 18:25	1
C6-C35	9.59	U	12.8	9.59	mg/Kg	☼	01/14/14 12:54	01/14/14 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*97*		*70 - 130*	*01/14/14 12:54*	*01/14/14 18:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**15.1**		0.313	0.0321	mg/Kg	☼	01/13/14 14:19	01/14/14 08:31	1
Lead	**315**		0.626	0.131	mg/Kg	☼	01/13/14 14:19	01/14/14 08:31	1

Client Sample ID: MW-27D (0.5-2)

Lab Sample ID: 600-85318-14

Date Collected: 01/08/14 15:45

Matrix: Solid

Date Received: 01/10/14 10:31

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	77		1.0	1.0	%			01/13/14 09:59	1

Client Sample ID: MW-27C (0-2)

Lab Sample ID: 600-85318-16

Date Collected: 01/08/14 16:20

Matrix: Solid

Date Received: 01/10/14 10:31

Percent Solids: 78.0

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00213	U	0.0128	0.00213	mg/Kg	☼		01/15/14 22:43	1
Benzene	0.000808	U	0.00641	0.000808	mg/Kg	☼		01/15/14 22:43	1
Chlorobromomethane	0.00228	U	0.00641	0.00228	mg/Kg	☼		01/15/14 22:43	1
Bromoform	0.00176	U	0.00641	0.00176	mg/Kg	☼		01/15/14 22:43	1
Bromomethane	0.00106	U	0.0128	0.00106	mg/Kg	☼		01/15/14 22:43	1
2-Butanone (MEK)	0.00244	U	0.0128	0.00244	mg/Kg	☼		01/15/14 22:43	1
Carbon disulfide	0.000705	U	0.0128	0.000705	mg/Kg	☼		01/15/14 22:43	1
Carbon tetrachloride	0.00145	U	0.00641	0.00145	mg/Kg	☼		01/15/14 22:43	1
Dibromochloromethane	0.00120	U	0.00641	0.00120	mg/Kg	☼		01/15/14 22:43	1
Chlorobenzene	0.00123	U	0.00641	0.00123	mg/Kg	☼		01/15/14 22:43	1
Chloroethane	0.00179	U	0.0128	0.00179	mg/Kg	☼		01/15/14 22:43	1
Chloroform	0.000846	U	0.00641	0.000846	mg/Kg	☼		01/15/14 22:43	1
Chloromethane	0.00213	U	0.0128	0.00213	mg/Kg	☼		01/15/14 22:43	1
1,1-Dichloroethane	0.00112	U	0.00641	0.00112	mg/Kg	☼		01/15/14 22:43	1
1,2-Dichloroethane	0.00115	U	0.00641	0.00115	mg/Kg	☼		01/15/14 22:43	1
1,1-Dichloroethene	0.00156	U	0.00641	0.00156	mg/Kg	☼		01/15/14 22:43	1
cis-1,2-Dichloroethene	0.00106	U	0.00641	0.00106	mg/Kg	☼		01/15/14 22:43	1
trans-1,2-Dichloroethene	0.00146	U	0.00641	0.00146	mg/Kg	☼		01/15/14 22:43	1
1,2-Dichloropropane	0.000910	U	0.00641	0.000910	mg/Kg	☼		01/15/14 22:43	1
cis-1,3-Dichloropropene	0.000692	U	0.00641	0.000692	mg/Kg	☼		01/15/14 22:43	1
trans-1,3-Dichloropropene	0.000743	U	0.00641	0.000743	mg/Kg	☼		01/15/14 22:43	1
Ethylbenzene	0.00131	U	0.00641	0.00131	mg/Kg	☼		01/15/14 22:43	1
2-Hexanone	0.00129	U	0.0128	0.00129	mg/Kg	☼		01/15/14 22:43	1
Methylene Chloride	0.00281	U	0.0128	0.00281	mg/Kg	☼		01/15/14 22:43	1
4-Methyl-2-pentanone (MIBK)	0.00188	U	0.0128	0.00188	mg/Kg	☼		01/15/14 22:43	1
Styrene	0.000910	U	0.00641	0.000910	mg/Kg	☼		01/15/14 22:43	1
1,1,2,2-Tetrachloroethane	0.00112	U	0.00641	0.00112	mg/Kg	☼		01/15/14 22:43	1
Tetrachloroethene	0.000910	U	0.00641	0.000910	mg/Kg	☼		01/15/14 22:43	1
Toluene	0.00177	U	0.00641	0.00177	mg/Kg	☼		01/15/14 22:43	1
1,1,1-Trichloroethane	0.000949	U	0.00641	0.000949	mg/Kg	☼		01/15/14 22:43	1
1,1,2-Trichloroethane	0.000936	U	0.00641	0.000936	mg/Kg	☼		01/15/14 22:43	1
Trichloroethene	0.00179	U	0.00641	0.00179	mg/Kg	☼		01/15/14 22:43	1
Vinyl acetate	0.00119	U	0.00641	0.00119	mg/Kg	☼		01/15/14 22:43	1
Vinyl chloride	0.00115	U	0.0128	0.00115	mg/Kg	☼		01/15/14 22:43	1
o-Xylene	0.00145	U	0.00641	0.00145	mg/Kg	☼		01/15/14 22:43	1
m-Xylene & p-Xylene	0.00195	U	0.0128	0.00195	mg/Kg	☼		01/15/14 22:43	1
Xylenes, Total	0.00145	U	0.00641	0.00145	mg/Kg	☼		01/15/14 22:43	1
Bromodichloromethane	0.000846	U	0.00641	0.000846	mg/Kg	☼		01/15/14 22:43	1
1,2-Dichloroethene, Total	0.00244	U	0.0128	0.00244	mg/Kg	☼		01/15/14 22:43	1

Client Sample ID: MW-27C (0-2)
Date Collected: 01/08/14 16:20
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-16
Matrix: Solid
Percent Solids: 78.0

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*91*		*50 - 130*		*01/15/14 22:43*	*1*
Dibromofluoromethane	*89*		*68 - 140*		*01/15/14 22:43*	*1*
4-Bromofluorobenzene	*113*		*57 - 140*		*01/15/14 22:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*81*		*61 - 130*		*01/15/14 22:43*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**0.00612**	**J**	0.0424	0.00343	mg/Kg	☼	01/15/14 08:14	01/17/14 12:30	1
2-Methylnaphthalene	**0.00706**	**J**	0.0424	0.00696	mg/Kg	☼	01/15/14 08:14	01/17/14 12:30	1
1-Methylnaphthalene	0.00399	U	0.0424	0.00399	mg/Kg	☼	01/15/14 08:14	01/17/14 12:30	1
Acenaphthylene	0.00254	U	0.0424	0.00254	mg/Kg	☼	01/15/14 08:14	01/17/14 12:30	1
Acenaphthene	0.00366	U	0.0424	0.00366	mg/Kg	☼	01/15/14 08:14	01/17/14 12:30	1
Fluorene	0.00600	U	0.0424	0.00600	mg/Kg	☼	01/15/14 08:14	01/17/14 12:30	1
Phenanthrene	**0.0133**	**J**	0.0424	0.0126	mg/Kg	☼	01/15/14 08:14	01/17/14 12:30	1
Anthracene	**0.00824**	**J**	0.0424	0.00325	mg/Kg	☼	01/15/14 08:14	01/17/14 12:30	1
Fluoranthene	0.00790	U	0.0424	0.00790	mg/Kg	☼	01/15/14 08:14	01/17/14 12:30	1
Pyrene	**0.0106**	**J**	0.0424	0.00465	mg/Kg	☼	01/15/14 08:14	01/17/14 12:30	1
Benzo[a]anthracene	**0.0123**	**J**	0.0424	0.00351	mg/Kg	☼	01/15/14 08:14	01/17/14 12:30	1
Chrysene	**0.0297**	**J**	0.0424	0.00259	mg/Kg	☼	01/15/14 08:14	01/17/14 12:30	1
Benzo[b]fluoranthene	**0.0202**	**J**	0.0424	0.00437	mg/Kg	☼	01/15/14 08:14	01/17/14 12:30	1
Benzo[k]fluoranthene	0.00379	U	0.0424	0.00379	mg/Kg	☼	01/15/14 08:14	01/17/14 12:30	1
Benzo[a]pyrene	**0.0138**	**J**	0.0424	0.00409	mg/Kg	☼	01/15/14 08:14	01/17/14 12:30	1
Indeno[1,2,3-cd]pyrene	0.00890	U	0.0424	0.00890	mg/Kg	☼	01/15/14 08:14	01/17/14 12:30	1
Dibenz(a,h)anthracene	0.00923	U	0.0424	0.00923	mg/Kg	☼	01/15/14 08:14	01/17/14 12:30	1
Benzo[g,h,i]perylene	0.0129	U	0.0424	0.0129	mg/Kg	☼	01/15/14 08:14	01/17/14 12:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol	*123*		*25 - 132*	*01/15/14 08:14*	*01/17/14 12:30*	*1*
Nitrobenzene-d5	*110*		*10 - 155*	*01/15/14 08:14*	*01/17/14 12:30*	*1*
2-Fluorobiphenyl	*114*		*38 - 127*	*01/15/14 08:14*	*01/17/14 12:30*	*1*
2,4,6-Tribromophenol	*103*		*10 - 148*	*01/15/14 08:14*	*01/17/14 12:30*	*1*
Terphenyl-d14	*125*		*53 - 134*	*01/15/14 08:14*	*01/17/14 12:30*	*1*
Phenol-d5 (Surr)	*111*		*27 - 123*	*01/15/14 08:14*	*01/17/14 12:30*	*1*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	4.87	U	12.8	4.87	mg/Kg	☼	01/14/14 12:54	01/14/14 19:00	1
>C12-C28	5.20	U	12.8	5.20	mg/Kg	☼	01/14/14 12:54	01/14/14 19:00	1
>C28-C35	5.20	U	12.8	5.20	mg/Kg	☼	01/14/14 12:54	01/14/14 19:00	1
C6-C35	9.58	U	12.8	9.58	mg/Kg	☼	01/14/14 12:54	01/14/14 19:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Terphenyl	*100*		*70 - 130*	*01/14/14 12:54*	*01/14/14 19:00*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**9.11**	**b**	0.297	0.0304	mg/Kg	☼	01/14/14 12:46	01/15/14 13:22	1
Lead	**1830**		0.593	0.124	mg/Kg	☼	01/14/14 12:46	01/15/14 13:22	1

Client Sample ID: MW-27C (0-2)

Lab Sample ID: 600-85318-16
Date Collected: 01/08/14 16:20
Matrix: Solid
Date Received: 01/10/14 10:31

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			01/14/14 13:52	1
Percent Solids	78		1.0	1.0	%			01/14/14 13:52	1

Client Sample ID: MW-41 (0-0.5)

Lab Sample ID: 600-85318-17
Date Collected: 01/08/14 13:40
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 76.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.00		1.25	0.272	mg/Kg	☼	01/13/14 14:19	01/14/14 09:00	1
Cadmium	0.474		0.312	0.0320	mg/Kg	☼	01/13/14 14:19	01/14/14 09:00	1
Lead	18.4		0.624	0.131	mg/Kg	☼	01/13/14 14:19	01/14/14 09:00	1
Selenium	0.323	U	2.49	0.323	mg/Kg	☼	01/13/14 14:19	01/14/14 09:00	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	76		1.0	1.0	%			01/13/14 09:59	1

Client Sample ID: MW-41 (0.5-2)

Lab Sample ID: 600-85318-18
Date Collected: 01/08/14 13:45
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 76.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10.1		1.31	0.285	mg/Kg	☼	01/13/14 14:19	01/14/14 09:02	1
Cadmium	0.810		0.327	0.0335	mg/Kg	☼	01/13/14 14:19	01/14/14 09:02	1
Lead	92.5		0.653	0.137	mg/Kg	☼	01/13/14 14:19	01/14/14 09:02	1
Selenium	0.338	U	2.61	0.338	mg/Kg	☼	01/13/14 14:19	01/14/14 09:02	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	77		1.0	1.0	%			01/13/14 09:59	1

Client Sample ID: MW-42 (0-0.5)

Lab Sample ID: 600-85318-19
Date Collected: 01/08/14 15:40
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 72.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14.2		1.26	0.275	mg/Kg	☼	01/13/14 14:19	01/14/14 09:05	1
Cadmium	1.56		0.315	0.0324	mg/Kg	☼	01/13/14 14:19	01/14/14 09:05	1
Lead	230		0.631	0.132	mg/Kg	☼	01/13/14 14:19	01/14/14 09:05	1
Selenium	0.580	J	2.52	0.327	mg/Kg	☼	01/13/14 14:19	01/14/14 09:05	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	27		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	73		1.0	1.0	%			01/13/14 09:59	1

Client Sample ID: MW-42 (0.5-2)

Lab Sample ID: 600-85318-20
Date Collected: 01/08/14 15:45
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 74.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.287	U	3.10	0.287	mg/Kg	☼	01/13/14 14:19	01/14/14 09:07	1
Arsenic	**13.9**		1.24	0.270	mg/Kg	☼	01/13/14 14:19	01/14/14 09:07	1
Cadmium	**1.82**		0.310	0.0318	mg/Kg	☼	01/13/14 14:19	01/14/14 09:07	1
Lead	**241**		0.620	0.130	mg/Kg	☼	01/13/14 14:19	01/14/14 09:07	1
Selenium	**0.502**	**J**	2.48	0.321	mg/Kg	☼	01/13/14 14:19	01/14/14 09:07	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**26**		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	**74**		1.0	1.0	%			01/13/14 09:59	1

Client Sample ID: DUP-6

Lab Sample ID: 600-85318-21
Date Collected: 01/08/14 00:00
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 77.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.39**		1.20	0.262	mg/Kg	☼	01/13/14 14:19	01/14/14 09:23	1
Cadmium	**0.385**		0.300	0.0308	mg/Kg	☼	01/13/14 14:19	01/14/14 09:23	1
Lead	**15.0**		0.601	0.126	mg/Kg	☼	01/13/14 14:19	01/14/14 09:23	1
Selenium	0.311	U	2.40	0.311	mg/Kg	☼	01/13/14 14:19	01/14/14 09:23	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**22**		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	**78**		1.0	1.0	%			01/13/14 09:59	1

Client Sample ID: FIELD BLANK

Lab Sample ID: 600-85318-22
Date Collected: 01/08/14 17:19
Matrix: Water
Date Received: 01/10/14 10:31

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00227	U	0.0100	0.00227	mg/L			01/11/14 18:04	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 18:04	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			01/11/14 18:04	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			01/11/14 18:04	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			01/11/14 18:04	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			01/11/14 18:04	1
Carbon disulfide	0.00170	U	0.00500	0.00170	mg/L			01/11/14 18:04	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			01/11/14 18:04	1
Dibromochloromethane	0.000920	U	0.00500	0.000920	mg/L			01/11/14 18:04	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			01/11/14 18:04	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			01/11/14 18:04	1
Chloroform	0.000820	U	0.00500	0.000820	mg/L			01/11/14 18:04	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			01/11/14 18:04	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			01/11/14 18:04	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			01/11/14 18:04	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			01/11/14 18:04	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 18:04	1

Client Sample ID: FIELD BLANK

Lab Sample ID: 600-85318-22

Date Collected: 01/08/14 17:19

Matrix: Water

Date Received: 01/10/14 10:31

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			01/11/14 18:04	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			01/11/14 18:04	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			01/11/14 18:04	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			01/11/14 18:04	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			01/11/14 18:04	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			01/11/14 18:04	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			01/11/14 18:04	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			01/11/14 18:04	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 18:04	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			01/11/14 18:04	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			01/11/14 18:04	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			01/11/14 18:04	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			01/11/14 18:04	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			01/11/14 18:04	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			01/11/14 18:04	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			01/11/14 18:04	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			01/11/14 18:04	1
o-Xylene	0.000930	U	0.00500	0.000930	mg/L			01/11/14 18:04	1
m-Xylene & p-Xylene	0.00126	U	0.0100	0.00126	mg/L			01/11/14 18:04	1
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			01/11/14 18:04	1
Bromodichloromethane	0.000760	U	0.00500	0.000760	mg/L			01/11/14 18:04	1
1,2-Dichloroethene, Total	0.000840	U	0.0100	0.000840	mg/L			01/11/14 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*70 - 130*		*01/11/14 18:04*	*1*
Dibromofluoromethane	*88*		*62 - 130*		*01/11/14 18:04*	*1*
4-Bromofluorobenzene	*104*		*67 - 139*		*01/11/14 18:04*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*50 - 134*		*01/11/14 18:04*	*1*

Client Sample ID: RINSE BLANK-CME

Lab Sample ID: 600-85318-23

Date Collected: 01/09/14 08:50

Matrix: Water

Date Received: 01/10/14 10:31

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00328	U ^	0.0100	0.00328	mg/L		01/13/14 09:01	01/15/14 12:52	1
Cadmium	**0.000600**	**J ^**	0.00500	0.000350	mg/L		01/13/14 09:01	01/15/14 12:52	1
Lead	0.00290	U ^	0.0100	0.00290	mg/L		01/13/14 09:01	01/15/14 12:52	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		01/13/14 09:01	01/15/14 12:52	1

Client Sample ID: MW-27B (0-2)

Lab Sample ID: 600-85318-24

Date Collected: 01/09/14 08:55

Matrix: Solid

Date Received: 01/10/14 10:31

Percent Solids: 77.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00214	U	0.0129	0.00214	mg/Kg	☼		01/15/14 23:08	1
Benzene	**0.000959**	**J**	0.00645	0.000813	mg/Kg	☼		01/15/14 23:08	1
Chlorobromomethane	0.00230	U	0.00645	0.00230	mg/Kg	☼		01/15/14 23:08	1
Bromoform	0.00177	U	0.00645	0.00177	mg/Kg	☼		01/15/14 23:08	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-1

Client Sample ID: MW-27B (0-2)
Date Collected: 01/09/14 08:55
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-24
Matrix: Solid
Percent Solids: 77.5

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	0.00107	U	0.0129	0.00107	mg/Kg	☼		01/15/14 23:08	1
2-Butanone (MEK)	0.00245	U	0.0129	0.00245	mg/Kg	☼		01/15/14 23:08	1
Carbon disulfide	0.000710	U	0.0129	0.000710	mg/Kg	☼		01/15/14 23:08	1
Carbon tetrachloride	0.00146	U	0.00645	0.00146	mg/Kg	☼		01/15/14 23:08	1
Dibromochloromethane	0.00121	U	0.00645	0.00121	mg/Kg	☼		01/15/14 23:08	1
Chlorobenzene	0.00124	U	0.00645	0.00124	mg/Kg	☼		01/15/14 23:08	1
Chloroethane	0.00181	U	0.0129	0.00181	mg/Kg	☼		01/15/14 23:08	1
Chloroform	0.000852	U	0.00645	0.000852	mg/Kg	☼		01/15/14 23:08	1
Chloromethane	0.00214	U	0.0129	0.00214	mg/Kg	☼		01/15/14 23:08	1
1,1-Dichloroethane	0.00112	U	0.00645	0.00112	mg/Kg	☼		01/15/14 23:08	1
1,2-Dichloroethane	0.00116	U	0.00645	0.00116	mg/Kg	☼		01/15/14 23:08	1
1,1-Dichloroethene	0.00157	U	0.00645	0.00157	mg/Kg	☼		01/15/14 23:08	1
cis-1,2-Dichloroethene	0.00107	U	0.00645	0.00107	mg/Kg	☼		01/15/14 23:08	1
trans-1,2-Dichloroethene	0.00147	U	0.00645	0.00147	mg/Kg	☼		01/15/14 23:08	1
1,2-Dichloropropane	0.000916	U	0.00645	0.000916	mg/Kg	☼		01/15/14 23:08	1
cis-1,3-Dichloropropene	0.000697	U	0.00645	0.000697	mg/Kg	☼		01/15/14 23:08	1
trans-1,3-Dichloropropene	0.000748	U	0.00645	0.000748	mg/Kg	☼		01/15/14 23:08	1
Ethylbenzene	0.00132	U	0.00645	0.00132	mg/Kg	☼		01/15/14 23:08	1
2-Hexanone	0.00130	U	0.0129	0.00130	mg/Kg	☼		01/15/14 23:08	1
Methylene Chloride	0.00283	U	0.0129	0.00283	mg/Kg	☼		01/15/14 23:08	1
4-Methyl-2-pentanone (MIBK)	0.00190	U	0.0129	0.00190	mg/Kg	☼		01/15/14 23:08	1
Styrene	0.000916	U	0.00645	0.000916	mg/Kg	☼		01/15/14 23:08	1
1,1,2,2-Tetrachloroethane	0.00112	U	0.00645	0.00112	mg/Kg	☼		01/15/14 23:08	1
Tetrachloroethene	0.000916	U	0.00645	0.000916	mg/Kg	☼		01/15/14 23:08	1
Toluene	0.00178	U	0.00645	0.00178	mg/Kg	☼		01/15/14 23:08	1
1,1,1-Trichloroethane	0.000955	U	0.00645	0.000955	mg/Kg	☼		01/15/14 23:08	1
1,1,2-Trichloroethane	0.000942	U	0.00645	0.000942	mg/Kg	☼		01/15/14 23:08	1
Trichloroethene	0.00181	U	0.00645	0.00181	mg/Kg	☼		01/15/14 23:08	1
Vinyl acetate	0.00120	U	0.00645	0.00120	mg/Kg	☼		01/15/14 23:08	1
Vinyl chloride	0.00116	U	0.0129	0.00116	mg/Kg	☼		01/15/14 23:08	1
o-Xylene	0.00146	U	0.00645	0.00146	mg/Kg	☼		01/15/14 23:08	1
m-Xylene & p-Xylene	0.00196	U	0.0129	0.00196	mg/Kg	☼		01/15/14 23:08	1
Xylenes, Total	0.00146	U	0.00645	0.00146	mg/Kg	☼		01/15/14 23:08	1
Bromodichloromethane	0.000852	U	0.00645	0.000852	mg/Kg	☼		01/15/14 23:08	1
1,2-Dichloroethene, Total	0.00245	U	0.0129	0.00245	mg/Kg	☼		01/15/14 23:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*87*		*50 - 130*		*01/15/14 23:08*	*1*
Dibromofluoromethane	*87*		*68 - 140*		*01/15/14 23:08*	*1*
4-Bromofluorobenzene	*118*		*57 - 140*		*01/15/14 23:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*78*		*61 - 130*		*01/15/14 23:08*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.0696	U	0.859	0.0696	mg/Kg	☼	01/17/14 13:18	01/22/14 22:46	20
2-Methylnaphthalene	0.141	U	0.859	0.141	mg/Kg	☼	01/17/14 13:18	01/22/14 22:46	20
1-Methylnaphthalene	0.0809	U	0.859	0.0809	mg/Kg	☼	01/17/14 13:18	01/22/14 22:46	20
Acenaphthylene	0.0516	U	0.859	0.0516	mg/Kg	☼	01/17/14 13:18	01/22/14 22:46	20
Acenaphthene	0.0742	U	0.859	0.0742	mg/Kg	☼	01/17/14 13:18	01/22/14 22:46	20
Fluorene	0.122	U	0.859	0.122	mg/Kg	☼	01/17/14 13:18	01/22/14 22:46	20

Client Sample ID: MW-27B (0-2)

Date Collected: 01/09/14 08:55
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-24

Matrix: Solid
Percent Solids: 77.5

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	0.255	U	0.859	0.255	mg/Kg	☼	01/17/14 13:18	01/22/14 22:46	20
Anthracene	0.0660	U	0.859	0.0660	mg/Kg	☼	01/17/14 13:18	01/22/14 22:46	20
Fluoranthene	0.160	U	0.859	0.160	mg/Kg	☼	01/17/14 13:18	01/22/14 22:46	20
Pyrene	0.0943	U	0.859	0.0943	mg/Kg	☼	01/17/14 13:18	01/22/14 22:46	20
Benzo[a]anthracene	0.0711	U	0.859	0.0711	mg/Kg	☼	01/17/14 13:18	01/22/14 22:46	20
Chrysene	0.0526	U	0.859	0.0526	mg/Kg	☼	01/17/14 13:18	01/22/14 22:46	20
Benzo[b]fluoranthene	0.0887	U	0.859	0.0887	mg/Kg	☼	01/17/14 13:18	01/22/14 22:46	20
Benzo[k]fluoranthene	0.0768	U	0.859	0.0768	mg/Kg	☼	01/17/14 13:18	01/22/14 22:46	20
Benzo[a]pyrene	0.0830	U	0.859	0.0830	mg/Kg	☼	01/17/14 13:18	01/22/14 22:46	20
Indeno[1,2,3-cd]pyrene	0.180	U	0.859	0.180	mg/Kg	☼	01/17/14 13:18	01/22/14 22:46	20
Dibenz(a,h)anthracene	0.187	U	0.859	0.187	mg/Kg	☼	01/17/14 13:18	01/22/14 22:46	20
Benzo[g,h,i]perylene	0.261	U	0.859	0.261	mg/Kg	☼	01/17/14 13:18	01/22/14 22:46	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*0*	*X*	*25 - 132*	*01/17/14 13:18*	*01/22/14 22:46*	*20*
Nitrobenzene-d5	*0*	*X*	*10 - 155*	*01/17/14 13:18*	*01/22/14 22:46*	*20*
2-Fluorobiphenyl	*0*	*X*	*38 - 127*	*01/17/14 13:18*	*01/22/14 22:46*	*20*
2,4,6-Tribromophenol	*0*	*X*	*10 - 148*	*01/17/14 13:18*	*01/22/14 22:46*	*20*
Terphenyl-d14	*0*	*X*	*53 - 134*	*01/17/14 13:18*	*01/22/14 22:46*	*20*
Phenol-d5 (Surr)	*0*	*X*	*27 - 123*	*01/17/14 13:18*	*01/22/14 22:46*	*20*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	4.87	U	12.8	4.87	mg/Kg	☼	01/14/14 12:54	01/14/14 19:35	1
>C12-C28	5.20	U	12.8	5.20	mg/Kg	☼	01/14/14 12:54	01/14/14 19:35	1
>C28-C35	5.20	U	12.8	5.20	mg/Kg	☼	01/14/14 12:54	01/14/14 19:35	1
C6-C35	9.59	U	12.8	9.59	mg/Kg	☼	01/14/14 12:54	01/14/14 19:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*97*		*70 - 130*	*01/14/14 12:54*	*01/14/14 19:35*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**6.99**		3.23	0.299	mg/Kg	☼	01/13/14 14:19	01/14/14 09:26	1
Arsenic	**16.8**		1.29	0.281	mg/Kg	☼	01/13/14 14:19	01/14/14 09:26	1
Cadmium	**9.85**		0.323	0.0331	mg/Kg	☼	01/13/14 14:19	01/14/14 09:26	1
Lead	**2420**		0.645	0.135	mg/Kg	☼	01/13/14 14:19	01/14/14 09:26	1
Selenium	**0.536**	**J**	2.58	0.334	mg/Kg	☼	01/13/14 14:19	01/14/14 09:26	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**23**		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	**77**		1.0	1.0	%			01/13/14 09:59	1

Client Sample ID: MW-27A (0-2)

Date Collected: 01/09/14 09:25
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-26

Matrix: Solid
Percent Solids: 78.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.00415**	**J**	0.0128	0.00212	mg/Kg	☼		01/15/14 23:32	1

Client Sample ID: MW-27A (0-2)
Date Collected: 01/09/14 09:25
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-26
Matrix: Solid
Percent Solids: 78.3

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.000805	U	0.00639	0.000805	mg/Kg	☼		01/15/14 23:32	1
Chlorobromomethane	0.00227	U	0.00639	0.00227	mg/Kg	☼		01/15/14 23:32	1
Bromoform	0.00175	U	0.00639	0.00175	mg/Kg	☼		01/15/14 23:32	1
Bromomethane	0.00106	U	0.0128	0.00106	mg/Kg	☼		01/15/14 23:32	1
2-Butanone (MEK)	0.00243	U	0.0128	0.00243	mg/Kg	☼		01/15/14 23:32	1
Carbon disulfide	0.000703	U	0.0128	0.000703	mg/Kg	☼		01/15/14 23:32	1
Carbon tetrachloride	0.00144	U	0.00639	0.00144	mg/Kg	☼		01/15/14 23:32	1
Dibromochloromethane	0.00120	U	0.00639	0.00120	mg/Kg	☼		01/15/14 23:32	1
Chlorobenzene	0.00123	U	0.00639	0.00123	mg/Kg	☼		01/15/14 23:32	1
Chloroethane	0.00179	U	0.0128	0.00179	mg/Kg	☼		01/15/14 23:32	1
Chloroform	0.000843	U	0.00639	0.000843	mg/Kg	☼		01/15/14 23:32	1
Chloromethane	0.00212	U	0.0128	0.00212	mg/Kg	☼		01/15/14 23:32	1
1,1-Dichloroethane	0.00111	U	0.00639	0.00111	mg/Kg	☼		01/15/14 23:32	1
1,2-Dichloroethane	0.00115	U	0.00639	0.00115	mg/Kg	☼		01/15/14 23:32	1
1,1-Dichloroethene	0.00156	U	0.00639	0.00156	mg/Kg	☼		01/15/14 23:32	1
cis-1,2-Dichloroethene	0.00106	U	0.00639	0.00106	mg/Kg	☼		01/15/14 23:32	1
trans-1,2-Dichloroethene	0.00146	U	0.00639	0.00146	mg/Kg	☼		01/15/14 23:32	1
1,2-Dichloropropane	0.000907	U	0.00639	0.000907	mg/Kg	☼		01/15/14 23:32	1
cis-1,3-Dichloropropene	0.000690	U	0.00639	0.000690	mg/Kg	☼		01/15/14 23:32	1
trans-1,3-Dichloropropene	0.000741	U	0.00639	0.000741	mg/Kg	☼		01/15/14 23:32	1
Ethylbenzene	0.00130	U	0.00639	0.00130	mg/Kg	☼		01/15/14 23:32	1
2-Hexanone	0.00129	U	0.0128	0.00129	mg/Kg	☼		01/15/14 23:32	1
Methylene Chloride	0.00280	U	0.0128	0.00280	mg/Kg	☼		01/15/14 23:32	1
4-Methyl-2-pentanone (MIBK)	0.00188	U	0.0128	0.00188	mg/Kg	☼		01/15/14 23:32	1
Styrene	0.000907	U	0.00639	0.000907	mg/Kg	☼		01/15/14 23:32	1
1,1,2,2-Tetrachloroethane	0.00111	U	0.00639	0.00111	mg/Kg	☼		01/15/14 23:32	1
Tetrachloroethene	0.000907	U	0.00639	0.000907	mg/Kg	☼		01/15/14 23:32	1
Toluene	0.00176	U	0.00639	0.00176	mg/Kg	☼		01/15/14 23:32	1
1,1,1-Trichloroethane	0.000945	U	0.00639	0.000945	mg/Kg	☼		01/15/14 23:32	1
1,1,2-Trichloroethane	0.000933	U	0.00639	0.000933	mg/Kg	☼		01/15/14 23:32	1
Trichloroethene	0.00179	U	0.00639	0.00179	mg/Kg	☼		01/15/14 23:32	1
Vinyl acetate	0.00119	U	0.00639	0.00119	mg/Kg	☼		01/15/14 23:32	1
Vinyl chloride	0.00115	U	0.0128	0.00115	mg/Kg	☼		01/15/14 23:32	1
o-Xylene	0.00144	U	0.00639	0.00144	mg/Kg	☼		01/15/14 23:32	1
m-Xylene & p-Xylene	0.00194	U	0.0128	0.00194	mg/Kg	☼		01/15/14 23:32	1
Xylenes, Total	0.00144	U	0.00639	0.00144	mg/Kg	☼		01/15/14 23:32	1
Bromodichloromethane	0.000843	U	0.00639	0.000843	mg/Kg	☼		01/15/14 23:32	1
1,2-Dichloroethene, Total	0.00243	U	0.0128	0.00243	mg/Kg	☼		01/15/14 23:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*50 - 130*		*01/15/14 23:32*	*1*
Dibromofluoromethane	*90*		*68 - 140*		*01/15/14 23:32*	*1*
4-Bromofluorobenzene	*127*		*57 - 140*		*01/15/14 23:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*81*		*61 - 130*		*01/15/14 23:32*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	**0.0101**	**J**	0.0424	0.00343	mg/Kg	☼	01/21/14 10:00	01/22/14 19:21	1
2-Methylnaphthalene	**0.0146**	**J**	0.0424	0.00696	mg/Kg	☼	01/21/14 10:00	01/22/14 19:21	1
1-Methylnaphthalene	**0.00693**	**J**	0.0424	0.00399	mg/Kg	☼	01/21/14 10:00	01/22/14 19:21	1

Client Sample ID: MW-27A (0-2)

Lab Sample ID: 600-85318-26
Date Collected: 01/09/14 09:25
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 78.3

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	0.00254	U	0.0424	0.00254	mg/Kg	☼	01/21/14 10:00	01/22/14 19:21	1
Acenaphthene	0.00366	U	0.0424	0.00366	mg/Kg	☼	01/21/14 10:00	01/22/14 19:21	1
Fluorene	0.00600	U	0.0424	0.00600	mg/Kg	☼	01/21/14 10:00	01/22/14 19:21	1
Phenanthrene	**0.0148**	**J**	0.0424	0.0126	mg/Kg	☼	01/21/14 10:00	01/22/14 19:21	1
Anthracene	**0.00760**	**J**	0.0424	0.00325	mg/Kg	☼	01/21/14 10:00	01/22/14 19:21	1
Fluoranthene	0.00790	U	0.0424	0.00790	mg/Kg	☼	01/21/14 10:00	01/22/14 19:21	1
Pyrene	0.00465	U *	0.0424	0.00465	mg/Kg	☼	01/21/14 10:00	01/22/14 19:21	1
Benzo[a]anthracene	**0.0138**	**J ***	0.0424	0.00351	mg/Kg	☼	01/21/14 10:00	01/22/14 19:21	1
Chrysene	**0.0361**	**J ***	0.0424	0.00259	mg/Kg	☼	01/21/14 10:00	01/22/14 19:21	1
Benzo[b]fluoranthene	0.00437	U *	0.0424	0.00437	mg/Kg	☼	01/21/14 10:00	01/22/14 19:21	1
Benzo[k]fluoranthene	0.00379	U *	0.0424	0.00379	mg/Kg	☼	01/21/14 10:00	01/22/14 19:21	1
Benzo[a]pyrene	0.00409	U *	0.0424	0.00409	mg/Kg	☼	01/21/14 10:00	01/22/14 19:21	1
Indeno[1,2,3-cd]pyrene	0.00890	U *	0.0424	0.00890	mg/Kg	☼	01/21/14 10:00	01/22/14 19:21	1
Dibenz(a,h)anthracene	0.00923	U *	0.0424	0.00923	mg/Kg	☼	01/21/14 10:00	01/22/14 19:21	1
Benzo[g,h,i]perylene	0.0129	U *	0.0424	0.0129	mg/Kg	☼	01/21/14 10:00	01/22/14 19:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*76*		*25 - 132*	*01/21/14 10:00*	*01/22/14 19:21*	*1*
Nitrobenzene-d5	*103*		*10 - 155*	*01/21/14 10:00*	*01/22/14 19:21*	*1*
2-Fluorobiphenyl	*107*		*38 - 127*	*01/21/14 10:00*	*01/22/14 19:21*	*1*
2,4,6-Tribromophenol	*81*		*10 - 148*	*01/21/14 10:00*	*01/22/14 19:21*	*1*
Terphenyl-d14	*136*	*X **	*53 - 134*	*01/21/14 10:00*	*01/22/14 19:21*	*1*
Phenol-d5 (Surr)	*98*		*27 - 123*	*01/21/14 10:00*	*01/22/14 19:21*	*1*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	4.85	U	12.8	4.85	mg/Kg	☼	01/14/14 12:54	01/14/14 20:09	1
>C12-C28	5.18	U	12.8	5.18	mg/Kg	☼	01/14/14 12:54	01/14/14 20:09	1
>C28-C35	5.18	U	12.8	5.18	mg/Kg	☼	01/14/14 12:54	01/14/14 20:09	1
C6-C35	9.54	U	12.8	9.54	mg/Kg	☼	01/14/14 12:54	01/14/14 20:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*95*		*70 - 130*	*01/14/14 12:54*	*01/14/14 20:09*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	**12.0**		0.296	0.0303	mg/Kg	☼	01/13/14 14:19	01/14/14 09:28	1
Lead	**829**		0.592	0.124	mg/Kg	☼	01/13/14 14:19	01/14/14 09:28	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**22**		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	**78**		1.0	1.0	%			01/13/14 09:59	1

Client Sample ID: 2013-NDA-1A(2-4)

Lab Sample ID: 600-85318-28
Date Collected: 01/09/14 10:15
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 81.6

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.00196	U	0.0204	0.00196	mg/Kg	☼	01/13/14 14:23	01/15/14 11:52	1

Client Sample ID: 2013-NDA-1A(2-4)

Lab Sample ID: 600-85318-28
Date Collected: 01/09/14 10:15
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 81.6

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1221	0.0105	U	0.0204	0.0105	mg/Kg	☼	01/13/14 14:23	01/15/14 11:52	1
PCB-1232	0.00819	U	0.0204	0.00819	mg/Kg	☼	01/13/14 14:23	01/15/14 11:52	1
PCB-1242	0.00152	U	0.0204	0.00152	mg/Kg	☼	01/13/14 14:23	01/15/14 11:52	1
PCB-1248	0.00304	U	0.0204	0.00304	mg/Kg	☼	01/13/14 14:23	01/15/14 11:52	1
PCB-1254	0.00270	U	0.0204	0.00270	mg/Kg	☼	01/13/14 14:23	01/15/14 11:52	1
PCB-1260	0.0165	U	0.0204	0.0165	mg/Kg	☼	01/13/14 14:23	01/15/14 11:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*86*		*58 - 164*	*01/13/14 14:23*	*01/15/14 11:52*	*1*
DCB Decachlorobiphenyl	*95*		*70 - 164*	*01/13/14 14:23*	*01/15/14 11:52*	*1*

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18**		1.0	1.0	%			01/14/14 13:52	1
Percent Solids	**82**		1.0	1.0	%			01/14/14 13:52	1

Client Sample ID: D11A (0-0.5)

Lab Sample ID: 600-85318-30
Date Collected: 01/09/14 10:35
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 72.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.76**	**J**	3.41	0.316	mg/Kg	☼	01/14/14 12:46	01/15/14 13:25	1
Arsenic	**27.2**		1.36	0.297	mg/Kg	☼	01/14/14 12:46	01/15/14 13:25	1
Cadmium	**1.77**	**b**	0.341	0.0350	mg/Kg	☼	01/14/14 12:46	01/15/14 13:25	1
Lead	**257**		0.682	0.143	mg/Kg	☼	01/14/14 12:46	01/15/14 13:25	1
Selenium	0.353	U	2.73	0.353	mg/Kg	☼	01/14/14 12:46	01/15/14 13:25	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**27**		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	**73**		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: D12A (0-0.5)

Lab Sample ID: 600-85318-31
Date Collected: 01/09/14 10:50
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 74.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**10.9**		1.25	0.273	mg/Kg	☼	01/14/14 12:46	01/15/14 13:27	1
Cadmium	**0.652**	**b**	0.313	0.0321	mg/Kg	☼	01/14/14 12:46	01/15/14 13:27	1
Lead	**80.2**		0.627	0.131	mg/Kg	☼	01/14/14 12:46	01/15/14 13:27	1
Selenium	0.324	U	2.51	0.324	mg/Kg	☼	01/14/14 12:46	01/15/14 13:27	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**25**		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	**75**		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: D13A (0-0.5)

Lab Sample ID: 600-85318-32
Date Collected: 01/09/14 11:04
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 78.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.503		0.303	0.0311	mg/Kg	☼	01/13/14 14:19	01/14/14 09:34	1
Lead	67.3		0.606	0.127	mg/Kg	☼	01/13/14 14:19	01/14/14 09:34	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	79		1.0	1.0	%			01/13/14 09:59	1

Client Sample ID: 2013-C2L-03-(0-0.5)

Lab Sample ID: 600-85318-33
Date Collected: 01/09/14 11:26
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 73.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	12.2		1.28	0.278	mg/Kg	☼	01/13/14 14:19	01/14/14 09:36	1
Cadmium	0.651		0.319	0.0327	mg/Kg	☼	01/13/14 14:19	01/14/14 09:36	1
Lead	79.5		0.638	0.134	mg/Kg	☼	01/13/14 14:19	01/14/14 09:36	1
Selenium	0.330	U	2.55	0.330	mg/Kg	☼	01/13/14 14:19	01/14/14 09:36	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	74		1.0	1.0	%			01/13/14 09:59	1

Client Sample ID: 2013-BSA-2A(0-2)

Lab Sample ID: 600-85318-36
Date Collected: 01/09/14 12:50
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 80.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	17.1		3.01	0.279	mg/Kg	☼	01/15/14 12:30	01/16/14 09:58	1
Arsenic	34.9		1.20	0.262	mg/Kg	☼	01/15/14 12:30	01/16/14 09:58	1
Cadmium	16.5		0.301	0.0309	mg/Kg	☼	01/15/14 12:30	01/16/14 09:58	1
Lead	2880		0.602	0.126	mg/Kg	☼	01/15/14 12:30	01/16/14 09:58	1
Selenium	1.07	J	2.41	0.312	mg/Kg	☼	01/15/14 12:30	01/16/14 09:58	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	81		1.0	1.0	%			01/13/14 09:59	1

Client Sample ID: 2013-AD-04 (0-0.5)

Lab Sample ID: 600-85318-37
Date Collected: 01/09/14 13:26
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 79.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.286	J	0.292	0.0300	mg/Kg	☼	01/13/14 14:19	01/14/14 09:38	1
Lead	31.9		0.585	0.123	mg/Kg	☼	01/13/14 14:19	01/14/14 09:38	1

Client Sample ID: 2013-AD-04 (0-0.5)

Lab Sample ID: 600-85318-37

Date Collected: 01/09/14 13:26

Matrix: Solid

Date Received: 01/10/14 10:31

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**21**		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	**79**		1.0	1.0	%			01/13/14 09:59	1

Client Sample ID: RINSE BLANK aeo

Lab Sample ID: 600-85318-40

Date Collected: 01/09/14 08:30

Matrix: Water

Date Received: 01/10/14 10:31

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**0.0149**		0.0100	0.00227	mg/L			01/11/14 18:27	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 18:27	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			01/11/14 18:27	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			01/11/14 18:27	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			01/11/14 18:27	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			01/11/14 18:27	1
Carbon disulfide	0.00170	U	0.00500	0.00170	mg/L			01/11/14 18:27	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			01/11/14 18:27	1
Dibromochloromethane	0.000920	U	0.00500	0.000920	mg/L			01/11/14 18:27	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			01/11/14 18:27	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			01/11/14 18:27	1
Chloroform	0.000820	U	0.00500	0.000820	mg/L			01/11/14 18:27	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			01/11/14 18:27	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			01/11/14 18:27	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			01/11/14 18:27	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			01/11/14 18:27	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 18:27	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			01/11/14 18:27	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			01/11/14 18:27	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			01/11/14 18:27	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			01/11/14 18:27	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			01/11/14 18:27	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			01/11/14 18:27	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			01/11/14 18:27	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			01/11/14 18:27	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 18:27	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			01/11/14 18:27	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			01/11/14 18:27	1
Toluene	**0.00227**	**J**	0.00500	0.000550	mg/L			01/11/14 18:27	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			01/11/14 18:27	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			01/11/14 18:27	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			01/11/14 18:27	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			01/11/14 18:27	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			01/11/14 18:27	1
o-Xylene	0.000930	U	0.00500	0.000930	mg/L			01/11/14 18:27	1
m-Xylene & p-Xylene	0.00126	U	0.0100	0.00126	mg/L			01/11/14 18:27	1
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			01/11/14 18:27	1
Bromodichloromethane	0.000760	U	0.00500	0.000760	mg/L			01/11/14 18:27	1
1,2-Dichloroethene, Total	0.000840	U	0.0100	0.000840	mg/L			01/11/14 18:27	1

Client Sample ID: RINSE BLANK aeo

Date Collected: 01/09/14 08:30
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-40

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*70 - 130*		*01/11/14 18:27*	*1*
Dibromofluoromethane	*87*		*62 - 130*		*01/11/14 18:27*	*1*
4-Bromofluorobenzene	*103*		*67 - 139*		*01/11/14 18:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*50 - 134*		*01/11/14 18:27*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.000120	U	0.000500	0.000120	mg/L		01/14/14 16:09	01/15/14 01:25	1
Acenaphthylene	0.000160	U	0.000500	0.000160	mg/L		01/14/14 16:09	01/15/14 01:25	1
Benzo[g,h,i]perylene	0.000350	U	0.000500	0.000350	mg/L		01/14/14 16:09	01/15/14 01:25	1
Phenanthrene	0.000290	U	0.000500	0.000290	mg/L		01/14/14 16:09	01/15/14 01:25	1
Benzo[k]fluoranthene	0.000160	U	0.000500	0.000160	mg/L		01/14/14 16:09	01/15/14 01:25	1
Benzo[a]pyrene	0.000130	U	0.000500	0.000130	mg/L		01/14/14 16:09	01/15/14 01:25	1
Anthracene	0.000440	U	0.000500	0.000440	mg/L		01/14/14 16:09	01/15/14 01:25	1
2-Methylnaphthalene	0.000140	U	0.000500	0.000140	mg/L		01/14/14 16:09	01/15/14 01:25	1
Pyrene	0.000330	U	0.000500	0.000330	mg/L		01/14/14 16:09	01/15/14 01:25	1
Dibenz(a,h)anthracene	0.000290	U	0.000500	0.000290	mg/L		01/14/14 16:09	01/15/14 01:25	1
Naphthalene	0.000160	U	0.000500	0.000160	mg/L		01/14/14 16:09	01/15/14 01:25	1
Fluoranthene	0.000310	U	0.000500	0.000310	mg/L		01/14/14 16:09	01/15/14 01:25	1
Benzo[a]anthracene	0.000250	U	0.000500	0.000250	mg/L		01/14/14 16:09	01/15/14 01:25	1
Indeno[1,2,3-cd]pyrene	0.000290	U	0.000500	0.000290	mg/L		01/14/14 16:09	01/15/14 01:25	1
Chrysene	0.000240	U	0.000500	0.000240	mg/L		01/14/14 16:09	01/15/14 01:25	1
Acenaphthene	0.000160	U	0.000500	0.000160	mg/L		01/14/14 16:09	01/15/14 01:25	1
Benzo[b]fluoranthene	0.000180	U	0.000500	0.000180	mg/L		01/14/14 16:09	01/15/14 01:25	1
1-Methylnaphthalene	0.000190	U	0.000500	0.000190	mg/L		01/14/14 16:09	01/15/14 01:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*91*		*33 - 141*	*01/14/14 16:09*	*01/15/14 01:25*	*1*
Nitrobenzene-d5	*80*		*47 - 120*	*01/14/14 16:09*	*01/15/14 01:25*	*1*
2-Fluorophenol	*38*		*18 - 120*	*01/14/14 16:09*	*01/15/14 01:25*	*1*
2-Fluorobiphenyl	*82*		*43 - 120*	*01/14/14 16:09*	*01/15/14 01:25*	*1*
2,4,6-Tribromophenol	*76*		*44 - 123*	*01/14/14 16:09*	*01/15/14 01:25*	*1*
Phenol-d5 (Surr)	*27*		*12 - 128*	*01/14/14 16:09*	*01/15/14 01:25*	*1*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	0.809	U	4.87	0.809	mg/L		01/14/14 15:16	01/15/14 04:47	1
>C12-C28	0.935	U	4.87	0.935	mg/L		01/14/14 15:16	01/15/14 04:47	1
>C28-C35	0.935	U	4.87	0.935	mg/L		01/14/14 15:16	01/15/14 04:47	1
C6-C35	1.52	U	4.87	1.52	mg/L		01/14/14 15:16	01/15/14 04:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*90*		*70 - 130*	*01/14/14 15:16*	*01/15/14 04:47*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00630	U	0.0500	0.00630	mg/L		01/13/14 09:01	01/15/14 12:54	1
Arsenic	0.00328	U ^	0.0100	0.00328	mg/L		01/13/14 09:01	01/15/14 12:54	1
Cadmium	0.000350	U ^	0.00500	0.000350	mg/L		01/13/14 09:01	01/15/14 12:54	1
Lead	0.00290	U ^	0.0100	0.00290	mg/L		01/13/14 09:01	01/15/14 12:54	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		01/13/14 09:01	01/15/14 12:54	1

Client Sample ID: TRIP BLANK
Date Collected: 01/09/14 00:00
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-41
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00227	U	0.0100	0.00227	mg/L			01/11/14 16:54	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 16:54	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			01/11/14 16:54	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			01/11/14 16:54	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			01/11/14 16:54	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			01/11/14 16:54	1
Carbon disulfide	0.00170	U	0.00500	0.00170	mg/L			01/11/14 16:54	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			01/11/14 16:54	1
Dibromochloromethane	0.000920	U	0.00500	0.000920	mg/L			01/11/14 16:54	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			01/11/14 16:54	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			01/11/14 16:54	1
Chloroform	0.000820	U	0.00500	0.000820	mg/L			01/11/14 16:54	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			01/11/14 16:54	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			01/11/14 16:54	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			01/11/14 16:54	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			01/11/14 16:54	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 16:54	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			01/11/14 16:54	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			01/11/14 16:54	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			01/11/14 16:54	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			01/11/14 16:54	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			01/11/14 16:54	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			01/11/14 16:54	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			01/11/14 16:54	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			01/11/14 16:54	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 16:54	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			01/11/14 16:54	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			01/11/14 16:54	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			01/11/14 16:54	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			01/11/14 16:54	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			01/11/14 16:54	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			01/11/14 16:54	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			01/11/14 16:54	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			01/11/14 16:54	1
o-Xylene	0.000930	U	0.00500	0.000930	mg/L			01/11/14 16:54	1
m-Xylene & p-Xylene	0.00126	U	0.0100	0.00126	mg/L			01/11/14 16:54	1
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			01/11/14 16:54	1
Bromodichloromethane	0.000760	U	0.00500	0.000760	mg/L			01/11/14 16:54	1
1,2-Dichloroethene, Total	0.000840	U	0.0100	0.000840	mg/L			01/11/14 16:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*99*		*70 - 130*		*01/11/14 16:54*	*1*
Dibromofluoromethane	*88*		*62 - 130*		*01/11/14 16:54*	*1*
4-Bromofluorobenzene	*104*		*67 - 139*		*01/11/14 16:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*84*		*50 - 134*		*01/11/14 16:54*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
b	The compound was found in the blank and sample

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
X	Surrogate is outside control limits
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
*	ISTD response or retention time outside acceptable limits
N	MS, MSD: Spike recovery exceeds upper or lower control limits.
b	The compound was found in the blank and sample

GC Semi VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.
N	MS, MSD: Spike recovery exceeds upper or lower control limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
N	RPD of the MS and MSD exceeds the control limits
b	The compound was found in the blank and sample
F	Duplicate RPD exceeds the control limit
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

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
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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	12DCE
Lab Sample ID	Client Sample ID	(50-130)	(68-140)	(57-140)	(61-130)
600-85318-1	2013-FFTA-01 (0.25-2)	76	81	104	85
600-85318-3	2013-FFTA-03 (18-19)	88	85	132	90
600-85318-4	2013-MB-3 (0.75-1.25)	93	93	133	95
600-85318-7	2013-MB-5 (0.5-5)	91	87	138	90
600-85318-8	2013-MB-5 (10-12)	96	101	101	98
600-85318-11	2013-MB-4 (0.83-1.33)	86	92	99	86
600-85318-14	MW-27D (0.5-2)	91	88	102	77
600-85318-16	MW-27C (0-2)	91	89	113	81
600-85318-24	MW-27B (0-2)	87	87	118	78
600-85318-26	MW-27A (0-2)	91	90	127	81
LCS 600-125013/3	Lab Control Sample	67	76	89	75
LCS 600-125071/3	Lab Control Sample	78	70	119	70
LCS 600-125242/4	Lab Control Sample	88	78	87	77
MB 600-125013/4	Method Blank	68	83	97	85
MB 600-125071/4	Method Blank	89	82	122	76
MB 600-125242/3	Method Blank	69	72	97	70

Surrogate Legend

TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane
BFB = 4-Bromofluorobenzene
12DCE = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	12DCE
Lab Sample ID	Client Sample ID	(70-130)	(62-130)	(67-139)	(50-134)
600-85318-22	FIELD BLANK	100	88	104	85
600-85318-40	RINSE BLANK aeo	99	87	103	85
600-85318-41	TRIP BLANK	99	88	104	84
LCS 600-124815/3	Lab Control Sample	99	89	99	78
MB 600-124815/4	Method Blank	101	88	101	81

Surrogate Legend

TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane
BFB = 4-Bromofluorobenzene
12DCE = 1,2-Dichloroethane-d4 (Surr)

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPH	TBP
Lab Sample ID	Client Sample ID	(38-127)	(25-132)	(10-155)	(27-123)	(53-134)	(10-148)
600-85318-1	2013-FFTA-01 (0.25-2)	0 X	0 X	0 X	0 X	0 X	0 X
600-85318-3	2013-FFTA-03 (18-19)	108	51	82	6 X	117	34
600-85318-7	2013-MB-5 (0.5-5)	112	126	19	114	128	98

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPH	TBP
Lab Sample ID	Client Sample ID	(38-127)	(25-132)	(10-155)	(27-123)	(53-134)	(10-148)
600-85318-8	2013-MB-5 (10-12)	0 X	0 X	0 X	0 X	0 X	0 X
600-85318-14	MW-27D (0.5-2)	92	55	18	121	121	59
600-85318-16	MW-27C (0-2)	114	123	110	111	125	103
600-85318-24	MW-27B (0-2)	0 X	0 X	0 X	0 X	0 X	0 X
600-85318-26	MW-27A (0-2)	107	76	103	98	136 X *	81
600-85318-26 MS	MW-27A (0-2)	88	82	89	92	121 *	89
600-85318-26 MSD	MW-27A (0-2)	97	76	91	96	128 *	106
LCS 600-124982/2-A	Lab Control Sample	120	122	127	120	128	106
LCS 600-125220/2-A	Lab Control Sample	77	78	76	81	79	70
LCS 600-125453/2-A	Lab Control Sample	92	81	90	98	115	80
MB 600-124982/1-A	Method Blank	114	113	117	111	124	37
MB 600-125220/1-A	Method Blank	68	72	69	64	74	30
MB 600-125453/1-A	Method Blank	106	87	97	99	120	59

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TPH	NBZ	2FP	FBP	TBP	PHL
Lab Sample ID	Client Sample ID	(33-141)	(47-120)	(18-120)	(43-120)	(44-123)	(12-128)
600-85318-40	RINSE BLANK aeo	91	80	38	82	76	27
LCS 600-124914/2-A	Lab Control Sample	100	99	74	95	97	66
MB 600-124914/1-A	Method Blank	90	84	64	84	64	51

Surrogate Legend

TPH = Terphenyl-d14
NBZ = Nitrobenzene-d5
2FP = 2-Fluorophenol
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
PHL = Phenol-d5 (Surr)

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX2	DCB2
Lab Sample ID	Client Sample ID	(58-164)	(70-164)
600-85318-28	2013-NDA-1A(2-4)	86	95
600-85318-A-36-B MS	600-85318-A-36-B MS	93	121
600-85318-A-36-C MSD	600-85318-A-36-C MSD	88	115
LCS 600-124838/2-A	Lab Control Sample	83	106

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	TCX2 (58-164)	DCB2 (70-164)								
MB 600-124838/1-A	Method Blank	91	110								

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	OTPH (70-130)									
600-85318-1	2013-FFTA-01 (0.25-2)	88									
600-85318-3	2013-FFTA-03 (18-19)	96									
600-85318-7	2013-MB-5 (0.5-5)	81									
600-85318-8	2013-MB-5 (10-12)	218 X									
600-85318-14	MW-27D (0.5-2)	97									
600-85318-16	MW-27C (0-2)	100									
600-85318-24	MW-27B (0-2)	97									
600-85318-26	MW-27A (0-2)	95									
LCS 600-124920/2-A	Lab Control Sample	109									
MB 600-124920/1-A	Method Blank	93									

Surrogate Legend

OTPH = o-Terphenyl

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	OTPH (70-130)									
600-85318-40	RINSE BLANK aeo	90									
LCS 600-124950/2-A	Lab Control Sample	116									
MB 600-124950/1-A	Method Blank	102									

Surrogate Legend

OTPH = o-Terphenyl

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-124815/4
Matrix: Water
Analysis Batch: 124815

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00227	U	0.0100	0.00227	mg/L			01/11/14 11:55	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 11:55	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			01/11/14 11:55	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			01/11/14 11:55	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			01/11/14 11:55	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			01/11/14 11:55	1
Carbon disulfide	0.00170	U	0.00500	0.00170	mg/L			01/11/14 11:55	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			01/11/14 11:55	1
Dibromochloromethane	0.000920	U	0.00500	0.000920	mg/L			01/11/14 11:55	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			01/11/14 11:55	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			01/11/14 11:55	1
Chloroform	0.000820	U	0.00500	0.000820	mg/L			01/11/14 11:55	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			01/11/14 11:55	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			01/11/14 11:55	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			01/11/14 11:55	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			01/11/14 11:55	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 11:55	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			01/11/14 11:55	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			01/11/14 11:55	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			01/11/14 11:55	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			01/11/14 11:55	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			01/11/14 11:55	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			01/11/14 11:55	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			01/11/14 11:55	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			01/11/14 11:55	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			01/11/14 11:55	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			01/11/14 11:55	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			01/11/14 11:55	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			01/11/14 11:55	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			01/11/14 11:55	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			01/11/14 11:55	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			01/11/14 11:55	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			01/11/14 11:55	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			01/11/14 11:55	1
o-Xylene	0.000930	U	0.00500	0.000930	mg/L			01/11/14 11:55	1
m-Xylene & p-Xylene	0.00126	U	0.0100	0.00126	mg/L			01/11/14 11:55	1
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			01/11/14 11:55	1
Bromodichloromethane	0.000760	U	0.00500	0.000760	mg/L			01/11/14 11:55	1
1,2-Dichloroethene, Total	0.000840	U	0.0100	0.000840	mg/L			01/11/14 11:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*101*		*70 - 130*		*01/11/14 11:55*	*1*
Dibromofluoromethane	*88*		*62 - 130*		*01/11/14 11:55*	*1*
4-Bromofluorobenzene	*101*		*67 - 139*		*01/11/14 11:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*81*		*50 - 134*		*01/11/14 11:55*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-124815/3
Matrix: Water
Analysis Batch: 124815

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.100	0.08884		mg/L		89	28 - 152
Benzene	0.0500	0.04907		mg/L		98	69 - 131
Chlorobromomethane	0.0500	0.05147		mg/L		103	60 - 141
Bromoform	0.0500	0.04099		mg/L		82	39 - 149
Bromomethane	0.0500	0.05474		mg/L		109	52 - 146
2-Butanone (MEK)	0.100	0.07429		mg/L		74	59 - 133
Carbon disulfide	0.0500	0.04410		mg/L		88	32 - 177
Carbon tetrachloride	0.0500	0.03961		mg/L		79	59 - 147
Dibromochloromethane	0.0500	0.04380		mg/L		88	58 - 132
Chlorobenzene	0.0500	0.04960		mg/L		99	60 - 136
Chloroethane	0.0500	0.05008		mg/L		100	56 - 144
Chloroform	0.0500	0.04577		mg/L		92	69 - 128
Chloromethane	0.0500	0.05169		mg/L		103	32 - 151
1,1-Dichloroethane	0.0500	0.04748		mg/L		95	66 - 126
1,2-Dichloroethane	0.0500	0.04184		mg/L		84	66 - 140
1,1-Dichloroethene	0.0500	0.04236		mg/L		85	59 - 145
cis-1,2-Dichloroethene	0.0500	0.04841		mg/L		97	69 - 129
trans-1,2-Dichloroethene	0.0500	0.04686		mg/L		94	70 - 132
1,2-Dichloropropane	0.0500	0.04924		mg/L		98	72 - 135
cis-1,3-Dichloropropene	0.0500	0.04840		mg/L		97	60 - 135
trans-1,3-Dichloropropene	0.0500	0.04567		mg/L		91	63 - 133
Ethylbenzene	0.0500	0.04788		mg/L		96	68 - 128
2-Hexanone	0.100	0.07234		mg/L		72	51 - 130
Methylene Chloride	0.0500	0.04580		mg/L		92	62 - 134
4-Methyl-2-pentanone (MIBK)	0.100	0.07388		mg/L		74	56 - 142
Styrene	0.0500	0.04940		mg/L		99	68 - 133
1,1,2,2-Tetrachloroethane	0.0500	0.03996		mg/L		80	68 - 134
Tetrachloroethene	0.0500	0.04275		mg/L		85	70 - 150
Toluene	0.0500	0.04826		mg/L		97	67 - 130
1,1,1-Trichloroethane	0.0500	0.04239		mg/L		85	65 - 142
1,1,2-Trichloroethane	0.0500	0.04439		mg/L		89	68 - 130
Trichloroethene	0.0500	0.04626		mg/L		93	68 - 130
Vinyl acetate	0.100	0.09050		mg/L		90	58 - 175
Vinyl chloride	0.0500	0.03610		mg/L		72	47 - 146
o-Xylene	0.0500	0.04777		mg/L		96	68 - 134
m-Xylene & p-Xylene	0.0500	0.04800		mg/L		96	67 - 132
Xylenes, Total	0.100	0.09577		mg/L		96	68 - 132
Bromodichloromethane	0.0500	0.04626		mg/L		93	73 - 130
1,2-Dichloroethene, Total	0.100	0.09527		mg/L		95	65 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*70 - 130*
Dibromofluoromethane	*89*		*62 - 130*
4-Bromofluorobenzene	*99*		*67 - 139*
1,2-Dichloroethane-d4 (Surr)	*78*		*50 - 134*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-125013/4
Matrix: Solid
Analysis Batch: 125013

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00166	U	0.0100	0.00166	mg/Kg			01/14/14 12:26	1
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			01/14/14 12:26	1
Chlorobromomethane	0.00178	U	0.00500	0.00178	mg/Kg			01/14/14 12:26	1
Bromoform	0.00137	U	0.00500	0.00137	mg/Kg			01/14/14 12:26	1
Bromomethane	0.000830	U	0.0100	0.000830	mg/Kg			01/14/14 12:26	1
2-Butanone (MEK)	0.00190	U	0.0100	0.00190	mg/Kg			01/14/14 12:26	1
Carbon disulfide	0.000550	U	0.0100	0.000550	mg/Kg			01/14/14 12:26	1
Carbon tetrachloride	0.00113	U	0.00500	0.00113	mg/Kg			01/14/14 12:26	1
Dibromochloromethane	0.000940	U	0.00500	0.000940	mg/Kg			01/14/14 12:26	1
Chlorobenzene	0.000960	U	0.00500	0.000960	mg/Kg			01/14/14 12:26	1
Chloroethane	0.00140	U	0.0100	0.00140	mg/Kg			01/14/14 12:26	1
Chloroform	0.000660	U	0.00500	0.000660	mg/Kg			01/14/14 12:26	1
Chloromethane	0.00166	U	0.0100	0.00166	mg/Kg			01/14/14 12:26	1
1,1-Dichloroethane	0.000870	U	0.00500	0.000870	mg/Kg			01/14/14 12:26	1
1,2-Dichloroethane	0.000900	U	0.00500	0.000900	mg/Kg			01/14/14 12:26	1
1,1-Dichloroethene	0.00122	U	0.00500	0.00122	mg/Kg			01/14/14 12:26	1
cis-1,2-Dichloroethene	0.000830	U	0.00500	0.000830	mg/Kg			01/14/14 12:26	1
trans-1,2-Dichloroethene	0.00114	U	0.00500	0.00114	mg/Kg			01/14/14 12:26	1
1,2-Dichloropropane	0.000710	U	0.00500	0.000710	mg/Kg			01/14/14 12:26	1
cis-1,3-Dichloropropene	0.000540	U	0.00500	0.000540	mg/Kg			01/14/14 12:26	1
trans-1,3-Dichloropropene	0.000580	U	0.00500	0.000580	mg/Kg			01/14/14 12:26	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			01/14/14 12:26	1
2-Hexanone	0.00101	U	0.0100	0.00101	mg/Kg			01/14/14 12:26	1
Methylene Chloride	0.00219	U	0.0100	0.00219	mg/Kg			01/14/14 12:26	1
4-Methyl-2-pentanone (MIBK)	0.00147	U	0.0100	0.00147	mg/Kg			01/14/14 12:26	1
Styrene	0.000710	U	0.00500	0.000710	mg/Kg			01/14/14 12:26	1
1,1,2,2-Tetrachloroethane	0.000870	U	0.00500	0.000870	mg/Kg			01/14/14 12:26	1
Tetrachloroethene	0.000710	U	0.00500	0.000710	mg/Kg			01/14/14 12:26	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			01/14/14 12:26	1
1,1,1-Trichloroethane	0.000740	U	0.00500	0.000740	mg/Kg			01/14/14 12:26	1
1,1,2-Trichloroethane	0.000730	U	0.00500	0.000730	mg/Kg			01/14/14 12:26	1
Trichloroethene	0.00140	U	0.00500	0.00140	mg/Kg			01/14/14 12:26	1
Vinyl acetate	0.000930	U	0.00500	0.000930	mg/Kg			01/14/14 12:26	1
Vinyl chloride	0.000900	U	0.0100	0.000900	mg/Kg			01/14/14 12:26	1
o-Xylene	0.00113	U	0.00500	0.00113	mg/Kg			01/14/14 12:26	1
m-Xylene & p-Xylene	0.00152	U	0.0100	0.00152	mg/Kg			01/14/14 12:26	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			01/14/14 12:26	1
Bromodichloromethane	0.000660	U	0.00500	0.000660	mg/Kg			01/14/14 12:26	1
1,2-Dichloroethene, Total	0.00190	U	0.0100	0.00190	mg/Kg			01/14/14 12:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*68*		*50 - 130*		*01/14/14 12:26*	*1*
Dibromofluoromethane	*83*		*68 - 140*		*01/14/14 12:26*	*1*
4-Bromofluorobenzene	*97*		*57 - 140*		*01/14/14 12:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*85*		*61 - 130*		*01/14/14 12:26*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-125013/3
Matrix: Solid
Analysis Batch: 125013

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.100	0.1349		mg/Kg		135	44 - 136
Benzene	0.0500	0.05464		mg/Kg		109	66 - 128
Chlorobromomethane	0.0500	0.04995		mg/Kg		100	60 - 140
Bromoform	0.0500	0.04483		mg/Kg		90	50 - 130
Bromomethane	0.0500	0.04230		mg/Kg		85	28 - 164
2-Butanone (MEK)	0.100	0.1193		mg/Kg		119	42 - 186
Carbon disulfide	0.0500	0.05146		mg/Kg		103	53 - 176
Carbon tetrachloride	0.0500	0.04599		mg/Kg		92	63 - 132
Dibromochloromethane	0.0500	0.04198		mg/Kg		84	63 - 125
Chlorobenzene	0.0500	0.04316		mg/Kg		86	67 - 126
Chloroethane	0.0500	0.04744		mg/Kg		95	30 - 136
Chloroform	0.0500	0.05352		mg/Kg		107	67 - 126
Chloromethane	0.0500	0.04545		mg/Kg		91	21 - 153
1,1-Dichloroethane	0.0500	0.05436		mg/Kg		109	64 - 130
1,2-Dichloroethane	0.0500	0.05906		mg/Kg		118	61 - 135
1,1-Dichloroethene	0.0500	0.04876		mg/Kg		98	40 - 157
cis-1,2-Dichloroethene	0.0500	0.05171		mg/Kg		103	62 - 130
trans-1,2-Dichloroethene	0.0500	0.05011		mg/Kg		100	65 - 130
1,2-Dichloropropane	0.0500	0.05673		mg/Kg		113	71 - 122
cis-1,3-Dichloropropene	0.0500	0.04731		mg/Kg		95	66 - 129
trans-1,3-Dichloropropene	0.0500	0.04686		mg/Kg		94	66 - 134
Ethylbenzene	0.0500	0.04270		mg/Kg		85	64 - 127
2-Hexanone	0.100	0.1074		mg/Kg		107	52 - 142
Methylene Chloride	0.0500	0.06166		mg/Kg		123	48 - 144
4-Methyl-2-pentanone (MIBK)	0.100	0.1237		mg/Kg		124	52 - 146
Styrene	0.0500	0.04396		mg/Kg		88	63 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.04987		mg/Kg		100	59 - 134
Tetrachloroethene	0.0500	0.03543		mg/Kg		71	69 - 125
Toluene	0.0500	0.04311		mg/Kg		86	69 - 125
1,1,1-Trichloroethane	0.0500	0.05149		mg/Kg		103	70 - 127
1,1,2-Trichloroethane	0.0500	0.04353		mg/Kg		87	67 - 124
Trichloroethene	0.0500	0.04676		mg/Kg		94	70 - 136
Vinyl acetate	0.100	0.1183		mg/Kg		118	54 - 136
Vinyl chloride	0.0500	0.04434		mg/Kg		89	28 - 159
o-Xylene	0.0500	0.04513		mg/Kg		90	64 - 132
m-Xylene & p-Xylene	0.0500	0.04322		mg/Kg		86	65 - 128
Xylenes, Total	0.100	0.08835		mg/Kg		88	65 - 129
Bromodichloromethane	0.0500	0.05528		mg/Kg		111	68 - 121
1,2-Dichloroethene, Total	0.100	0.1018		mg/Kg		102	62 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*67*		*50 - 130*
Dibromofluoromethane	*76*		*68 - 140*
4-Bromofluorobenzene	*89*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*75*		*61 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-125071/4
Matrix: Solid
Analysis Batch: 125071

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00166	U	0.0100	0.00166	mg/Kg			01/15/14 16:12	1
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			01/15/14 16:12	1
Chlorobromomethane	0.00178	U	0.00500	0.00178	mg/Kg			01/15/14 16:12	1
Bromoform	0.00137	U	0.00500	0.00137	mg/Kg			01/15/14 16:12	1
Bromomethane	0.000830	U	0.0100	0.000830	mg/Kg			01/15/14 16:12	1
2-Butanone (MEK)	0.00190	U	0.0100	0.00190	mg/Kg			01/15/14 16:12	1
Carbon disulfide	0.000550	U	0.0100	0.000550	mg/Kg			01/15/14 16:12	1
Carbon tetrachloride	0.00113	U	0.00500	0.00113	mg/Kg			01/15/14 16:12	1
Dibromochloromethane	0.000940	U	0.00500	0.000940	mg/Kg			01/15/14 16:12	1
Chlorobenzene	0.000960	U	0.00500	0.000960	mg/Kg			01/15/14 16:12	1
Chloroethane	0.00140	U	0.0100	0.00140	mg/Kg			01/15/14 16:12	1
Chloroform	0.000660	U	0.00500	0.000660	mg/Kg			01/15/14 16:12	1
Chloromethane	0.00166	U	0.0100	0.00166	mg/Kg			01/15/14 16:12	1
1,1-Dichloroethane	0.000870	U	0.00500	0.000870	mg/Kg			01/15/14 16:12	1
1,2-Dichloroethane	0.000900	U	0.00500	0.000900	mg/Kg			01/15/14 16:12	1
1,1-Dichloroethene	0.00122	U	0.00500	0.00122	mg/Kg			01/15/14 16:12	1
cis-1,2-Dichloroethene	0.000830	U	0.00500	0.000830	mg/Kg			01/15/14 16:12	1
trans-1,2-Dichloroethene	0.00114	U	0.00500	0.00114	mg/Kg			01/15/14 16:12	1
1,2-Dichloropropane	0.000710	U	0.00500	0.000710	mg/Kg			01/15/14 16:12	1
cis-1,3-Dichloropropene	0.000540	U	0.00500	0.000540	mg/Kg			01/15/14 16:12	1
trans-1,3-Dichloropropene	0.000580	U	0.00500	0.000580	mg/Kg			01/15/14 16:12	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			01/15/14 16:12	1
2-Hexanone	0.00101	U	0.0100	0.00101	mg/Kg			01/15/14 16:12	1
Methylene Chloride	0.00219	U	0.0100	0.00219	mg/Kg			01/15/14 16:12	1
4-Methyl-2-pentanone (MIBK)	0.00147	U	0.0100	0.00147	mg/Kg			01/15/14 16:12	1
Styrene	0.000710	U	0.00500	0.000710	mg/Kg			01/15/14 16:12	1
1,1,2,2-Tetrachloroethane	0.000870	U	0.00500	0.000870	mg/Kg			01/15/14 16:12	1
Tetrachloroethene	0.000710	U	0.00500	0.000710	mg/Kg			01/15/14 16:12	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			01/15/14 16:12	1
1,1,1-Trichloroethane	0.000740	U	0.00500	0.000740	mg/Kg			01/15/14 16:12	1
1,1,2-Trichloroethane	0.000730	U	0.00500	0.000730	mg/Kg			01/15/14 16:12	1
Trichloroethene	0.00140	U	0.00500	0.00140	mg/Kg			01/15/14 16:12	1
Vinyl acetate	0.000930	U	0.00500	0.000930	mg/Kg			01/15/14 16:12	1
Vinyl chloride	0.000900	U	0.0100	0.000900	mg/Kg			01/15/14 16:12	1
o-Xylene	0.00113	U	0.00500	0.00113	mg/Kg			01/15/14 16:12	1
m-Xylene & p-Xylene	0.00152	U	0.0100	0.00152	mg/Kg			01/15/14 16:12	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			01/15/14 16:12	1
Bromodichloromethane	0.000660	U	0.00500	0.000660	mg/Kg			01/15/14 16:12	1
1,2-Dichloroethene, Total	0.00190	U	0.0100	0.00190	mg/Kg			01/15/14 16:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*89*		*50 - 130*		*01/15/14 16:12*	*1*
Dibromofluoromethane	*82*		*68 - 140*		*01/15/14 16:12*	*1*
4-Bromofluorobenzene	*122*		*57 - 140*		*01/15/14 16:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*76*		*61 - 130*		*01/15/14 16:12*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-125071/3
Matrix: Solid
Analysis Batch: 125071

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.100	0.1180		mg/Kg		118	44 - 136
Benzene	0.0500	0.04344		mg/Kg		87	66 - 128
Chlorobromomethane	0.0500	0.04129		mg/Kg		83	60 - 140
Bromoform	0.0500	0.05685		mg/Kg		114	50 - 130
Bromomethane	0.0500	0.03218		mg/Kg		64	28 - 164
2-Butanone (MEK)	0.100	0.1145		mg/Kg		114	42 - 186
Carbon disulfide	0.0500	0.04092		mg/Kg		82	53 - 176
Carbon tetrachloride	0.0500	0.04017		mg/Kg		80	63 - 132
Dibromochloromethane	0.0500	0.04628		mg/Kg		93	63 - 125
Chlorobenzene	0.0500	0.04449		mg/Kg		89	67 - 126
Chloroethane	0.0500	0.03442		mg/Kg		69	30 - 136
Chloroform	0.0500	0.04355		mg/Kg		87	67 - 126
Chloromethane	0.0500	0.03238		mg/Kg		65	21 - 153
1,1-Dichloroethane	0.0500	0.04422		mg/Kg		88	64 - 130
1,2-Dichloroethane	0.0500	0.04731		mg/Kg		95	61 - 135
1,1-Dichloroethene	0.0500	0.03993		mg/Kg		80	40 - 157
cis-1,2-Dichloroethene	0.0500	0.04296		mg/Kg		86	62 - 130
trans-1,2-Dichloroethene	0.0500	0.04015		mg/Kg		80	65 - 130
1,2-Dichloropropane	0.0500	0.04563		mg/Kg		91	71 - 122
cis-1,3-Dichloropropene	0.0500	0.04845		mg/Kg		97	66 - 129
trans-1,3-Dichloropropene	0.0500	0.04720		mg/Kg		94	66 - 134
Ethylbenzene	0.0500	0.04333		mg/Kg		87	64 - 127
2-Hexanone	0.100	0.1164		mg/Kg		116	52 - 142
Methylene Chloride	0.0500	0.04047		mg/Kg		81	48 - 144
4-Methyl-2-pentanone (MIBK)	0.100	0.1096		mg/Kg		110	52 - 146
Styrene	0.0500	0.04389		mg/Kg		88	63 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.05551		mg/Kg		111	59 - 134
Tetrachloroethene	0.0500	0.04267		mg/Kg		85	69 - 125
Toluene	0.0500	0.04362		mg/Kg		87	69 - 125
1,1,1-Trichloroethane	0.0500	0.04211		mg/Kg		84	70 - 127
1,1,2-Trichloroethane	0.0500	0.04796		mg/Kg		96	67 - 124
Trichloroethene	0.0500	0.04069		mg/Kg		81	70 - 136
Vinyl acetate	0.100	0.09814		mg/Kg		98	54 - 136
Vinyl chloride	0.0500	0.03312		mg/Kg		66	28 - 159
o-Xylene	0.0500	0.04516		mg/Kg		90	64 - 132
m-Xylene & p-Xylene	0.0500	0.04343		mg/Kg		87	65 - 128
Xylenes, Total	0.100	0.08859		mg/Kg		89	65 - 129
Bromodichloromethane	0.0500	0.04857		mg/Kg		97	68 - 121
1,2-Dichloroethene, Total	0.100	0.08311		mg/Kg		83	62 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*78*		*50 - 130*
Dibromofluoromethane	*70*		*68 - 140*
4-Bromofluorobenzene	*119*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*70*		*61 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-125242/3
Matrix: Solid
Analysis Batch: 125242

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00166	U	0.0100	0.00166	mg/Kg			01/17/14 09:21	1
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			01/17/14 09:21	1
Chlorobromomethane	0.00178	U	0.00500	0.00178	mg/Kg			01/17/14 09:21	1
Bromoform	0.00137	U	0.00500	0.00137	mg/Kg			01/17/14 09:21	1
Bromomethane	0.000830	U	0.0100	0.000830	mg/Kg			01/17/14 09:21	1
2-Butanone (MEK)	0.00190	U	0.0100	0.00190	mg/Kg			01/17/14 09:21	1
Carbon disulfide	0.000550	U	0.0100	0.000550	mg/Kg			01/17/14 09:21	1
Carbon tetrachloride	0.00113	U	0.00500	0.00113	mg/Kg			01/17/14 09:21	1
Dibromochloromethane	0.000940	U	0.00500	0.000940	mg/Kg			01/17/14 09:21	1
Chlorobenzene	0.000960	U	0.00500	0.000960	mg/Kg			01/17/14 09:21	1
Chloroethane	0.00140	U	0.0100	0.00140	mg/Kg			01/17/14 09:21	1
Chloroform	0.000660	U	0.00500	0.000660	mg/Kg			01/17/14 09:21	1
Chloromethane	0.00166	U	0.0100	0.00166	mg/Kg			01/17/14 09:21	1
1,1-Dichloroethane	0.000870	U	0.00500	0.000870	mg/Kg			01/17/14 09:21	1
1,2-Dichloroethane	0.000900	U	0.00500	0.000900	mg/Kg			01/17/14 09:21	1
1,1-Dichloroethene	0.00122	U	0.00500	0.00122	mg/Kg			01/17/14 09:21	1
cis-1,2-Dichloroethene	0.000830	U	0.00500	0.000830	mg/Kg			01/17/14 09:21	1
trans-1,2-Dichloroethene	0.00114	U	0.00500	0.00114	mg/Kg			01/17/14 09:21	1
1,2-Dichloropropane	0.000710	U	0.00500	0.000710	mg/Kg			01/17/14 09:21	1
cis-1,3-Dichloropropene	0.000540	U	0.00500	0.000540	mg/Kg			01/17/14 09:21	1
trans-1,3-Dichloropropene	0.000580	U	0.00500	0.000580	mg/Kg			01/17/14 09:21	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			01/17/14 09:21	1
2-Hexanone	0.00101	U	0.0100	0.00101	mg/Kg			01/17/14 09:21	1
Methylene Chloride	0.00219	U	0.0100	0.00219	mg/Kg			01/17/14 09:21	1
4-Methyl-2-pentanone (MIBK)	0.00147	U	0.0100	0.00147	mg/Kg			01/17/14 09:21	1
Styrene	0.000710	U	0.00500	0.000710	mg/Kg			01/17/14 09:21	1
1,1,2,2-Tetrachloroethane	0.000870	U	0.00500	0.000870	mg/Kg			01/17/14 09:21	1
Tetrachloroethene	0.000710	U	0.00500	0.000710	mg/Kg			01/17/14 09:21	1
Toluene	0.002338	J	0.00500	0.00138	mg/Kg			01/17/14 09:21	1
1,1,1-Trichloroethane	0.000740	U	0.00500	0.000740	mg/Kg			01/17/14 09:21	1
1,1,2-Trichloroethane	0.000730	U	0.00500	0.000730	mg/Kg			01/17/14 09:21	1
Trichloroethene	0.00140	U	0.00500	0.00140	mg/Kg			01/17/14 09:21	1
Vinyl acetate	0.000930	U	0.00500	0.000930	mg/Kg			01/17/14 09:21	1
Vinyl chloride	0.000900	U	0.0100	0.000900	mg/Kg			01/17/14 09:21	1
o-Xylene	0.00113	U	0.00500	0.00113	mg/Kg			01/17/14 09:21	1
m-Xylene & p-Xylene	0.00152	U	0.0100	0.00152	mg/Kg			01/17/14 09:21	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			01/17/14 09:21	1
Bromodichloromethane	0.000660	U	0.00500	0.000660	mg/Kg			01/17/14 09:21	1
1,2-Dichloroethene, Total	0.00190	U	0.0100	0.00190	mg/Kg			01/17/14 09:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*69*		*50 - 130*		*01/17/14 09:21*	*1*
Dibromofluoromethane	*72*		*68 - 140*		*01/17/14 09:21*	*1*
4-Bromofluorobenzene	*97*		*57 - 140*		*01/17/14 09:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*70*		*61 - 130*		*01/17/14 09:21*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-125242/4
Matrix: Solid
Analysis Batch: 125242

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.100	0.08969		mg/Kg		90	44 - 136
Benzene	0.0500	0.04565		mg/Kg		91	66 - 128
Chlorobromomethane	0.0500	0.04215		mg/Kg		84	60 - 140
Bromoform	0.0500	0.05340		mg/Kg		107	50 - 130
Bromomethane	0.0500	0.03961		mg/Kg		79	28 - 164
2-Butanone (MEK)	0.100	0.08400		mg/Kg		84	42 - 186
Carbon disulfide	0.0500	0.04260		mg/Kg		85	53 - 176
Carbon tetrachloride	0.0500	0.04011		mg/Kg		80	63 - 132
Dibromochloromethane	0.0500	0.04838		mg/Kg		97	63 - 125
Chlorobenzene	0.0500	0.04898		mg/Kg		98	67 - 126
Chloroethane	0.0500	0.04154		mg/Kg		83	30 - 136
Chloroform	0.0500	0.04591		mg/Kg		92	67 - 126
Chloromethane	0.0500	0.03629		mg/Kg		73	21 - 153
1,1-Dichloroethane	0.0500	0.04617		mg/Kg		92	64 - 130
1,2-Dichloroethane	0.0500	0.04697		mg/Kg		94	61 - 135
1,1-Dichloroethene	0.0500	0.04233		mg/Kg		85	40 - 157
cis-1,2-Dichloroethene	0.0500	0.04427		mg/Kg		89	62 - 130
trans-1,2-Dichloroethene	0.0500	0.04145		mg/Kg		83	65 - 130
1,2-Dichloropropane	0.0500	0.04721		mg/Kg		94	71 - 122
cis-1,3-Dichloropropene	0.0500	0.05391		mg/Kg		108	66 - 129
trans-1,3-Dichloropropene	0.0500	0.04994		mg/Kg		100	66 - 134
Ethylbenzene	0.0500	0.04874		mg/Kg		97	64 - 127
2-Hexanone	0.100	0.09630		mg/Kg		96	52 - 142
Methylene Chloride	0.0500	0.04452		mg/Kg		89	48 - 144
4-Methyl-2-pentanone (MIBK)	0.100	0.08713		mg/Kg		87	52 - 146
Styrene	0.0500	0.04818		mg/Kg		96	63 - 128
1,1,2,2-Tetrachloroethane	0.0500	0.05092		mg/Kg		102	59 - 134
Tetrachloroethene	0.0500	0.04189		mg/Kg		84	69 - 125
Toluene	0.0500	0.05054		mg/Kg		101	69 - 125
1,1,1-Trichloroethane	0.0500	0.04297		mg/Kg		86	70 - 127
1,1,2-Trichloroethane	0.0500	0.04746		mg/Kg		95	67 - 124
Trichloroethene	0.0500	0.04189		mg/Kg		84	70 - 136
Vinyl acetate	0.100	0.08864		mg/Kg		89	54 - 136
Vinyl chloride	0.0500	0.03688		mg/Kg		74	28 - 159
o-Xylene	0.0500	0.05039		mg/Kg		101	64 - 132
m-Xylene & p-Xylene	0.0500	0.04839		mg/Kg		97	65 - 128
Xylenes, Total	0.100	0.09878		mg/Kg		99	65 - 129
Bromodichloromethane	0.0500	0.04363		mg/Kg		87	68 - 121
1,2-Dichloroethene, Total	0.100	0.08572		mg/Kg		86	62 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*88*		*50 - 130*
Dibromofluoromethane	*78*		*68 - 140*
4-Bromofluorobenzene	*87*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*77*		*61 - 130*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 600-124914/1-A
Matrix: Water
Analysis Batch: 125073

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124914

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.000120	U	0.000500	0.000120	mg/L		01/14/14 11:33	01/14/14 19:18	1
Acenaphthylene	0.000160	U	0.000500	0.000160	mg/L		01/14/14 11:33	01/14/14 19:18	1
Benzo[g,h,i]perylene	0.000350	U	0.000500	0.000350	mg/L		01/14/14 11:33	01/14/14 19:18	1
Phenanthrene	0.000290	U	0.000500	0.000290	mg/L		01/14/14 11:33	01/14/14 19:18	1
Benzo[k]fluoranthene	0.000160	U	0.000500	0.000160	mg/L		01/14/14 11:33	01/14/14 19:18	1
Benzo[a]pyrene	0.000130	U	0.000500	0.000130	mg/L		01/14/14 11:33	01/14/14 19:18	1
Anthracene	0.000440	U	0.000500	0.000440	mg/L		01/14/14 11:33	01/14/14 19:18	1
2-Methylnaphthalene	0.000140	U	0.000500	0.000140	mg/L		01/14/14 11:33	01/14/14 19:18	1
Pyrene	0.000330	U	0.000500	0.000330	mg/L		01/14/14 11:33	01/14/14 19:18	1
Dibenz(a,h)anthracene	0.000290	U	0.000500	0.000290	mg/L		01/14/14 11:33	01/14/14 19:18	1
Naphthalene	0.000160	U	0.000500	0.000160	mg/L		01/14/14 11:33	01/14/14 19:18	1
Fluoranthene	0.000310	U	0.000500	0.000310	mg/L		01/14/14 11:33	01/14/14 19:18	1
Benzo[a]anthracene	0.000250	U	0.000500	0.000250	mg/L		01/14/14 11:33	01/14/14 19:18	1
Indeno[1,2,3-cd]pyrene	0.000290	U	0.000500	0.000290	mg/L		01/14/14 11:33	01/14/14 19:18	1
Chrysene	0.000240	U	0.000500	0.000240	mg/L		01/14/14 11:33	01/14/14 19:18	1
Acenaphthene	0.000160	U	0.000500	0.000160	mg/L		01/14/14 11:33	01/14/14 19:18	1
Benzo[b]fluoranthene	0.000180	U	0.000500	0.000180	mg/L		01/14/14 11:33	01/14/14 19:18	1
1-Methylnaphthalene	0.000190	U	0.000500	0.000190	mg/L		01/14/14 11:33	01/14/14 19:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*84*		*47 - 120*	*01/14/14 11:33*	*01/14/14 19:18*	*1*
2-Fluorophenol	*64*		*18 - 120*	*01/14/14 11:33*	*01/14/14 19:18*	*1*
2-Fluorobiphenyl	*84*		*43 - 120*	*01/14/14 11:33*	*01/14/14 19:18*	*1*
Terphenyl-d14	*90*		*33 - 141*	*01/14/14 11:33*	*01/14/14 19:18*	*1*
2,4,6-Tribromophenol	*64*		*44 - 123*	*01/14/14 11:33*	*01/14/14 19:18*	*1*
Phenol-d5 (Surr)	*51*		*12 - 128*	*01/14/14 11:33*	*01/14/14 19:18*	*1*

Lab Sample ID: LCS 600-124914/2-A
Matrix: Water
Analysis Batch: 125073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124914

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluorene	0.00800	0.006367		mg/L		80	48 - 127
Acenaphthylene	0.00800	0.006226		mg/L		78	35 - 135
Benzo[g,h,i]perylene	0.00800	0.006708		mg/L		84	46 - 133
Phenanthrene	0.00800	0.006020		mg/L		75	52 - 121
Benzo[k]fluoranthene	0.00800	0.006078		mg/L		76	46 - 130
Benzo[a]pyrene	0.00800	0.007103		mg/L		89	50 - 124
Anthracene	0.00800	0.006701		mg/L		84	53 - 124
2-Methylnaphthalene	0.00800	0.006153		mg/L		77	40 - 121
Pyrene	0.00800	0.006628		mg/L		83	49 - 121
Dibenz(a,h)anthracene	0.00800	0.006705		mg/L		84	42 - 134
Naphthalene	0.00800	0.006255		mg/L		78	39 - 120
Fluoranthene	0.00800	0.006808		mg/L		85	53 - 127
Benzo[a]anthracene	0.00800	0.007000		mg/L		88	53 - 122
Indeno[1,2,3-cd]pyrene	0.00800	0.006413		mg/L		80	45 - 124
Chrysene	0.00800	0.006745		mg/L		84	49 - 124
Acenaphthene	0.00800	0.006037		mg/L		75	47 - 145

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 600-124914/2-A
Matrix: Water
Analysis Batch: 125073

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124914

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo[b]fluoranthene	0.00800	0.007535		mg/L		94	53 - 131
1-Methylnaphthalene	0.00800	0.006093		mg/L		76	45 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*99*		*47 - 120*
2-Fluorophenol	*74*		*18 - 120*
2-Fluorobiphenyl	*95*		*43 - 120*
Terphenyl-d14	*100*		*33 - 141*
2,4,6-Tribromophenol	*97*		*44 - 123*
Phenol-d5 (Surr)	*66*		*12 - 128*

Lab Sample ID: MB 600-124982/1-A
Matrix: Solid
Analysis Batch: 125404

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124982

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.00467	U	0.0330	0.00467	mg/Kg		01/15/14 08:14	01/17/14 11:37	1
Acenaphthylene	0.00198	U	0.0330	0.00198	mg/Kg		01/15/14 08:14	01/17/14 11:37	1
Benzo[g,h,i]perylene	0.0100	U	0.0330	0.0100	mg/Kg		01/15/14 08:14	01/17/14 11:37	1
Phenanthrene	0.00979	U	0.0330	0.00979	mg/Kg		01/15/14 08:14	01/17/14 11:37	1
Benzo[k]fluoranthene	0.00295	U	0.0330	0.00295	mg/Kg		01/15/14 08:14	01/17/14 11:37	1
Benzo[a]pyrene	0.00318	U	0.0330	0.00318	mg/Kg		01/15/14 08:14	01/17/14 11:37	1
Anthracene	0.00253	U	0.0330	0.00253	mg/Kg		01/15/14 08:14	01/17/14 11:37	1
2-Methylnaphthalene	0.00542	U	0.0330	0.00542	mg/Kg		01/15/14 08:14	01/17/14 11:37	1
Pyrene	0.00362	U	0.0330	0.00362	mg/Kg		01/15/14 08:14	01/17/14 11:37	1
Dibenz(a,h)anthracene	0.00718	U	0.0330	0.00718	mg/Kg		01/15/14 08:14	01/17/14 11:37	1
Naphthalene	0.00267	U	0.0330	0.00267	mg/Kg		01/15/14 08:14	01/17/14 11:37	1
Fluoranthene	0.00615	U	0.0330	0.00615	mg/Kg		01/15/14 08:14	01/17/14 11:37	1
Benzo[a]anthracene	0.00273	U	0.0330	0.00273	mg/Kg		01/15/14 08:14	01/17/14 11:37	1
Indeno[1,2,3-cd]pyrene	0.00692	U	0.0330	0.00692	mg/Kg		01/15/14 08:14	01/17/14 11:37	1
Chrysene	0.00202	U	0.0330	0.00202	mg/Kg		01/15/14 08:14	01/17/14 11:37	1
Acenaphthene	0.00285	U	0.0330	0.00285	mg/Kg		01/15/14 08:14	01/17/14 11:37	1
Benzo[b]fluoranthene	0.00340	U	0.0330	0.00340	mg/Kg		01/15/14 08:14	01/17/14 11:37	1
1-Methylnaphthalene	0.00310	U	0.0330	0.00310	mg/Kg		01/15/14 08:14	01/17/14 11:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*117*		*10 - 155*	*01/15/14 08:14*	*01/17/14 11:37*	*1*
2-Fluorophenol	*113*		*25 - 132*	*01/15/14 08:14*	*01/17/14 11:37*	*1*
2-Fluorobiphenyl	*114*		*38 - 127*	*01/15/14 08:14*	*01/17/14 11:37*	*1*
Terphenyl-d14	*124*		*53 - 134*	*01/15/14 08:14*	*01/17/14 11:37*	*1*
2,4,6-Tribromophenol	*37*		*10 - 148*	*01/15/14 08:14*	*01/17/14 11:37*	*1*
Phenol-d5 (Surr)	*111*		*27 - 123*	*01/15/14 08:14*	*01/17/14 11:37*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 600-124982/2-A
Matrix: Solid
Analysis Batch: 125404

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124982

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluorene	0.665	0.7878		mg/Kg		118	52 - 130
Acenaphthylene	0.665	0.7906		mg/Kg		119	57 - 130
Benzo[g,h,i]perylene	0.665	0.8150		mg/Kg		123	58 - 150
Phenanthrene	0.665	0.7950		mg/Kg		120	57 - 130
Benzo[k]fluoranthene	0.665	0.8866		mg/Kg		133	56 - 136
Benzo[a]pyrene	0.665	0.8663		mg/Kg		130	59 - 130
Anthracene	0.665	0.8143		mg/Kg		122	58 - 130
2-Methylnaphthalene	0.665	0.7985		mg/Kg		120	51 - 130
Pyrene	0.665	0.8251		mg/Kg		124	60 - 135
Dibenz(a,h)anthracene	0.665	0.7815		mg/Kg		118	58 - 138
Naphthalene	0.665	0.7566		mg/Kg		114	59 - 130
Fluoranthene	0.665	0.8355		mg/Kg		126	63 - 130
Benzo[a]anthracene	0.665	0.8417		mg/Kg		127	61 - 132
Indeno[1,2,3-cd]pyrene	0.665	0.7055		mg/Kg		106	56 - 150
Chrysene	0.665	0.8494		mg/Kg		128	64 - 130
Acenaphthene	0.665	0.7836		mg/Kg		118	58 - 130
Benzo[b]fluoranthene	0.665	0.8438		mg/Kg		127	54 - 130
1-Methylnaphthalene	0.665	0.7705		mg/Kg		116	51 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*127*		*10 - 155*
2-Fluorophenol	*122*		*25 - 132*
2-Fluorobiphenyl	*120*		*38 - 127*
Terphenyl-d14	*128*		*53 - 134*
2,4,6-Tribromophenol	*106*		*10 - 148*
Phenol-d5 (Surr)	*120*		*27 - 123*

Lab Sample ID: MB 600-125220/1-A
Matrix: Solid
Analysis Batch: 125471

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 125220

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzidine	0.0180	U	0.167	0.0180	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Benzyl alcohol	0.0117	U	0.0333	0.0117	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Bis(2-chloroethoxy)methane	0.00284	U	0.0333	0.00284	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Bis(2-chloroethyl)ether	0.00330	U	0.0333	0.00330	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
bis (2-Chloroisopropyl) ether	0.0177	U	0.0333	0.0177	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Bis(2-ethylhexyl) phthalate	0.0107	U	0.133	0.0107	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
4-Bromophenyl phenyl ether	0.00568	U	0.0333	0.00568	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Butyl benzyl phthalate	0.01363	J	0.133	0.0124	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Carbazole	0.00624	U	0.0333	0.00624	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
4-Chloroaniline	0.0116	U	0.0333	0.0116	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
4-Chloro-3-methylphenol	0.0312	U	0.0333	0.0312	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2-Chloronaphthalene	0.00242	U	0.0333	0.00242	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2-Chlorophenol	0.00394	U	0.0333	0.00394	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
4-Chlorophenyl phenyl ether	0.00360	U	0.0333	0.00360	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Dibenzofuran	0.00356	U	0.0333	0.00356	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
1,2-Dichlorobenzene	0.00604	U	0.0333	0.00604	mg/Kg		01/17/14 13:18	01/20/14 19:49	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 600-125220/1-A
Matrix: Solid
Analysis Batch: 125471

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 125220

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	0.00308	U	0.0333	0.00308	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
1,4-Dichlorobenzene	0.00450	U	0.0333	0.00450	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
3,3'-Dichlorobenzidine	0.0203	U	0.0333	0.0203	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2,4-Dichlorophenol	0.00774	U	0.0333	0.00774	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Diethyl phthalate	0.09509	J	0.133	0.0169	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2,4-Dimethylphenol	0.0172	U	0.0333	0.0172	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Dimethyl phthalate	0.00978	U	0.133	0.00978	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Di-n-butyl phthalate	0.02540	J	0.133	0.00518	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
4,6-Dinitro-2-methylphenol	0.00996	U	0.0333	0.00996	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2,4-Dinitrophenol	0.00944	U	0.200	0.00944	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2,4-Dinitrotoluene	0.00722	U	0.0333	0.00722	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2,6-Dinitrotoluene	0.00590	U	0.0333	0.00590	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Di-n-octyl phthalate	0.00380	U	0.133	0.00380	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Hexachlorobenzene	0.00304	U	0.0333	0.00304	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Hexachlorobutadiene	0.00384	U	0.0333	0.00384	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Hexachlorocyclopentadiene	0.00922	U	0.0333	0.00922	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Hexachloroethane	0.00462	U	0.0333	0.00462	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Isophorone	0.00200	U	0.0333	0.00200	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2-Methylphenol	0.00646	U	0.0333	0.00646	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
3 & 4 Methylphenol	0.00558	U	0.0667	0.00558	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2-Nitroaniline	0.00978	U	0.0333	0.00978	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
3-Nitroaniline	0.0143	U	0.0333	0.0143	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
4-Nitroaniline	0.0223	U	0.0333	0.0223	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Nitrobenzene	0.00592	U	0.0333	0.00592	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2-Nitrophenol	0.00778	U	0.0333	0.00778	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
4-Nitrophenol	0.0102	U	0.0333	0.0102	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
N-Nitrosodimethylamine	0.00838	U	0.0333	0.00838	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
N-Nitrosodi-n-propylamine	0.00444	U	0.0333	0.00444	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
N-Nitrosodiphenylamine	0.00378	U	0.0333	0.00378	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Pentachlorophenol	0.00800	U	0.334	0.00800	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Phenol	0.00848	U	0.0333	0.00848	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
1,2,4-Trichlorobenzene	0.00420	U	0.0333	0.00420	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2,4,5-Trichlorophenol	0.0200	U	0.0333	0.0200	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2,4,6-Trichlorophenol	0.00536	U	0.0333	0.00536	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Fluorene	0.00472	U	0.0333	0.00472	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Acenaphthylene	0.00200	U	0.0333	0.00200	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Benzo[g,h,i]perylene	0.0101	U	0.0333	0.0101	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Phenanthrene	0.00990	U	0.0333	0.00990	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Benzo[k]fluoranthene	0.00298	U	0.0333	0.00298	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Benzo[a]pyrene	0.00322	U	0.0333	0.00322	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Anthracene	0.00256	U	0.0333	0.00256	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
2-Methylnaphthalene	0.00548	U	0.0333	0.00548	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Pyrene	0.00366	U	0.0333	0.00366	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Dibenz(a,h)anthracene	0.00726	U	0.0333	0.00726	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Naphthalene	0.00270	U	0.0333	0.00270	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Fluoranthene	0.00622	U	0.0333	0.00622	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Benzo[a]anthracene	0.00276	U	0.0333	0.00276	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Indeno[1,2,3-cd]pyrene	0.00700	U	0.0333	0.00700	mg/Kg		01/17/14 13:18	01/20/14 19:49	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 600-125220/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125471 — **Prep Batch: 125220**

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	0.00204	U	0.0333	0.00204	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Acenaphthene	0.00288	U	0.0333	0.00288	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
Benzo[b]fluoranthene	0.00344	U	0.0333	0.00344	mg/Kg		01/17/14 13:18	01/20/14 19:49	1
1-Methylnaphthalene	0.00314	U	0.0333	0.00314	mg/Kg		01/17/14 13:18	01/20/14 19:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*69*		*10 - 155*	*01/17/14 13:18*	*01/20/14 19:49*	*1*
2-Fluorophenol	*72*		*25 - 132*	*01/17/14 13:18*	*01/20/14 19:49*	*1*
2-Fluorobiphenyl	*68*		*38 - 127*	*01/17/14 13:18*	*01/20/14 19:49*	*1*
Terphenyl-d14	*74*		*53 - 134*	*01/17/14 13:18*	*01/20/14 19:49*	*1*
2,4,6-Tribromophenol	*30*		*10 - 148*	*01/17/14 13:18*	*01/20/14 19:49*	*1*
Phenol-d5 (Surr)	*64*		*27 - 123*	*01/17/14 13:18*	*01/20/14 19:49*	*1*

Lab Sample ID: LCS 600-125220/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125471 — **Prep Batch: 125220**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzidine	3.33	1.296		mg/Kg		39	10 - 145
Benzyl alcohol	0.667	0.6353		mg/Kg		95	31 - 137
Bis(2-chloroethoxy)methane	0.667	0.5066		mg/Kg		76	42 - 139
Bis(2-chloroethyl)ether	0.667	0.5044		mg/Kg		76	68 - 130
bis (2-Chloroisopropyl) ether	0.667	0.4332		mg/Kg		65	63 - 142
Bis(2-ethylhexyl) phthalate	0.667	0.6094		mg/Kg		91	68 - 133
4-Bromophenyl phenyl ether	0.667	0.4829		mg/Kg		72	69 - 130
Butyl benzyl phthalate	0.667	0.5929		mg/Kg		89	70 - 130
Carbazole	0.667	0.5852		mg/Kg		88	61 - 149
4-Chloroaniline	0.667	0.4143		mg/Kg		62	18 - 130
4-Chloro-3-methylphenol	0.667	0.5005		mg/Kg		75	51 - 130
2-Chloronaphthalene	0.667	0.5161		mg/Kg		77	62 - 130
2-Chlorophenol	0.667	0.5282		mg/Kg		79	63 - 130
4-Chlorophenyl phenyl ether	0.667	0.5002		mg/Kg		75	46 - 130
Dibenzofuran	0.667	0.5231		mg/Kg		78	51 - 130
1,2-Dichlorobenzene	0.667	0.4887		mg/Kg		73	55 - 130
1,3-Dichlorobenzene	0.667	0.4753		mg/Kg		71	57 - 130
1,4-Dichlorobenzene	0.667	0.4531		mg/Kg		68	58 - 130
3,3'-Dichlorobenzidine	0.667	0.5417		mg/Kg		81	10 - 150
2,4-Dichlorophenol	0.667	0.5026		mg/Kg		75	38 - 130
Diethyl phthalate	0.667	0.5703		mg/Kg		86	59 - 130
2,4-Dimethylphenol	0.667	0.4974		mg/Kg		75	55 - 130
Dimethyl phthalate	0.667	0.5248		mg/Kg		79	68 - 130
Di-n-butyl phthalate	0.667	0.5866		mg/Kg		88	70 - 130
4,6-Dinitro-2-methylphenol	1.33	1.047		mg/Kg		79	10 - 130
2,4-Dinitrophenol	1.33	0.9387		mg/Kg		70	24 - 143
2,4-Dinitrotoluene	0.667	0.5026		mg/Kg		75	51 - 150
2,6-Dinitrotoluene	0.667	0.5138		mg/Kg		77	47 - 130
Di-n-octyl phthalate	0.667	0.5830		mg/Kg		87	68 - 131
Hexachlorobenzene	0.667	0.4537		mg/Kg		68	66 - 130

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 600-125220/2-A
Matrix: Solid
Analysis Batch: 125471

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125220

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobutadiene	0.667	0.4490		mg/Kg		67	62 - 130
Hexachlorocyclopentadiene	0.667	0.4301		mg/Kg		65	24 - 130
Hexachloroethane	0.667	0.4859		mg/Kg		73	68 - 130
Isophorone	0.667	0.5099		mg/Kg		76	67 - 130
2-Methylphenol	0.667	0.5347		mg/Kg		80	57 - 130
3 & 4 Methylphenol	0.667	0.5593		mg/Kg		84	46 - 130
2-Nitroaniline	0.667	0.5117		mg/Kg		77	67 - 150
3-Nitroaniline	0.667	0.4892		mg/Kg		73	24 - 150
4-Nitroaniline	0.667	0.5003		mg/Kg		75	45 - 160
Nitrobenzene	0.667	0.4802		mg/Kg		72	60 - 130
2-Nitrophenol	0.667	0.5539		mg/Kg		83	54 - 130
4-Nitrophenol	1.33	1.015		mg/Kg		76	36 - 149
N-Nitrosodimethylamine	0.667	0.4881		mg/Kg		73	54 - 130
N-Nitrosodi-n-propylamine	0.667	0.5284		mg/Kg		79	70 - 130
N-Nitrosodiphenylamine	0.667	0.5135		mg/Kg		77	70 - 130
Pentachlorophenol	1.33	0.8711		mg/Kg		65	43 - 130
Phenol	0.667	0.4584		mg/Kg		69	56 - 130
1,2,4-Trichlorobenzene	0.667	0.4477		mg/Kg		67	55 - 130
2,4,5-Trichlorophenol	0.667	0.5451		mg/Kg		82	56 - 130
2,4,6-Trichlorophenol	0.667	0.5172		mg/Kg		78	45 - 130
Fluorene	0.667	0.5171		mg/Kg		78	52 - 130
Acenaphthylene	0.667	0.5289		mg/Kg		79	57 - 130
Benzo[g,h,i]perylene	0.667	0.5746		mg/Kg		86	58 - 150
Phenanthrene	0.667	0.5032		mg/Kg		75	57 - 130
Benzo[k]fluoranthene	0.667	0.5204		mg/Kg		78	56 - 136
Benzo[a]pyrene	0.667	0.5856		mg/Kg		88	59 - 130
Anthracene	0.667	0.5160		mg/Kg		77	58 - 130
2-Methylnaphthalene	0.667	0.4902		mg/Kg		74	51 - 130
Pyrene	0.667	0.5191		mg/Kg		78	60 - 135
Dibenz(a,h)anthracene	0.667	0.5362		mg/Kg		80	58 - 138
Naphthalene	0.667	0.4776		mg/Kg		72	59 - 130
Fluoranthene	0.667	0.5172		mg/Kg		78	63 - 130
Benzo[a]anthracene	0.667	0.5639		mg/Kg		85	61 - 132
Indeno[1,2,3-cd]pyrene	0.667	0.5431		mg/Kg		81	56 - 150
Chrysene	0.667	0.5256		mg/Kg		79	64 - 130
Acenaphthene	0.667	0.5160		mg/Kg		77	58 - 130
Benzo[b]fluoranthene	0.667	0.5166		mg/Kg		77	54 - 130
1-Methylnaphthalene	0.667	0.5040		mg/Kg		76	51 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*76*		*10 - 155*
2-Fluorophenol	*78*		*25 - 132*
2-Fluorobiphenyl	*77*		*38 - 127*
Terphenyl-d14	*79*		*53 - 134*
2,4,6-Tribromophenol	*70*		*10 - 148*
Phenol-d5 (Surr)	*81*		*27 - 123*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 600-125453/1-A
Matrix: Solid
Analysis Batch: 125638

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 125453

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.00472	U	0.0333	0.00472	mg/Kg		01/21/14 10:00	01/22/14 16:21	1
Acenaphthylene	0.00200	U	0.0333	0.00200	mg/Kg		01/21/14 10:00	01/22/14 16:21	1
Benzo[g,h,i]perylene	0.0101	U	0.0333	0.0101	mg/Kg		01/21/14 10:00	01/22/14 16:21	1
Phenanthrene	0.00990	U	0.0333	0.00990	mg/Kg		01/21/14 10:00	01/22/14 16:21	1
Benzo[k]fluoranthene	0.00298	U	0.0333	0.00298	mg/Kg		01/21/14 10:00	01/22/14 16:21	1
Benzo[a]pyrene	0.00322	U	0.0333	0.00322	mg/Kg		01/21/14 10:00	01/22/14 16:21	1
Anthracene	0.00256	U	0.0333	0.00256	mg/Kg		01/21/14 10:00	01/22/14 16:21	1
2-Methylnaphthalene	0.00548	U	0.0333	0.00548	mg/Kg		01/21/14 10:00	01/22/14 16:21	1
Pyrene	0.00366	U	0.0333	0.00366	mg/Kg		01/21/14 10:00	01/22/14 16:21	1
Dibenz(a,h)anthracene	0.00726	U	0.0333	0.00726	mg/Kg		01/21/14 10:00	01/22/14 16:21	1
Naphthalene	0.00270	U	0.0333	0.00270	mg/Kg		01/21/14 10:00	01/22/14 16:21	1
Fluoranthene	0.00622	U	0.0333	0.00622	mg/Kg		01/21/14 10:00	01/22/14 16:21	1
Benzo[a]anthracene	0.00276	U	0.0333	0.00276	mg/Kg		01/21/14 10:00	01/22/14 16:21	1
Indeno[1,2,3-cd]pyrene	0.00700	U	0.0333	0.00700	mg/Kg		01/21/14 10:00	01/22/14 16:21	1
Chrysene	0.00204	U	0.0333	0.00204	mg/Kg		01/21/14 10:00	01/22/14 16:21	1
Acenaphthene	0.00288	U	0.0333	0.00288	mg/Kg		01/21/14 10:00	01/22/14 16:21	1
Benzo[b]fluoranthene	0.00344	U	0.0333	0.00344	mg/Kg		01/21/14 10:00	01/22/14 16:21	1
1-Methylnaphthalene	0.00314	U	0.0333	0.00314	mg/Kg		01/21/14 10:00	01/22/14 16:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*97*		*10 - 155*	*01/21/14 10:00*	*01/22/14 16:21*	*1*
2-Fluorophenol	*87*		*25 - 132*	*01/21/14 10:00*	*01/22/14 16:21*	*1*
2-Fluorobiphenyl	*106*		*38 - 127*	*01/21/14 10:00*	*01/22/14 16:21*	*1*
Terphenyl-d14	*120*		*53 - 134*	*01/21/14 10:00*	*01/22/14 16:21*	*1*
2,4,6-Tribromophenol	*59*		*10 - 148*	*01/21/14 10:00*	*01/22/14 16:21*	*1*
Phenol-d5 (Surr)	*99*		*27 - 123*	*01/21/14 10:00*	*01/22/14 16:21*	*1*

Lab Sample ID: LCS 600-125453/2-A
Matrix: Solid
Analysis Batch: 125638

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125453

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluorene	0.667	0.6609		mg/Kg		99	52 - 130
Acenaphthylene	0.667	0.6722		mg/Kg		101	57 - 130
Benzo[g,h,i]perylene	0.667	0.8601		mg/Kg		129	58 - 150
Phenanthrene	0.667	0.7300		mg/Kg		110	57 - 130
Benzo[k]fluoranthene	0.667	0.7323		mg/Kg		110	56 - 136
Benzo[a]pyrene	0.667	0.8382		mg/Kg		126	59 - 130
Anthracene	0.667	0.7352		mg/Kg		110	58 - 130
2-Methylnaphthalene	0.667	0.6159		mg/Kg		92	51 - 130
Pyrene	0.667	0.7807		mg/Kg		117	60 - 135
Dibenz(a,h)anthracene	0.667	0.8409		mg/Kg		126	58 - 138
Naphthalene	0.667	0.6248		mg/Kg		94	59 - 130
Fluoranthene	0.667	0.7761		mg/Kg		116	63 - 130
Benzo[a]anthracene	0.667	0.8108		mg/Kg		122	61 - 132
Indeno[1,2,3-cd]pyrene	0.667	0.7687		mg/Kg		115	56 - 150
Chrysene	0.667	0.7738		mg/Kg		116	64 - 130
Acenaphthene	0.667	0.6447		mg/Kg		97	58 - 130

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 600-125453/2-A
Matrix: Solid
Analysis Batch: 125638

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125453

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Benzo[b]fluoranthene			0.667	0.7326		mg/Kg		110	54 - 130		
1-Methylnaphthalene			0.667	0.6110		mg/Kg		92	51 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*90*		*10 - 155*
2-Fluorophenol	*81*		*25 - 132*
2-Fluorobiphenyl	*92*		*38 - 127*
Terphenyl-d14	*115*		*53 - 134*
2,4,6-Tribromophenol	*80*		*10 - 148*
Phenol-d5 (Surr)	*98*		*27 - 123*

Lab Sample ID: 600-85318-26 MS
Matrix: Solid
Analysis Batch: 125638

Client Sample ID: MW-27A (0-2)
Prep Type: Total/NA
Prep Batch: 125453

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluorene	0.00600	U	0.850	0.7766		mg/Kg	☼	91	36 - 122		
Acenaphthylene	0.00254	U	0.850	0.8058		mg/Kg	☼	95	32 - 137		
Benzo[g,h,i]perylene	0.0129	U *	0.850	0.9448	N *	mg/Kg	☼	111	34 - 110		
Phenanthrene	0.0148	J	0.850	0.8593		mg/Kg	☼	99	26 - 126		
Benzo[k]fluoranthene	0.00379	U *	0.850	0.8817	*	mg/Kg	☼	104	33 - 137		
Benzo[a]pyrene	0.00409	U *	0.850	0.8997	*	mg/Kg	☼	106	30 - 130		
Anthracene	0.00760	J	0.850	0.8302		mg/Kg	☼	97	35 - 115		
2-Methylnaphthalene	0.0146	J	0.850	0.7149		mg/Kg	☼	82	32 - 136		
Pyrene	0.00465	U *	0.850	1.169	*	mg/Kg	☼	138	28 - 138		
Dibenz(a,h)anthracene	0.00923	U *	0.850	0.9887	*	mg/Kg	☼	116	19 - 125		
Naphthalene	0.0101	J	0.850	0.7099		mg/Kg	☼	82	30 - 112		
Fluoranthene	0.00790	U	0.850	0.6247		mg/Kg	☼	73	37 - 132		
Benzo[a]anthracene	0.0138	J *	0.850	0.9531	*	mg/Kg	☼	110	38 - 128		
Indeno[1,2,3-cd]pyrene	0.00890	U *	0.850	0.7919	*	mg/Kg	☼	93	30 - 112		
Chrysene	0.0361	J *	0.850	0.9702	*	mg/Kg	☼	110	36 - 130		
Acenaphthene	0.00366	U	0.850	0.7827		mg/Kg	☼	92	25 - 134		
Benzo[b]fluoranthene	0.00437	U *	0.850	0.9162	*	mg/Kg	☼	108	40 - 131		
1-Methylnaphthalene	0.00693	J	0.850	0.7217		mg/Kg	☼	84	63 - 137		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*89*		*10 - 155*
2-Fluorophenol	*82*		*25 - 132*
2-Fluorobiphenyl	*88*		*38 - 127*
Terphenyl-d14	*121*	*	*53 - 134*
2,4,6-Tribromophenol	*89*		*10 - 148*
Phenol-d5 (Surr)	*92*		*27 - 123*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: 600-85318-26 MSD
Matrix: Solid
Analysis Batch: 125638

Client Sample ID: MW-27A (0-2)
Prep Type: Total/NA
Prep Batch: 125453

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluorene	0.00600	U	0.848	0.8740		mg/Kg	☼	103	36 - 122	12	30
Acenaphthylene	0.00254	U	0.848	0.8986		mg/Kg	☼	106	32 - 137	11	30
Benzo[g,h,i]perylene	0.0129	U *	0.848	0.9774	N *	mg/Kg	☼	115	34 - 110	3	30
Phenanthrene	0.0148	J	0.848	0.9416		mg/Kg	☼	109	26 - 126	9	30
Benzo[k]fluoranthene	0.00379	U *	0.848	0.8825	*	mg/Kg	☼	104	33 - 137	0	30
Benzo[a]pyrene	0.00409	U *	0.848	0.9529	*	mg/Kg	☼	112	30 - 130	6	30
Anthracene	0.00760	J	0.848	0.9256		mg/Kg	☼	108	35 - 115	11	30
2-Methylnaphthalene	0.0146	J	0.848	0.7647		mg/Kg	☼	88	32 - 136	7	30
Pyrene	0.00465	U *	0.848	1.182	N *	mg/Kg	☼	139	28 - 138	1	30
Dibenz(a,h)anthracene	0.00923	U *	0.848	0.9432	*	mg/Kg	☼	111	19 - 125	5	30
Naphthalene	0.0101	J	0.848	0.7700		mg/Kg	☼	90	30 - 112	8	30
Fluoranthene	0.00790	U	0.848	0.6824		mg/Kg	☼	80	37 - 132	9	30
Benzo[a]anthracene	0.0138	J *	0.848	0.9894	*	mg/Kg	☼	115	38 - 128	4	30
Indeno[1,2,3-cd]pyrene	0.00890	U *	0.848	0.7965	*	mg/Kg	☼	94	30 - 112	1	30
Chrysene	0.0361	J *	0.848	0.9661	*	mg/Kg	☼	110	36 - 130	0	30
Acenaphthene	0.00366	U	0.848	0.8667		mg/Kg	☼	102	25 - 134	10	30
Benzo[b]fluoranthene	0.00437	U *	0.848	0.8916	*	mg/Kg	☼	105	40 - 131	3	30
1-Methylnaphthalene	0.00693	J	0.848	0.8139		mg/Kg	☼	95	63 - 137	12	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*91*		*10 - 155*
2-Fluorophenol	*76*		*25 - 132*
2-Fluorobiphenyl	*97*		*38 - 127*
Terphenyl-d14	*128*	*	*53 - 134*
2,4,6-Tribromophenol	*106*		*10 - 148*
Phenol-d5 (Surr)	*96*		*27 - 123*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 600-124838/1-A
Matrix: Solid
Analysis Batch: 125027

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124838

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.00160	U	0.0167	0.00160	mg/Kg		01/13/14 14:23	01/14/14 15:08	1
PCB-1221	0.00863	U	0.0167	0.00863	mg/Kg		01/13/14 14:23	01/14/14 15:08	1
PCB-1232	0.00670	U	0.0167	0.00670	mg/Kg		01/13/14 14:23	01/14/14 15:08	1
PCB-1242	0.00124	U	0.0167	0.00124	mg/Kg		01/13/14 14:23	01/14/14 15:08	1
PCB-1248	0.00249	U	0.0167	0.00249	mg/Kg		01/13/14 14:23	01/14/14 15:08	1
PCB-1254	0.00221	U	0.0167	0.00221	mg/Kg		01/13/14 14:23	01/14/14 15:08	1
PCB-1260	0.0135	U	0.0167	0.0135	mg/Kg		01/13/14 14:23	01/14/14 15:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*91*		*58 - 164*	*01/13/14 14:23*	*01/14/14 15:08*	*1*
DCB Decachlorobiphenyl	*110*		*70 - 164*	*01/13/14 14:23*	*01/14/14 15:08*	*1*

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 600-124838/2-A
Matrix: Solid
Analysis Batch: 125027

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124838

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			0.167	0.1323		mg/Kg		79	68 - 122		
PCB-1260			0.167	0.1460		mg/Kg		88	10 - 158		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*83*		*58 - 164*
DCB Decachlorobiphenyl	*106*		*70 - 164*

Lab Sample ID: 600-85318-A-36-B MS
Matrix: Solid
Analysis Batch: 125030

Client Sample ID: 600-85318-A-36-B MS
Prep Type: Total/NA
Prep Batch: 124838

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	0.00198		0.207	0.2049		mg/Kg	☼	99	10 - 154		
PCB-1260	0.0167		0.207	0.2272		mg/Kg	☼	110	10 - 158		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*93*		*58 - 164*
DCB Decachlorobiphenyl	*121*		*70 - 164*

Lab Sample ID: 600-85318-A-36-C MSD
Matrix: Solid
Analysis Batch: 125030

Client Sample ID: 600-85318-A-36-C MSD
Prep Type: Total/NA
Prep Batch: 124838

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	0.00198		0.206	0.1927		mg/Kg	☼	93	10 - 154	6	30
PCB-1260	0.0167		0.206	0.2059		mg/Kg	☼	100	10 - 158	10	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*88*		*58 - 164*
DCB Decachlorobiphenyl	*115*		*70 - 164*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Lab Sample ID: MB 600-124920/1-A
Matrix: Solid
Analysis Batch: 125003

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124920

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	3.80	U	10.0	3.80	mg/Kg		01/14/14 12:54	01/14/14 14:57	1
>C12-C28	4.06	U	10.0	4.06	mg/Kg		01/14/14 12:54	01/14/14 14:57	1
>C28-C35	4.06	U	10.0	4.06	mg/Kg		01/14/14 12:54	01/14/14 14:57	1
C6-C35	7.48	U	10.0	7.48	mg/Kg		01/14/14 12:54	01/14/14 14:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*93*		*70 - 130*	*01/14/14 12:54*	*01/14/14 14:57*	*1*

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC) (Continued)

Lab Sample ID: LCS 600-124920/2-A
Matrix: Solid
Analysis Batch: 125003

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124920

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C12	250	234.9		mg/Kg		94	75 - 125
>C12-C28	250	224.7		mg/Kg		90	75 - 125
C6-C35	500	459.6		mg/Kg		92	75 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*109*		*70 - 130*

Lab Sample ID: MB 600-124950/1-A
Matrix: Water
Analysis Batch: 125003

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124950

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C12	0.830	U	5.00	0.830	mg/L		01/14/14 15:16	01/15/14 01:55	1
>C12-C28	0.960	U	5.00	0.960	mg/L		01/14/14 15:16	01/15/14 01:55	1
>C28-C35	0.960	U	5.00	0.960	mg/L		01/14/14 15:16	01/15/14 01:55	1
C6-C35	1.56	U	5.00	1.56	mg/L		01/14/14 15:16	01/15/14 01:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*102*		*70 - 130*	*01/14/14 15:16*	*01/15/14 01:55*	*1*

Lab Sample ID: LCS 600-124950/2-A
Matrix: Water
Analysis Batch: 125003

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124950

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
C6-C12	33.3	36.71		mg/L		110	75 - 125
>C12-C28	33.3	34.95		mg/L		105	75 - 125
C6-C35	66.7	71.65		mg/L		107	75 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
o-Terphenyl	*116*		*70 - 130*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-124797/1-A
Matrix: Water
Analysis Batch: 125051

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124797

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00630	U	0.0500	0.00630	mg/L		01/13/14 09:01	01/15/14 12:23	1
Arsenic	0.004240	J ^	0.0100	0.00328	mg/L		01/13/14 09:01	01/15/14 12:23	1
Cadmium	0.000350	U ^	0.00500	0.000350	mg/L		01/13/14 09:01	01/15/14 12:23	1
Lead	0.00290	U ^	0.0100	0.00290	mg/L		01/13/14 09:01	01/15/14 12:23	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		01/13/14 09:01	01/15/14 12:23	1

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

Lab Sample ID: LCS 600-124797/2-A
Matrix: Water
Analysis Batch: 125051

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124797

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.00	1.016		mg/L		102	80 - 120
Arsenic	1.00	0.9953	^	mg/L		100	80 - 120
Cadmium	0.500	0.4990	^	mg/L		100	80 - 120
Lead	1.00	1.028	^	mg/L		103	80 - 120
Selenium	1.00	0.9947		mg/L		99	80 - 120

Lab Sample ID: MB 600-124836/1-A
Matrix: Solid
Analysis Batch: 124882

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124836

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		01/13/14 14:19	01/14/14 08:21	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		01/13/14 14:19	01/14/14 08:21	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		01/13/14 14:19	01/14/14 08:21	1
Lead	0.105	U	0.500	0.105	mg/Kg		01/13/14 14:19	01/14/14 08:21	1
Selenium	0.259	U	2.00	0.259	mg/Kg		01/13/14 14:19	01/14/14 08:21	1

Lab Sample ID: LCS 600-124836/2-A
Matrix: Solid
Analysis Batch: 124882

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124836

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	66.54		mg/Kg		75	50 - 150
Arsenic	99.6	95.57		mg/Kg		96	78 - 122
Cadmium	182	179.3		mg/Kg		99	81 - 119
Lead	115	110.5		mg/Kg		96	79 - 121
Selenium	150	144.3		mg/Kg		96	80 - 120

Lab Sample ID: 600-85318-14 MS
Matrix: Solid
Analysis Batch: 124882

Client Sample ID: MW-27D (0.5-2)
Prep Type: Total/NA
Prep Batch: 124836

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	2.05		63.9	27.07	N	mg/Kg	☼	39	75 - 125
Arsenic	10.7		63.9	69.18		mg/Kg	☼	92	75 - 125
Cadmium	15.1		31.9	51.38		mg/Kg	☼	114	75 - 125
Lead	315		63.9	555.1	4	mg/Kg	☼	377	75 - 125
Selenium	0.324		63.9	57.04		mg/Kg	☼	89	75 - 125

Lab Sample ID: 600-85318-14 MSD
Matrix: Solid
Analysis Batch: 124882

Client Sample ID: MW-27D (0.5-2)
Prep Type: Total/NA
Prep Batch: 124836

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	2.05		62.6	27.54	N	mg/Kg	☼	41	75 - 125	2	20
Arsenic	10.7		62.6	70.41		mg/Kg	☼	95	75 - 125	2	20
Cadmium	15.1		31.3	54.91	N	mg/Kg	☼	127	75 - 125	7	20
Lead	315		62.6	405.9	4 N	mg/Kg	☼	146	75 - 125	31	20
Selenium	0.324		62.6	56.62		mg/Kg	☼	90	75 - 125	1	20

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

Lab Sample ID: 600-85318-20 MS
Matrix: Solid
Analysis Batch: 124882

Client Sample ID: MW-42 (0.5-2)
Prep Type: Total/NA
Prep Batch: 124836

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	13.9		63.6	62.09		mg/Kg	☼	76	75 - 125
Cadmium	1.82		31.8	31.12		mg/Kg	☼	92	75 - 125
Lead	241		63.6	79.68	N	mg/Kg	☼	-253	75 - 125
Selenium	0.502	J	63.6	51.77		mg/Kg	☼	81	75 - 125

Lab Sample ID: 600-85318-20 MSD
Matrix: Solid
Analysis Batch: 124882

Client Sample ID: MW-42 (0.5-2)
Prep Type: Total/NA
Prep Batch: 124836

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	13.9		61.9	59.96	N	mg/Kg	☼	74	75 - 125	3	20
Cadmium	1.82		31.0	30.37		mg/Kg	☼	92	75 - 125	2	20
Lead	241		61.9	74.50	N	mg/Kg	☼	-268	75 - 125	7	20
Selenium	0.502	J	61.9	50.72		mg/Kg	☼	81	75 - 125	2	20

Lab Sample ID: 600-85318-14 DU
Matrix: Solid
Analysis Batch: 124882

Client Sample ID: MW-27D (0.5-2)
Prep Type: Total/NA
Prep Batch: 124836

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	2.05		2.568	J	mg/Kg	☼	23	20
Arsenic	10.7		10.17		mg/Kg	☼	5	20
Cadmium	15.1		16.92		mg/Kg	☼	12	20
Lead	315		327.3		mg/Kg	☼	4	20
Selenium	0.324		0.321	U	mg/Kg	☼	NC	20

Lab Sample ID: 600-85318-20 DU
Matrix: Solid
Analysis Batch: 124882

Client Sample ID: MW-42 (0.5-2)
Prep Type: Total/NA
Prep Batch: 124836

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.287	U	0.304	U	mg/Kg	☼	NC	20
Arsenic	13.9		12.84		mg/Kg	☼	8	20
Cadmium	1.82		0.4723	F	mg/Kg	☼	118	20
Lead	241		22.22	F	mg/Kg	☼	166	20
Selenium	0.502	J	0.340	U	mg/Kg	☼	NC	20

Lab Sample ID: MB 600-124919/1-A
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124919

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		01/14/14 12:46	01/15/14 12:51	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		01/14/14 12:46	01/15/14 12:51	1
Cadmium	0.03000	J	0.250	0.0256	mg/Kg		01/14/14 12:46	01/15/14 12:51	1
Lead	0.105	U	0.500	0.105	mg/Kg		01/14/14 12:46	01/15/14 12:51	1
Selenium	0.259	U	2.00	0.259	mg/Kg		01/14/14 12:46	01/15/14 12:51	1

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

Lab Sample ID: LCSSRM 600-124919/2-A
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124919

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	101.7		mg/Kg		115.3	45.4 - 231.3
Arsenic	99.6	99.60		mg/Kg		100.0	80.8 - 119.5
Cadmium	182	190.9		mg/Kg		104.9	81.9 - 118.1
Lead	115	115.8		mg/Kg		100.7	81.8 - 119.1
Selenium	150	147.1		mg/Kg		98.1	77.3 - 122.7

Lab Sample ID: MB 600-125018/1-A
Matrix: Solid
Analysis Batch: 125110

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 125018

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		01/15/14 12:30	01/16/14 09:51	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		01/15/14 12:30	01/16/14 09:51	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		01/15/14 12:30	01/16/14 09:51	1
Lead	0.105	U	0.500	0.105	mg/Kg		01/15/14 12:30	01/16/14 09:51	1
Selenium	0.259	U	2.00	0.259	mg/Kg		01/15/14 12:30	01/16/14 09:51	1

Lab Sample ID: LCSSRM 600-125018/2-A
Matrix: Solid
Analysis Batch: 125110

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125018

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	59.66		mg/Kg		67.6	45.4 - 231.3
Arsenic	99.6	98.49		mg/Kg		98.9	80.8 - 119.5
Cadmium	182	178.7		mg/Kg		98.2	81.9 - 118.1
Lead	115	110.8		mg/Kg		96.3	81.8 - 119.1
Selenium	150	144.7		mg/Kg		96.5	77.3 - 122.7

Lab Sample ID: 600-85318-36 MS
Matrix: Solid
Analysis Batch: 125110

Client Sample ID: 2013-BSA-2A(0-2)
Prep Type: Total/NA
Prep Batch: 125018

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	17.1		61.4	31.60	N	mg/Kg	☼	24	75 - 125
Arsenic	34.9		61.4	67.00	N	mg/Kg	☼	52	75 - 125
Cadmium	16.5		30.7	38.79	N	mg/Kg	☼	73	75 - 125
Lead	2880		61.4	1880	4	mg/Kg	☼	-1628	75 - 125
Selenium	1.07	J	61.4	53.54		mg/Kg	☼	85	75 - 125

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

Lab Sample ID: 600-85318-36 MSD — **Client Sample ID: 2013-BSA-2A(0-2)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125110 — **Prep Batch: 125018**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	17.1		60.2	27.98	N	mg/Kg	☼	18	75 - 125	12	20
Arsenic	34.9		60.2	64.44	N	mg/Kg	☼	49	75 - 125	4	20
Cadmium	16.5		30.1	37.80	N	mg/Kg	☼	71	75 - 125	3	20
Lead	2880		60.2	1422	4 N	mg/Kg	☼	-2420	75 - 125	28	20
Selenium	1.07	J	60.2	52.91		mg/Kg	☼	86	75 - 125	1	20

Lab Sample ID: 600-85318-36 DU — **Client Sample ID: 2013-BSA-2A(0-2)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125110 — **Prep Batch: 125018**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	17.1		13.62	F	mg/Kg	☼	23	20
Arsenic	34.9		14.55	F	mg/Kg	☼	82	20
Cadmium	16.5		14.46		mg/Kg	☼	13	20
Lead	2880		2740		mg/Kg	☼	5	20
Selenium	1.07	J	0.7478	J	mg/Kg	☼	35	20

Method: Moisture - Percent Moisture

Lab Sample ID: 600-85318-1 DU — **Client Sample ID: 2013-FFTA-01 (0.25-2)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 124801

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	22		22		%		0.05	20
Percent Solids	78		78		%		0.01	20

Lab Sample ID: 600-85318-21 DU — **Client Sample ID: DUP-6**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 124801

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	22		23		%		2	20
Percent Solids	78		77		%		0.5	20

Lab Sample ID: 600-85318-31 DU — **Client Sample ID: D12A (0-0.5)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125061

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	25		25		%		2	20
Percent Solids	75		75		%		0.8	20

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	MQL	MDL	Units	Method
1,1,1-Trichloroethane	0.00500	0.000740	mg/Kg	8260B
1,1,1-Trichloroethane	0.00500	0.000980	mg/L	8260B
1,1,2,2-Tetrachloroethane	0.00500	0.000870	mg/Kg	8260B
1,1,2,2-Tetrachloroethane	0.00500	0.000800	mg/L	8260B
1,1,2-Trichloroethane	0.00500	0.000730	mg/Kg	8260B
1,1,2-Trichloroethane	0.00500	0.000530	mg/L	8260B
1,1-Dichloroethane	0.00500	0.000870	mg/Kg	8260B
1,1-Dichloroethane	0.00500	0.000500	mg/L	8260B
1,1-Dichloroethene	0.00500	0.00122	mg/Kg	8260B
1,1-Dichloroethene	0.00500	0.000760	mg/L	8260B
1,2-Dichloroethane	0.00500	0.000900	mg/Kg	8260B
1,2-Dichloroethane	0.00500	0.00101	mg/L	8260B
1,2-Dichloroethene, Total	0.0100	0.00190	mg/Kg	8260B
1,2-Dichloroethene, Total	0.0100	0.000840	mg/L	8260B
1,2-Dichloropropane	0.00500	0.000710	mg/Kg	8260B
1,2-Dichloropropane	0.00500	0.00141	mg/L	8260B
2-Butanone (MEK)	0.0100	0.00190	mg/Kg	8260B
2-Butanone (MEK)	0.0100	0.00157	mg/L	8260B
2-Hexanone	0.0100	0.00101	mg/Kg	8260B
2-Hexanone	0.0100	0.00142	mg/L	8260B
4-Methyl-2-pentanone (MIBK)	0.0100	0.00147	mg/Kg	8260B
4-Methyl-2-pentanone (MIBK)	0.0100	0.00111	mg/L	8260B
Acetone	0.0100	0.00166	mg/Kg	8260B
Acetone	0.0100	0.00227	mg/L	8260B
Benzene	0.00500	0.000630	mg/Kg	8260B
Benzene	0.00500	0.000560	mg/L	8260B
Bromodichloromethane	0.00500	0.000660	mg/Kg	8260B
Bromodichloromethane	0.00500	0.000760	mg/L	8260B
Bromoform	0.00500	0.00137	mg/Kg	8260B
Bromoform	0.00500	0.000770	mg/L	8260B
Bromomethane	0.0100	0.000830	mg/Kg	8260B
Bromomethane	0.0100	0.00215	mg/L	8260B
Carbon disulfide	0.0100	0.000550	mg/Kg	8260B
Carbon disulfide	0.00500	0.00170	mg/L	8260B
Carbon tetrachloride	0.00500	0.00113	mg/Kg	8260B
Carbon tetrachloride	0.00500	0.000920	mg/L	8260B
Chlorobenzene	0.00500	0.000960	mg/Kg	8260B
Chlorobenzene	0.00500	0.000820	mg/L	8260B
Chlorobromomethane	0.00500	0.00178	mg/Kg	8260B
Chlorobromomethane	0.00500	0.000810	mg/L	8260B
Chloroethane	0.0100	0.00140	mg/Kg	8260B
Chloroethane	0.0100	0.00173	mg/L	8260B
Chloroform	0.00500	0.000660	mg/Kg	8260B
Chloroform	0.00500	0.000820	mg/L	8260B
Chloromethane	0.0100	0.00166	mg/Kg	8260B
Chloromethane	0.0100	0.000850	mg/L	8260B
cis-1,2-Dichloroethene	0.00500	0.000830	mg/Kg	8260B
cis-1,2-Dichloroethene	0.00500	0.000560	mg/L	8260B
cis-1,3-Dichloropropene	0.00500	0.000540	mg/Kg	8260B
cis-1,3-Dichloropropene	0.00500	0.000970	mg/L	8260B
Dibromochloromethane	0.00500	0.000940	mg/Kg	8260B
Dibromochloromethane	0.00500	0.000920	mg/L	8260B

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	MQL	MDL	Units	Method
Ethylbenzene	0.00500	0.00102	mg/Kg	8260B
Ethylbenzene	0.00500	0.00129	mg/L	8260B
Methylene Chloride	0.0100	0.00219	mg/Kg	8260B
Methylene Chloride	0.0100	0.00143	mg/L	8260B
m-Xylene & p-Xylene	0.0100	0.00152	mg/Kg	8260B
m-Xylene & p-Xylene	0.0100	0.00126	mg/L	8260B
o-Xylene	0.00500	0.00113	mg/Kg	8260B
o-Xylene	0.00500	0.000930	mg/L	8260B
Styrene	0.00500	0.000710	mg/Kg	8260B
Styrene	0.00500	0.000560	mg/L	8260B
Tetrachloroethene	0.00500	0.000710	mg/Kg	8260B
Tetrachloroethene	0.00500	0.00124	mg/L	8260B
Toluene	0.00500	0.00138	mg/Kg	8260B
Toluene	0.00500	0.000550	mg/L	8260B
trans-1,2-Dichloroethene	0.00500	0.00114	mg/Kg	8260B
trans-1,2-Dichloroethene	0.00500	0.000880	mg/L	8260B
trans-1,3-Dichloropropene	0.00500	0.000580	mg/Kg	8260B
trans-1,3-Dichloropropene	0.00500	0.000590	mg/L	8260B
Trichloroethene	0.00500	0.00140	mg/Kg	8260B
Trichloroethene	0.00500	0.00158	mg/L	8260B
Vinyl acetate	0.00500	0.000930	mg/Kg	8260B
Vinyl acetate	0.0100	0.000600	mg/L	8260B
Vinyl chloride	0.0100	0.000900	mg/Kg	8260B
Vinyl chloride	0.00500	0.000850	mg/L	8260B
Xylenes, Total	0.00500	0.00113	mg/Kg	8260B
Xylenes, Total	0.00500	0.00198	mg/L	8260B

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	MQL	MDL	Units	Method
1,2,4-Trichlorobenzene	0.0167	0.00210	mg/Kg	8270C LL
1,2-Dichlorobenzene	0.0167	0.00302	mg/Kg	8270C LL
1,3-Dichlorobenzene	0.0167	0.00154	mg/Kg	8270C LL
1,4-Dichlorobenzene	0.0167	0.00225	mg/Kg	8270C LL
1-Methylnaphthalene	0.0167	0.00157	mg/Kg	8270C LL
1-Methylnaphthalene	0.000500	0.000190	mg/L	8270C LL
2,4,5-Trichlorophenol	0.0167	0.0100	mg/Kg	8270C LL
2,4,6-Trichlorophenol	0.0167	0.00268	mg/Kg	8270C LL
2,4-Dichlorophenol	0.0167	0.00387	mg/Kg	8270C LL
2,4-Dimethylphenol	0.0167	0.00858	mg/Kg	8270C LL
2,4-Dinitrophenol	0.100	0.00472	mg/Kg	8270C LL
2,4-Dinitrotoluene	0.0167	0.00361	mg/Kg	8270C LL
2,6-Dinitrotoluene	0.0167	0.00295	mg/Kg	8270C LL
2-Chloronaphthalene	0.0167	0.00121	mg/Kg	8270C LL
2-Chlorophenol	0.0167	0.00197	mg/Kg	8270C LL
2-Methylnaphthalene	0.0167	0.00274	mg/Kg	8270C LL
2-Methylnaphthalene	0.000500	0.000140	mg/L	8270C LL
2-Methylphenol	0.0167	0.00323	mg/Kg	8270C LL
2-Nitroaniline	0.0167	0.00489	mg/Kg	8270C LL
2-Nitrophenol	0.0167	0.00389	mg/Kg	8270C LL
3 & 4 Methylphenol	0.0333	0.00279	mg/Kg	8270C LL
3,3'-Dichlorobenzidine	0.0167	0.0102	mg/Kg	8270C LL

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	MQL	MDL	Units	Method
3-Nitroaniline	0.0167	0.00715	mg/Kg	8270C LL
4,6-Dinitro-2-methylphenol	0.0167	0.00498	mg/Kg	8270C LL
4-Bromophenyl phenyl ether	0.0167	0.00284	mg/Kg	8270C LL
4-Chloro-3-methylphenol	0.0167	0.0156	mg/Kg	8270C LL
4-Chloroaniline	0.0167	0.00582	mg/Kg	8270C LL
4-Chlorophenyl phenyl ether	0.0167	0.00180	mg/Kg	8270C LL
4-Nitroaniline	0.0167	0.0112	mg/Kg	8270C LL
4-Nitrophenol	0.0167	0.00508	mg/Kg	8270C LL
Acenaphthene	0.0167	0.00144	mg/Kg	8270C LL
Acenaphthene	0.000500	0.000160	mg/L	8270C LL
Acenaphthylene	0.0167	0.00100	mg/Kg	8270C LL
Acenaphthylene	0.000500	0.000160	mg/L	8270C LL
Anthracene	0.0167	0.00128	mg/Kg	8270C LL
Anthracene	0.000500	0.000440	mg/L	8270C LL
Benzidine	0.0833	0.00902	mg/Kg	8270C LL
Benzo[a]anthracene	0.0167	0.00138	mg/Kg	8270C LL
Benzo[a]anthracene	0.000500	0.000250	mg/L	8270C LL
Benzo[a]pyrene	0.0167	0.00161	mg/Kg	8270C LL
Benzo[a]pyrene	0.000500	0.000130	mg/L	8270C LL
Benzo[b]fluoranthene	0.0167	0.00172	mg/Kg	8270C LL
Benzo[b]fluoranthene	0.000500	0.000180	mg/L	8270C LL
Benzo[g,h,i]perylene	0.0167	0.00507	mg/Kg	8270C LL
Benzo[g,h,i]perylene	0.000500	0.000350	mg/L	8270C LL
Benzo[k]fluoranthene	0.0167	0.00149	mg/Kg	8270C LL
Benzo[k]fluoranthene	0.000500	0.000160	mg/L	8270C LL
Benzyl alcohol	0.0167	0.00583	mg/Kg	8270C LL
bis (2-Chloroisopropyl) ether	0.0167	0.00884	mg/Kg	8270C LL
Bis(2-chloroethoxy)methane	0.0167	0.00142	mg/Kg	8270C LL
Bis(2-chloroethyl)ether	0.0167	0.00165	mg/Kg	8270C LL
Bis(2-ethylhexyl) phthalate	0.0667	0.00537	mg/Kg	8270C LL
Butyl benzyl phthalate	0.0667	0.00619	mg/Kg	8270C LL
Carbazole	0.0167	0.00312	mg/Kg	8270C LL
Chrysene	0.0167	0.00102	mg/Kg	8270C LL
Chrysene	0.000500	0.000240	mg/L	8270C LL
Dibenz(a,h)anthracene	0.0167	0.00363	mg/Kg	8270C LL
Dibenz(a,h)anthracene	0.000500	0.000290	mg/L	8270C LL
Dibenzofuran	0.0167	0.00178	mg/Kg	8270C LL
Diethyl phthalate	0.0667	0.00843	mg/Kg	8270C LL
Dimethyl phthalate	0.0667	0.00489	mg/Kg	8270C LL
Di-n-butyl phthalate	0.0667	0.00259	mg/Kg	8270C LL
Di-n-octyl phthalate	0.0667	0.00190	mg/Kg	8270C LL
Fluoranthene	0.0167	0.00311	mg/Kg	8270C LL
Fluoranthene	0.000500	0.000310	mg/L	8270C LL
Fluorene	0.0167	0.00236	mg/Kg	8270C LL
Fluorene	0.000500	0.000120	mg/L	8270C LL
Hexachlorobenzene	0.0167	0.00152	mg/Kg	8270C LL
Hexachlorobutadiene	0.0167	0.00192	mg/Kg	8270C LL
Hexachlorocyclopentadiene	0.0167	0.00461	mg/Kg	8270C LL
Hexachloroethane	0.0167	0.00231	mg/Kg	8270C LL
Indeno[1,2,3-cd]pyrene	0.0167	0.00350	mg/Kg	8270C LL
Indeno[1,2,3-cd]pyrene	0.000500	0.000290	mg/L	8270C LL
Isophorone	0.0167	0.00100	mg/Kg	8270C LL

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	MQL	MDL	Units	Method
Naphthalene	0.0167	0.00135	mg/Kg	8270C LL
Naphthalene	0.000500	0.000160	mg/L	8270C LL
Nitrobenzene	0.0167	0.00296	mg/Kg	8270C LL
N-Nitrosodimethylamine	0.0167	0.00419	mg/Kg	8270C LL
N-Nitrosodi-n-propylamine	0.0167	0.00222	mg/Kg	8270C LL
N-Nitrosodiphenylamine	0.0167	0.00189	mg/Kg	8270C LL
Pentachlorophenol	0.167	0.00400	mg/Kg	8270C LL
Phenanthrene	0.0167	0.00495	mg/Kg	8270C LL
Phenanthrene	0.000500	0.000290	mg/L	8270C LL
Phenol	0.0167	0.00424	mg/Kg	8270C LL
Pyrene	0.0167	0.00183	mg/Kg	8270C LL
Pyrene	0.000500	0.000330	mg/L	8270C LL

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	MQL	MDL	Units	Method
PCB-1016	0.0167	0.00160	mg/Kg	8082
PCB-1221	0.0167	0.00863	mg/Kg	8082
PCB-1232	0.0167	0.00670	mg/Kg	8082
PCB-1242	0.0167	0.00124	mg/Kg	8082
PCB-1248	0.0167	0.00249	mg/Kg	8082
PCB-1254	0.0167	0.00221	mg/Kg	8082
PCB-1260	0.0167	0.0135	mg/Kg	8082

Method: TX 1005 - Texas - Total Petroleum Hydrocarbon (GC)

Analyte	MQL	MDL	Units	Method
>C12-C28	10.0	4.06	mg/Kg	TX 1005
>C12-C28	5.00	0.960	mg/L	TX 1005
>C28-C35	10.0	4.06	mg/Kg	TX 1005
>C28-C35	5.00	0.960	mg/L	TX 1005
C6-C12	10.0	3.80	mg/Kg	TX 1005
C6-C12	5.00	0.830	mg/L	TX 1005
C6-C35	10.0	7.48	mg/Kg	TX 1005
C6-C35	5.00	1.56	mg/L	TX 1005

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Antimony	2.50	0.232	mg/Kg	6010B
Antimony	0.0500	0.00630	mg/L	6010B
Arsenic	1.00	0.218	mg/Kg	6010B
Arsenic	0.0100	0.00328	mg/L	6010B
Cadmium	0.250	0.0256	mg/Kg	6010B
Cadmium	0.00500	0.000350	mg/L	6010B
Lead	0.500	0.105	mg/Kg	6010B
Lead	0.0100	0.00290	mg/L	6010B
Selenium	2.00	0.259	mg/Kg	6010B
Selenium	0.0400	0.00417	mg/L	6010B

General Chemistry

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-1

General Chemistry

Analyte	MQL	MDL	Units	Method
Percent Moisture	1.0	1.0	%	Moisture
Percent Solids	1.0	1.0	%	Moisture

GC/MS VOA

Analysis Batch: 124815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-22	FIELD BLANK	Total/NA	Water	8260B	
600-85318-40	RINSE BLANK aeo	Total/NA	Water	8260B	
600-85318-41	TRIP BLANK	Total/NA	Water	8260B	
LCS 600-124815/3	Lab Control Sample	Total/NA	Water	8260B	
MB 600-124815/4	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 125013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-1	2013-FFTA-01 (0.25-2)	Total/NA	Solid	8260B	
LCS 600-125013/3	Lab Control Sample	Total/NA	Solid	8260B	
MB 600-125013/4	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 125071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-3	2013-FFTA-03 (18-19)	Total/NA	Solid	8260B	
600-85318-4	2013-MB-3 (0.75-1.25)	Total/NA	Solid	8260B	
600-85318-7	2013-MB-5 (0.5-5)	Total/NA	Solid	8260B	
600-85318-11	2013-MB-4 (0.83-1.33)	Total/NA	Solid	8260B	
600-85318-14	MW-27D (0.5-2)	Total/NA	Solid	8260B	
600-85318-16	MW-27C (0-2)	Total/NA	Solid	8260B	
600-85318-24	MW-27B (0-2)	Total/NA	Solid	8260B	
600-85318-26	MW-27A (0-2)	Total/NA	Solid	8260B	
LCS 600-125071/3	Lab Control Sample	Total/NA	Solid	8260B	
MB 600-125071/4	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 125242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-8	2013-MB-5 (10-12)	Total/NA	Solid	8260B	
LCS 600-125242/4	Lab Control Sample	Total/NA	Solid	8260B	
MB 600-125242/3	Method Blank	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 124914

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-40	RINSE BLANK aeo	Total/NA	Water	3510C	
LCS 600-124914/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 600-124914/1-A	Method Blank	Total/NA	Water	3510C	

Prep Batch: 124982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-16	MW-27C (0-2)	Total/NA	Solid	3546	
LCS 600-124982/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 600-124982/1-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 125073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-40	RINSE BLANK aeo	Total/NA	Water	8270C LL	124914
LCS 600-124914/2-A	Lab Control Sample	Total/NA	Water	8270C LL	124914
MB 600-124914/1-A	Method Blank	Total/NA	Water	8270C LL	124914

GC/MS Semi VOA (Continued)

Prep Batch: 125220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-1	2013-FFTA-01 (0.25-2)	Total/NA	Solid	3546	
600-85318-3	2013-FFTA-03 (18-19)	Total/NA	Solid	3546	
600-85318-7	2013-MB-5 (0.5-5)	Total/NA	Solid	3546	
600-85318-8	2013-MB-5 (10-12)	Total/NA	Solid	3546	
600-85318-14	MW-27D (0.5-2)	Total/NA	Solid	3546	
600-85318-24	MW-27B (0-2)	Total/NA	Solid	3546	
LCS 600-125220/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 600-125220/1-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 125404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-16	MW-27C (0-2)	Total/NA	Solid	8270C LL	124982
LCS 600-124982/2-A	Lab Control Sample	Total/NA	Solid	8270C LL	124982
MB 600-124982/1-A	Method Blank	Total/NA	Solid	8270C LL	124982

Prep Batch: 125453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-26	MW-27A (0-2)	Total/NA	Solid	3546	
600-85318-26 MS	MW-27A (0-2)	Total/NA	Solid	3546	
600-85318-26 MSD	MW-27A (0-2)	Total/NA	Solid	3546	
LCS 600-125453/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 600-125453/1-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 125471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-3	2013-FFTA-03 (18-19)	Total/NA	Solid	8270C LL	125220
600-85318-7	2013-MB-5 (0.5-5)	Total/NA	Solid	8270C LL	125220
600-85318-14	MW-27D (0.5-2)	Total/NA	Solid	8270C LL	125220
LCS 600-125220/2-A	Lab Control Sample	Total/NA	Solid	8270C LL	125220
MB 600-125220/1-A	Method Blank	Total/NA	Solid	8270C LL	125220

Analysis Batch: 125638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-1	2013-FFTA-01 (0.25-2)	Total/NA	Solid	8270C LL	125220
600-85318-8	2013-MB-5 (10-12)	Total/NA	Solid	8270C LL	125220
600-85318-24	MW-27B (0-2)	Total/NA	Solid	8270C LL	125220
600-85318-26	MW-27A (0-2)	Total/NA	Solid	8270C LL	125453
600-85318-26 MS	MW-27A (0-2)	Total/NA	Solid	8270C LL	125453
600-85318-26 MSD	MW-27A (0-2)	Total/NA	Solid	8270C LL	125453
LCS 600-125453/2-A	Lab Control Sample	Total/NA	Solid	8270C LL	125453
MB 600-125453/1-A	Method Blank	Total/NA	Solid	8270C LL	125453

GC Semi VOA

Prep Batch: 124838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-28	2013-NDA-1A(2-4)	Total/NA	Solid	3546	
600-85318-A-36-B MS	600-85318-A-36-B MS	Total/NA	Solid	3546	
600-85318-A-36-C MSD	600-85318-A-36-C MSD	Total/NA	Solid	3546	
LCS 600-124838/2-A	Lab Control Sample	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 124838 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-124838/1-A	Method Blank	Total/NA	Solid	3546	

Prep Batch: 124920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-1	2013-FFTA-01 (0.25-2)	Total/NA	Solid	TX_1005_S_Prep	
600-85318-3	2013-FFTA-03 (18-19)	Total/NA	Solid	TX_1005_S_Prep	
600-85318-7	2013-MB-5 (0.5-5)	Total/NA	Solid	TX_1005_S_Prep	
600-85318-8	2013-MB-5 (10-12)	Total/NA	Solid	TX_1005_S_Prep	
600-85318-14	MW-27D (0.5-2)	Total/NA	Solid	TX_1005_S_Prep	
600-85318-16	MW-27C (0-2)	Total/NA	Solid	TX_1005_S_Prep	
600-85318-24	MW-27B (0-2)	Total/NA	Solid	TX_1005_S_Prep	
600-85318-26	MW-27A (0-2)	Total/NA	Solid	TX_1005_S_Prep	
LCS 600-124920/2-A	Lab Control Sample	Total/NA	Solid	TX_1005_S_Prep	
MB 600-124920/1-A	Method Blank	Total/NA	Solid	TX_1005_S_Prep	

Prep Batch: 124950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-40	RINSE BLANK aeo	Total/NA	Water	TX_1005_W_Prep	
LCS 600-124950/2-A	Lab Control Sample	Total/NA	Water	TX_1005_W_Prep	
MB 600-124950/1-A	Method Blank	Total/NA	Water	TX_1005_W_Prep	

Analysis Batch: 124998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-40	RINSE BLANK aeo	Total/NA	Water	TX 1005	124950

Analysis Batch: 125003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-1	2013-FFTA-01 (0.25-2)	Total/NA	Solid	TX 1005	124920
600-85318-3	2013-FFTA-03 (18-19)	Total/NA	Solid	TX 1005	124920
600-85318-7	2013-MB-5 (0.5-5)	Total/NA	Solid	TX 1005	124920
600-85318-8	2013-MB-5 (10-12)	Total/NA	Solid	TX 1005	124920
600-85318-14	MW-27D (0.5-2)	Total/NA	Solid	TX 1005	124920
600-85318-16	MW-27C (0-2)	Total/NA	Solid	TX 1005	124920
600-85318-24	MW-27B (0-2)	Total/NA	Solid	TX 1005	124920
600-85318-26	MW-27A (0-2)	Total/NA	Solid	TX 1005	124920
LCS 600-124920/2-A	Lab Control Sample	Total/NA	Solid	TX 1005	124920
LCS 600-124950/2-A	Lab Control Sample	Total/NA	Water	TX 1005	124950
MB 600-124920/1-A	Method Blank	Total/NA	Solid	TX 1005	124920
MB 600-124950/1-A	Method Blank	Total/NA	Water	TX 1005	124950

GC Semi VOA (Continued)

Analysis Batch: 125027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 600-124838/2-A	Lab Control Sample	Total/NA	Solid	8082	124838
MB 600-124838/1-A	Method Blank	Total/NA	Solid	8082	124838

Analysis Batch: 125030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-28	2013-NDA-1A(2-4)	Total/NA	Solid	8082	124838
600-85318-A-36-B MS	600-85318-A-36-B MS	Total/NA	Solid	8082	124838
600-85318-A-36-C MSD	600-85318-A-36-C MSD	Total/NA	Solid	8082	124838

Metals

Prep Batch: 124797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-23	RINSE BLANK-CME	Total/NA	Water	3010A	
600-85318-40	RINSE BLANK aeo	Total/NA	Water	3010A	
LCS 600-124797/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-124797/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 124836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-4	2013-MB-3 (0.75-1.25)	Total/NA	Solid	3050B	
600-85318-7 - DL	2013-MB-5 (0.5-5)	Total/NA	Solid	3050B	
600-85318-7	2013-MB-5 (0.5-5)	Total/NA	Solid	3050B	
600-85318-8	2013-MB-5 (10-12)	Total/NA	Solid	3050B	
600-85318-11	2013-MB-4 (0.83-1.33)	Total/NA	Solid	3050B	
600-85318-14	MW-27D (0.5-2)	Total/NA	Solid	3050B	
600-85318-14 DU	MW-27D (0.5-2)	Total/NA	Solid	3050B	
600-85318-14 MS	MW-27D (0.5-2)	Total/NA	Solid	3050B	
600-85318-14 MSD	MW-27D (0.5-2)	Total/NA	Solid	3050B	
600-85318-17	MW-41 (0-0.5)	Total/NA	Solid	3050B	
600-85318-18	MW-41 (0.5-2)	Total/NA	Solid	3050B	
600-85318-19	MW-42 (0-0.5)	Total/NA	Solid	3050B	
600-85318-20	MW-42 (0.5-2)	Total/NA	Solid	3050B	
600-85318-20 DU	MW-42 (0.5-2)	Total/NA	Solid	3050B	
600-85318-20 MS	MW-42 (0.5-2)	Total/NA	Solid	3050B	
600-85318-20 MSD	MW-42 (0.5-2)	Total/NA	Solid	3050B	
600-85318-21	DUP-6	Total/NA	Solid	3050B	
600-85318-24	MW-27B (0-2)	Total/NA	Solid	3050B	
600-85318-26	MW-27A (0-2)	Total/NA	Solid	3050B	
600-85318-32	D13A (0-0.5)	Total/NA	Solid	3050B	
600-85318-33	2013-C2L-03-(0-0.5)	Total/NA	Solid	3050B	
600-85318-37	2013-AD-04 (0-0.5)	Total/NA	Solid	3050B	
LCS 600-124836/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-124836/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 124882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-4	2013-MB-3 (0.75-1.25)	Total/NA	Solid	6010B	124836
600-85318-7	2013-MB-5 (0.5-5)	Total/NA	Solid	6010B	124836
600-85318-8	2013-MB-5 (10-12)	Total/NA	Solid	6010B	124836

Metals (Continued)

Analysis Batch: 124882 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-11	2013-MB-4 (0.83-1.33)	Total/NA	Solid	6010B	124836
600-85318-14	MW-27D (0.5-2)	Total/NA	Solid	6010B	124836
600-85318-14 DU	MW-27D (0.5-2)	Total/NA	Solid	6010B	124836
600-85318-14 MS	MW-27D (0.5-2)	Total/NA	Solid	6010B	124836
600-85318-14 MSD	MW-27D (0.5-2)	Total/NA	Solid	6010B	124836
600-85318-17	MW-41 (0-0.5)	Total/NA	Solid	6010B	124836
600-85318-18	MW-41 (0.5-2)	Total/NA	Solid	6010B	124836
600-85318-19	MW-42 (0-0.5)	Total/NA	Solid	6010B	124836
600-85318-20	MW-42 (0.5-2)	Total/NA	Solid	6010B	124836
600-85318-20 DU	MW-42 (0.5-2)	Total/NA	Solid	6010B	124836
600-85318-20 MS	MW-42 (0.5-2)	Total/NA	Solid	6010B	124836
600-85318-20 MSD	MW-42 (0.5-2)	Total/NA	Solid	6010B	124836
600-85318-21	DUP-6	Total/NA	Solid	6010B	124836
600-85318-24	MW-27B (0-2)	Total/NA	Solid	6010B	124836
600-85318-26	MW-27A (0-2)	Total/NA	Solid	6010B	124836
600-85318-32	D13A (0-0.5)	Total/NA	Solid	6010B	124836
600-85318-33	2013-C2L-03-(0-0.5)	Total/NA	Solid	6010B	124836
600-85318-37	2013-AD-04 (0-0.5)	Total/NA	Solid	6010B	124836
LCS 600-124836/2-A	Lab Control Sample	Total/NA	Solid	6010B	124836
MB 600-124836/1-A	Method Blank	Total/NA	Solid	6010B	124836

Prep Batch: 124919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-16	MW-27C (0-2)	Total/NA	Solid	3050B	
600-85318-30	D11A (0-0.5)	Total/NA	Solid	3050B	
600-85318-31	D12A (0-0.5)	Total/NA	Solid	3050B	
LCSSRM 600-124919/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-124919/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 125010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-7 - DL	2013-MB-5 (0.5-5)	Total/NA	Solid	6010B	124836
600-85318-16	MW-27C (0-2)	Total/NA	Solid	6010B	124919
600-85318-30	D11A (0-0.5)	Total/NA	Solid	6010B	124919
600-85318-31	D12A (0-0.5)	Total/NA	Solid	6010B	124919
LCSSRM 600-124919/2-A	Lab Control Sample	Total/NA	Solid	6010B	124919
MB 600-124919/1-A	Method Blank	Total/NA	Solid	6010B	124919

Prep Batch: 125018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-36	2013-BSA-2A(0-2)	Total/NA	Solid	3050B	
600-85318-36 DU	2013-BSA-2A(0-2)	Total/NA	Solid	3050B	
600-85318-36 MS	2013-BSA-2A(0-2)	Total/NA	Solid	3050B	
600-85318-36 MSD	2013-BSA-2A(0-2)	Total/NA	Solid	3050B	
LCSSRM 600-125018/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-125018/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 125051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-23	RINSE BLANK-CME	Total/NA	Water	6010B	124797
600-85318-40	RINSE BLANK aeo	Total/NA	Water	6010B	124797

Metals (Continued)

Analysis Batch: 125051 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 600-124797/2-A	Lab Control Sample	Total/NA	Water	6010B	124797
MB 600-124797/1-A	Method Blank	Total/NA	Water	6010B	124797

Analysis Batch: 125110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-36	2013-BSA-2A(0-2)	Total/NA	Solid	6010B	125018
600-85318-36 DU	2013-BSA-2A(0-2)	Total/NA	Solid	6010B	125018
600-85318-36 MS	2013-BSA-2A(0-2)	Total/NA	Solid	6010B	125018
600-85318-36 MSD	2013-BSA-2A(0-2)	Total/NA	Solid	6010B	125018
LCSSRM 600-125018/2-A	Lab Control Sample	Total/NA	Solid	6010B	125018
MB 600-125018/1-A	Method Blank	Total/NA	Solid	6010B	125018

General Chemistry

Analysis Batch: 124801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-1	2013-FFTA-01 (0.25-2)	Total/NA	Solid	Moisture	
600-85318-1 DU	2013-FFTA-01 (0.25-2)	Total/NA	Solid	Moisture	
600-85318-3	2013-FFTA-03 (18-19)	Total/NA	Solid	Moisture	
600-85318-4	2013-MB-3 (0.75-1.25)	Total/NA	Solid	Moisture	
600-85318-7	2013-MB-5 (0.5-5)	Total/NA	Solid	Moisture	
600-85318-8	2013-MB-5 (10-12)	Total/NA	Solid	Moisture	
600-85318-11	2013-MB-4 (0.83-1.33)	Total/NA	Solid	Moisture	
600-85318-14	MW-27D (0.5-2)	Total/NA	Solid	Moisture	
600-85318-17	MW-41 (0-0.5)	Total/NA	Solid	Moisture	
600-85318-18	MW-41 (0.5-2)	Total/NA	Solid	Moisture	
600-85318-19	MW-42 (0-0.5)	Total/NA	Solid	Moisture	
600-85318-20	MW-42 (0.5-2)	Total/NA	Solid	Moisture	
600-85318-20 MS	MW-42 (0.5-2)	Total/NA	Solid	Moisture	
600-85318-20 MSD	MW-42 (0.5-2)	Total/NA	Solid	Moisture	
600-85318-21	DUP-6	Total/NA	Solid	Moisture	
600-85318-21 DU	DUP-6	Total/NA	Solid	Moisture	
600-85318-24	MW-27B (0-2)	Total/NA	Solid	Moisture	
600-85318-26	MW-27A (0-2)	Total/NA	Solid	Moisture	
600-85318-32	D13A (0-0.5)	Total/NA	Solid	Moisture	
600-85318-33	2013-C2L-03-(0-0.5)	Total/NA	Solid	Moisture	
600-85318-36	2013-BSA-2A(0-2)	Total/NA	Solid	Moisture	
600-85318-37	2013-AD-04 (0-0.5)	Total/NA	Solid	Moisture	

Analysis Batch: 124909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-16	MW-27C (0-2)	Total/NA	Solid	Moisture	
600-85318-28	2013-NDA-1A(2-4)	Total/NA	Solid	Moisture	

Analysis Batch: 125061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-30	D11A (0-0.5)	Total/NA	Solid	Moisture	
600-85318-31	D12A (0-0.5)	Total/NA	Solid	Moisture	
600-85318-31 DU	D12A (0-0.5)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-1

Client Sample ID: 2013-FFTA-01 (0.25-2)

Lab Sample ID: 600-85318-1

Date Collected: 01/08/14 10:20
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 78.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	125013	01/14/14 15:28	WS1	TAL HOU
Total/NA	Prep	3546			15.06 g	1.0 mL	125220	01/17/14 13:18	RLK	TAL HOU
Total/NA	Analysis	8270C LL		20	15.06 g	1.0 mL	125638	01/22/14 21:55	MBB	TAL HOU
Total/NA	Prep	TX_1005_S_Prep			10.02 g	10.00 mL	124920	01/14/14 12:54	NVP	TAL HOU
Total/NA	Analysis	TX 1005		1	10.02 g	10.00 mL	125003	01/14/14 16:07	RJV	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 09:59	AYS	TAL HOU

Client Sample ID: 2013-FFTA-03 (18-19)

Lab Sample ID: 600-85318-3

Date Collected: 01/08/14 10:45
Matrix: Solid
Date Received: 01/10/14 10:31
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	Analysis	8260B		1	5 g	5 g	125071	01/15/14 20:16	KLV	TAL HOU
Total/NA	Prep	3546			15.03 g	1.0 mL	125220	01/17/14 13:18	RLK	TAL HOU
Total/NA	Analysis	8270C LL		1	15.03 g	1.0 mL	125471	01/21/14 02:32	MBB	TAL HOU
Total/NA	Prep	TX_1005_S_Prep			10.07 g	10.00 mL	124920	01/14/14 12:54	NVP	TAL HOU
Total/NA	Analysis	TX 1005		1	10.07 g	10.00 mL	125003	01/14/14 16:41	RJV	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 09:59	AYS	TAL HOU

Client Sample ID: 2013-MB-3 (0.75-1.25)

Lab Sample ID: 600-85318-4

Date Collected: 01/08/14 12:18
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 77.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	125071	01/15/14 20:41	KLV	TAL HOU
Total/NA	Prep	3050B			1.06 g	50 mL	124836	01/13/14 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	124882	01/14/14 08:28	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 09:59	AYS	TAL HOU

Client Sample ID: 2013-MB-5 (0.5-5)

Lab Sample ID: 600-85318-7

Date Collected: 01/08/14 13:20
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 76.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	125071	01/15/14 21:06	KLV	TAL HOU
Total/NA	Prep	3546			15.08 g	1.0 mL	125220	01/17/14 13:18	RLK	TAL HOU
Total/NA	Analysis	8270C LL		1	15.08 g	1.0 mL	125471	01/21/14 02:59	MBB	TAL HOU
Total/NA	Prep	TX_1005_S_Prep			10.02 g	10.00 mL	124920	01/14/14 12:54	NVP	TAL HOU
Total/NA	Analysis	TX 1005		1	10.02 g	10.00 mL	125003	01/14/14 17:17	RJV	TAL HOU
Total/NA	Prep	3050B			1.05 g	50 mL	124836	01/13/14 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	124882	01/14/14 08:52	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.05 g	50 mL	124836	01/13/14 14:19	NER	TAL HOU

Client Sample ID: 2013-MB-5 (0.5-5)

Lab Sample ID: 600-85318-7

Date Collected: 01/08/14 13:20
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 76.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B	DL	10	1.05 g	50 mL	125010	01/15/14 10:39	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 09:59	AYS	TAL HOU

Client Sample ID: 2013-MB-5 (10-12)

Lab Sample ID: 600-85318-8

Date Collected: 01/08/14 13:35
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 75.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	125242	01/17/14 12:32	WS1	TAL HOU
Total/NA	Prep	3546			15.00 g	1.0 mL	125220	01/17/14 13:18	RLK	TAL HOU
Total/NA	Analysis	8270C LL		100	15.00 g	1.0 mL	125638	01/22/14 22:21	MBB	TAL HOU
Total/NA	Prep	TX_1005_S_Prep			10.03 g	10.00 mL	124920	01/14/14 12:54	NVP	TAL HOU
Total/NA	Analysis	TX 1005		5	10.03 g	10.00 mL	125003	01/15/14 09:36	RJV	TAL HOU
Total/NA	Prep	3050B			1.01 g	50 mL	124836	01/13/14 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	124882	01/14/14 08:55	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 09:59	AYS	TAL HOU

Client Sample ID: 2013-MB-4 (0.83-1.33)

Lab Sample ID: 600-85318-11

Date Collected: 01/08/14 15:15
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 76.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	125071	01/15/14 21:55	KLV	TAL HOU
Total/NA	Prep	3050B			1.03 g	50 mL	124836	01/13/14 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	124882	01/14/14 08:57	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 09:59	AYS	TAL HOU

Client Sample ID: MW-27D (0.5-2)

Lab Sample ID: 600-85318-14

Date Collected: 01/08/14 15:45
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 77.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	125071	01/15/14 22:19	KLV	TAL HOU
Total/NA	Prep	3546			15.06 g	1.0 mL	125220	01/17/14 13:18	RLK	TAL HOU
Total/NA	Analysis	8270C LL		1	15.06 g	1.0 mL	125471	01/21/14 03:53	MBB	TAL HOU
Total/NA	Prep	TX_1005_S_Prep			10.07 g	10.00 mL	124920	01/14/14 12:54	NVP	TAL HOU
Total/NA	Analysis	TX 1005		1	10.07 g	10.00 mL	125003	01/14/14 18:25	RJV	TAL HOU
Total/NA	Prep	3050B			1.03 g	50 mL	124836	01/13/14 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	124882	01/14/14 08:31	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 09:59	AYS	TAL HOU

Client Sample ID: MW-27C (0-2)

Lab Sample ID: 600-85318-16

Date Collected: 01/08/14 16:20
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 78.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	125071	01/15/14 22:43	KLV	TAL HOU
Total/NA	Prep	3546			15.13 g	1.00 mL	124982	01/15/14 08:14	MRA	TAL HOU
Total/NA	Analysis	8270C LL		1	15.13 g	1.00 mL	125404	01/17/14 12:30	TTD	TAL HOU
Total/NA	Prep	TX_1005_S_Prep			10.01 g	10.00 mL	124920	01/14/14 12:54	NVP	TAL HOU
Total/NA	Analysis	TX 1005		1	10.01 g	10.00 mL	125003	01/14/14 19:00	RJV	TAL HOU
Total/NA	Prep	3050B			1.08 g	50 mL	124919	01/14/14 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	125010	01/15/14 13:22	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124909	01/14/14 13:52	AYS	TAL HOU

Client Sample ID: MW-41 (0-0.5)

Lab Sample ID: 600-85318-17

Date Collected: 01/08/14 13:40
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 76.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	124836	01/13/14 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	124882	01/14/14 09:00	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 09:59	AYS	TAL HOU

Client Sample ID: MW-41 (0.5-2)

Lab Sample ID: 600-85318-18

Date Collected: 01/08/14 13:45
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 76.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	50 mL	124836	01/13/14 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	124882	01/14/14 09:02	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 09:59	AYS	TAL HOU

Client Sample ID: MW-42 (0-0.5)

Lab Sample ID: 600-85318-19

Date Collected: 01/08/14 15:40
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 72.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	50 mL	124836	01/13/14 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	124882	01/14/14 09:05	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 09:59	AYS	TAL HOU

Client Sample ID: MW-42 (0.5-2)

Lab Sample ID: 600-85318-20

Date Collected: 01/08/14 15:45
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 74.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	50 mL	124836	01/13/14 14:19	NER	TAL HOU

Client Sample ID: MW-42 (0.5-2)

Lab Sample ID: 600-85318-20

Date Collected: 01/08/14 15:45
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 74.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1	1.09 g	50 mL	124882	01/14/14 09:07	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 09:59	AYS	TAL HOU

Client Sample ID: DUP-6

Lab Sample ID: 600-85318-21

Date Collected: 01/08/14 00:00
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 77.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.07 g	50 mL	124836	01/13/14 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	124882	01/14/14 09:23	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 09:59	AYS	TAL HOU

Client Sample ID: FIELD BLANK

Lab Sample ID: 600-85318-22

Date Collected: 01/08/14 17:19
Matrix: Water
Date Received: 01/10/14 10:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	124815	01/11/14 18:04	DT1	TAL HOU

Client Sample ID: RINSE BLANK-CME

Lab Sample ID: 600-85318-23

Date Collected: 01/09/14 08:50
Matrix: Water
Date Received: 01/10/14 10:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	124797	01/13/14 09:01	NER	TAL HOU
Total/NA	Analysis	6010B		1	50 mL	50 mL	125051	01/15/14 12:52	DCL	TAL HOU

Client Sample ID: MW-27B (0-2)

Lab Sample ID: 600-85318-24

Date Collected: 01/09/14 08:55
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 77.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	125071	01/15/14 23:08	KLV	TAL HOU
Total/NA	Prep	3546			15.02 g	1.0 mL	125220	01/17/14 13:18	RLK	TAL HOU
Total/NA	Analysis	8270C LL		20	15.02 g	1.0 mL	125638	01/22/14 22:46	MBB	TAL HOU
Total/NA	Prep	TX_1005_S_Prep			10.07 g	10.00 mL	124920	01/14/14 12:54	NVP	TAL HOU
Total/NA	Analysis	TX 1005		1	10.07 g	10.00 mL	125003	01/14/14 19:35	RJV	TAL HOU
Total/NA	Prep	3050B			1.00 g	50 mL	124836	01/13/14 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	124882	01/14/14 09:26	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 09:59	AYS	TAL HOU

Client Sample ID: MW-27A (0-2)

Lab Sample ID: 600-85318-26

Date Collected: 01/09/14 09:25
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 78.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	125071	01/15/14 23:32	KLV	TAL HOU
Total/NA	Prep	3546			15.08 g	1.0 mL	125453	01/21/14 10:00	RLK	TAL HOU
Total/NA	Analysis	8270C LL		1	15.08 g	1.0 mL	125638	01/22/14 19:21	MBB	TAL HOU
Total/NA	Prep	TX_1005_S_Prep			10.02 g	10.00 mL	124920	01/14/14 12:54	NVP	TAL HOU
Total/NA	Analysis	TX 1005		1	10.02 g	10.00 mL	125003	01/14/14 20:09	RJV	TAL HOU
Total/NA	Prep	3050B			1.08 g	50 mL	124836	01/13/14 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	124882	01/14/14 09:28	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 09:59	AYS	TAL HOU

Client Sample ID: 2013-NDA-1A(2-4)

Lab Sample ID: 600-85318-28

Date Collected: 01/09/14 10:15
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 81.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.04 g	5.00 mL	124838	01/13/14 14:23	RLK	TAL HOU
Total/NA	Analysis	8082		1	15.04 g	5.00 mL	125030	01/15/14 11:52	JAL	TAL HOU
Total/NA	Analysis	Moisture		1			124909	01/14/14 13:52	AYS	TAL HOU

Client Sample ID: D11A (0-0.5)

Lab Sample ID: 600-85318-30

Date Collected: 01/09/14 10:35
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 72.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	50 mL	124919	01/14/14 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	125010	01/15/14 13:25	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: D12A (0-0.5)

Lab Sample ID: 600-85318-31

Date Collected: 01/09/14 10:50
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 74.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.07 g	50 mL	124919	01/14/14 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	125010	01/15/14 13:27	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: D13A (0-0.5)

Lab Sample ID: 600-85318-32

Date Collected: 01/09/14 11:04
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 78.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	124836	01/13/14 14:19	NER	TAL HOU

Client Sample ID: D13A (0-0.5)

Lab Sample ID: 600-85318-32

Date Collected: 01/09/14 11:04
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 78.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010B		1	1.05 g	50 mL	124882	01/14/14 09:34	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 09:59	AYS	TAL HOU

Client Sample ID: 2013-C2L-03-(0-0.5)

Lab Sample ID: 600-85318-33

Date Collected: 01/09/14 11:26
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 73.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	124836	01/13/14 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	124882	01/14/14 09:36	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 09:59	AYS	TAL HOU

Client Sample ID: 2013-BSA-2A(0-2)

Lab Sample ID: 600-85318-36

Date Collected: 01/09/14 12:50
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 80.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	125018	01/15/14 12:30	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	125110	01/16/14 09:58	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 09:59	AYS	TAL HOU

Client Sample ID: 2013-AD-04 (0-0.5)

Lab Sample ID: 600-85318-37

Date Collected: 01/09/14 13:26
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 79.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.08 g	50 mL	124836	01/13/14 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	124882	01/14/14 09:38	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 09:59	AYS	TAL HOU

Client Sample ID: RINSE BLANK aeo

Lab Sample ID: 600-85318-40

Date Collected: 01/09/14 08:30
Matrix: Water
Date Received: 01/10/14 10:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	124815	01/11/14 18:27	DT1	TAL HOU
Total/NA	Prep	3510C			250 mL	1.0 mL	124914	01/14/14 16:09	LER	TAL HOU
Total/NA	Analysis	8270C LL		1	250 mL	1.0 mL	125073	01/15/14 01:25	MBB	TAL HOU
Total/NA	Prep	TX_1005_W_Prep			30.79 mL	3.00 mL	124950	01/14/14 15:16	NVP	TAL HOU
Total/NA	Analysis	TX 1005		1	30.79 mL	3.00 mL	124998	01/15/14 04:47	RJV	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	124797	01/13/14 09:01	NER	TAL HOU
Total/NA	Analysis	6010B		1	50 mL	50 mL	125051	01/15/14 12:54	DCL	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-1

Client Sample ID: TRIP BLANK
Date Collected: 01/09/14 00:00
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-41
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	124815	01/11/14 16:54	DT1	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-1

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0759	08-04-14
Louisiana	NELAP	6	30643	06-30-14
Oklahoma	State Program	6	1309	08-31-14
Texas	NELAP	6	T104704223	10-31-14
USDA	Federal		P330-08-00217	04-01-14 *
Utah	NELAP	8	TX00083	10-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain

600-85318 Chain of Custody

5/9/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 1
Company: Golder Associates Inc.				Job #:
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
2013-FFTA-01 (0-2)	01/08/14	1020	G	Solid			X	X	X	X								
2013-FFTA-02 (2-4)	01/08/14	1030	G	Solid														HOLD
2013-FFTA-03 (18-19)	01/08/14	1045	G	Solid			X	X	X	X								
2013-MB-3 (0-0.5)	01/08/14	1218	G	Solid			X						X					
2013-MB-3 (0.5-2)	01/08/14	1222	G	Solid														HOLD
2013-MB-3 (2-4)	01/08/14	1224	G	Solid														HOLD
2013-MB-5 (0-5)	01/08/14	1320	G	Solid		MS/D	X	X	X	X			X					
2013-MB-5 (10-12)	01/08/14	1335	G	Solid			X	X	X	X			X					
2013-MB-5 (14-16)	01/08/14	1345	G	Solid														HOLD
2013-MB-5 (18-20)	01/08/14	1420	G	Solid														HOLD
2013-MB-4 (0-0.5)	01/08/14	1515	G	Solid			X						X					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	JOSHUA JANZON	01/09/2014 1515	GOLDER	McCower	1/9/14 1515	TAL
2	McCower	1/9/14 1700	TAL			
3					1/10/14 1031	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8944	E-Mail: dean.joiner@testamericainc.com		Page: Page 2
Company: Golder Associates Inc.				Job #: 1302086

Address: 500 Century Plaza Drive Suite 190	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Houston	TAT Requested (days): 5 WD TRRP		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: TX, 77073			Other:
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested		
Email: Christina_Higginbotham@golder.com	WO #:		
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831		
Site: EXIDE - FRISCO	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
2013-MB-4 (0.5-2)	01/08/14	1518	G	Solid														HOLD
2013-MB-4 (2-4)	01/08/14	1520	G	Solid														HOLD
MW-27D (0-2)	01/08/14	1545	G	Solid			X		X	X			X					
MW-27D (2-4)	01/08/14	1550	G	Solid														
MW-27C (0-2)	01/08/14	1620	G	Solid			X		X	X			X					
MW-41 (0-0.5)	01/08/14	1340	G	Solid										X				
MW-41 (0.5-2)	01/08/14	1345	G	Solid										X				
MW-42 (0-0.5)	01/08/14	1540	G	Solid										X				
MW-42 (0.5-2)	01/08/14	1545	G	Solid										X				
MW-42 (0.5-2) MS	01/08/14	1545	G	Solid										X				
MW-42 (0.5-2) MSD	01/08/14	1546	G	Solid										X				

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/09/2014 1515	COLDER	[signature]	1/9/14 1515	TAL
[signature] McCowen	1/9/14 1700	TAL	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 1/10/14 0837	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

5/9/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 3
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE - FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B-As	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N			
DUP-6	01/08/14	—	G	Solid										X					
FIELD BLANK	01/08/14	1719	G	Solid			X												
RINSE BLANK-CME	01/09/14	0850	G	~~Solid~~ W										X					
MW-27B (0-2)	01/09/14	0895	G	Solid			X		X	X			X						
MW-27B (2-4)	01/09/14	0900	G	Solid															HOLD
MW-27A (0-2)	01/09/14	0925	G	Solid			X		X	X			X						
MW-27A (2-4)	01/09/14	0930	G	Solid															HOLD
2013-NDA-1A (2-4)	01/09/14	1015	G	Solid												X			
E-11C (0-0.5)	01/09/14	1025	G	Solid													X		
D-11A (0-0.5)	01/09/14	1035	G	Solid									X						
D-12A (0-0.5)	01/09/14	1050	G	Solid									X						

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/09/2014 1515	GOLDER	[signature]	1/9/14 1515	TAL
[signature]	1/9/14 1700	TAL	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 1/10/14 1037	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: CHRIS TREUNO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 4
Company: Golder Associates Inc.				Job #:
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE - FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
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C - Zn Acetate	O - AsNaO2
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E - NaHSO4	Q - Na2SO3
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G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N					
D-13A (0-0.5)	01/09/14	1104	G	Solid									X								
2013-C2L-03 (0-0.5)	01/09/14	1126	G	Solid										X							
2013-C2L-03 (1-2)	01/09/14	1127	G	Solid																	HOLD
2013-C2L-03 (4-5)	01/09/14	1128	G	Solid																	HOLD
2013-BSA-2A (0-2)	01/09/14	1250	G	Solid												X					
2013-AD-04 (0-0.5)	01/09/14	1326	G	Solid									X								
2013-AD-04 (0.5-2)	01/09/14	1327	G	Solid																	HOLD
2013-AD-04 (2-4)	01/09/14	1328	G	Solid																	HOLD
RINSE BLANK-GEO	01/09/14	0830	G	Solid			X		X	X				X							
TRIP BLANK	01/09/14	/	G	Solid			X														
			G	Solid																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
JOSHUA JANZEN	01/09/14 1500	GOLDER	MMcCowen	1/9/14 1515	TAL
MMcCowen	1/9/14 1700	TAL			
				1/10/14 1031	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

5/9/2014

Upton, Cathy

From: Upton, Cathy
Sent: Tuesday, March 04, 2014 3:13 PM
To: Upton, Cathy
Subject: FW: Additional Metals in Soil

Dean,

We would like to report all five metals for the samples listed below. Do you think we could get revised reports for these by Wednesday?

Location ID	Sample ID	lab_sample_id	Date Sampled	Antimony	Arsenic	Cadı
2013-SL-C15	2013-SL-C15 (0-6)	600-84633-7	2013-12-19	NA	NA	2.10
MW-42	MW-42 (0.5-2)	600-85318-20	2014-01-08	NA	13.9	1.82
MW-27B	MW-27B (0-2)	600-85318-24	2014-01-09	NA	NA	9.85
D-11A	D11A (0-0.5)	600-85318-30	2014-01-09	NA	**27.2**	1.77
2013-BSA-2A	2013-BSA-2A(0-2)	600-85318-36	2014-01-09	NA	**34.9**	16.5
ECO-2A	ECO-2A (0-0.5)	600-85389-18	2014-01-09	NA	NA	3.29
ECO-8A	ECO-8A (0-0.5)	600-85389-20	2014-01-09	NA	NA	5.65
2013-AD-3	2013-AD-03 (0-0.5)	600-85389-23	2014-01-09	NA	NA	1.51
SCC-5B	SCC-5B (0-0.5)	600-85389-29	2014-01-10	NA	NA	2.48
2013-CUFT-10B	2013-CUFT-10B (0-0.5)	600-85389-63	2014-01-10	NA	NA	2.19
SRB-VS-11A	SRB-VS-11A (0-0.5)	600-85473-15	2014-01-10	NA	NA	1.44
2013-FWFS-5A	2013-FWFS-5A (0-2)	600-85473-34	2014-01-13	NA	NA	0.52
2013-MW-17B	2013-MW-17B (0-0.5)	600-85473-38	2014-01-13	NA	NA	5.19
SCC-10B	SCC-10B (0-0.5)	600-85473-39	2014-01-13	NA	NA	1.85
2013-C2L-06	2013-C2L-06 (0-0.5)	600-85636-21	2014-01-14	NA	**22.6**	3.68
ECO-7D	ECO-7D (0-0.5)	600-85636-39	2014-01-14	NA	15.1	2.30

Thanks,
Anne

Anne Faeth-Boyd, R.G., P.E. | Senior Project Engineer | **Golder Associates Inc.**
820 South Main Street, Suite 100, St. Charles, Missouri, USA 63301
T: +1 (636) 724-9191 | **F:** +1 (636) 724-9323 | **C:** +1 314 503-5179 | **E:** Anne_Faeth-Boyd@golder.com |
www.golder.com

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Upton, Cathy

From: Higginbotham, Christina [Christina_Higginbotham@golder.com]
Sent: Tuesday, May 06, 2014 5:02 PM
To: Upton, Cathy; Joiner, Dean
Cc: Thomas, Jim; Faeth-Boyd, Anne
Subject: Exide discrepancies - metals reporting
Follow Up Flag: Follow up
Flag Status: Red

Cathy and Dean,

The below revisions are being requested so the final laboratory reports are consistent with tabulated data that was already submitted.
It appears that some metals noted below were reported in an earlier package, and removed for the later data packages. We would like the specified data (see highlights) turned back "on" please.

Please let us know estimated time for these revisions, or if you have any questions regarding this request.

Thanks,
Christina

600-85636 REVISION

				Sb	As	Cd	Pb	Se		
2013-STB-4A	2013-STB-4A (2-4)	600-85636-1	2014-01-13	NA	NA	NA	**1540**	NA	REPORT CADMIUM (confirm Cd concentrat

600-85318 REVISIONS

2013-C2L-03	2013-C2L-03-(0-0.5)	600-85318-33	2014-01-09	NA	12.2	0.651	79.5	< 0.330 U	REPORT ARSENIC AND SELENIUM
D-12A	D12A (0-0.5)	600-85318-31	2014-01-09	NA	10.9	0.652 b	80.2	< 0.324 U	REV 4 (3/18) reports Cd, Pb only. Report dat reported As, Cd, Pb, Se REPORT ARSENIC AND SELENIUM
MW-41	MW-41 (0.5-2)	600-85318-18	2014-01-08	NA	10.1	0.810	92.5	< 0.338 U	REV 4 (3/18) reports Cd, Pb only. Report da reported As, Cd, Pb, Se. REPORT ARSENIC AND SELENIUM
MW-41	MW-41 (0-0.5)	600-85318-17	2014-01-08	NA	8.00	0.474	18.4	< 0.323 U	REV 4 (3/18) reports Cd, Pb only. Report da reported As, Cd, Pb, Se. REPORT ARSENIC AND SELENIUM
MW-42	DUP-6	600-85318-21	2014-01-08	NA	7.39	0.385	15.0	< 0.311 U	REV 4 (3/18) reports Cd, Pb only. Report da reported As, Cd, Pb, Se. REPORT ARSENIC AND SELENIUM
MW-42	MW-42 (0-0.5)	600-85318-19	2014-01-08	NA	14.2	1.56	230	0.580 J	REV 4 (3/18) reports Cd, Pb only. Report da reported As, Cd, Pb, Se. REPORT ARSENIC AND SELENIUM

600-85473 REVISIONS

2013-NT-01	2013-NT-01 (0.2-2)	600-85473-21	2014-01-10	NA	14.4	0.618	18.5	0.546 J	Report from 1/22 has results for As and Se. only lists Pb and Cd, 4/21 only lists Cd and F REPORT ARSENIC AND SELENIUM , also ple interval to "0.5-2" instead of "0.2-2".
2013-NT-01	2013-NT-01 (0-0.5)	600-85473-20	2014-01-10	NA	**15.9**	0.571	19.5	< 0.328 U	Report from 1/22 reports As and Se. Rev 3 4/21 does not. REPORT ARSENIC AND SELENIUM
2013-NT-02	2013-NT-02 (0.5-2)	600-85473-24	2014-01-10	NA	14.1	0.354	21.2	0.324 J	Report from 1/22 reports As and Se. Rev 3 4/21 does not. REPORT ARSENIC AND SELENIUM
2013-NT-02	2013-NT-02 (0-0.5)	600-85473-23	2014-01-10	NA	14.9	4.89	**837**	0.654 J	Report from 1/22 reports As and Se. Rev 3 4/21 does not. REPORT ARSENIC AND SELENIUM

600-85389 REVISION

2013-WMU14-1A (5-7)	600-85389-12	1/9/2014	na	na	5.14 J	**17000**	na	REPORT CADMIUM (confirm Cd concentratio
DUP-7	600-85389-14	1/9/2014	na	na	na	**10500**	na	REPORT CADMIUM (if 85389-12 is confirmed

Christina Higginbotham, P.G. | Remediation Project Manager | **Golder Associates Inc.**
500 Century Plaza Drive, Suite 190, Houston, Texas, USA 77073
T: +1 (281) 821-6868 | **F:** +1 (281) 821-6870 | **C:** +1 (281) 620-7835 | **E:** CHigginbotham@golder.com | **www.golder.com**

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Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-85318-1

Login Number: 85318

List Source: TestAmerica Houston

List Number: 1

Creator: Lopez, Sandro R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	3.9/3.0
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.	False	Refer to Job Narrative for details.
Samples are received within Holding Time.	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	Check done at department level as required.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-85318-2
Client Project/Site: Exide Recycling Center

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
2/27/2014 12:27:55 PM
Cathy Upton, Project Management Assistant II
(713)690-4444
cathy.upton@testamericainc.com

Designee for

Dean Joiner, Project Manager II
(713)690-4444
dean.joiner@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: 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.

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-85318-2 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☐ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☐ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☐ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☐ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton		2/27/2014
Name (printed)	Signature	Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	2/27/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85318-2
Reviewer Name:	Cathy Upton		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		X			R01A
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?			X		
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?			X		
		Were LCSs analyzed at the required frequency?			X		
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?			X		
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?			X		
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	2/27/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85318-2
Reviewer Name:	Cathy Upton		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	2/27/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85318-2
Reviewer Name:	Cathy Upton		

ER #[1]	Description
R01A	The following sample(s) was listed on the Chain of Custody (COC); however, no sample(s) was received: . MW-27C(0-2) AND 2013-BSA-2A-(0-2) WERE NOT RECEIVED. The following sample(s) was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC): EXTRA SAMPLES: 2013-AD-03-(0-0.5): 1-4oz jar 2013-AD-03-(0.5-2): 1-4oz jar 2013-AD-03-(2-4): 1-4oz jar JX: 2- 4oz jars 2- 2oz jars

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Detection Check Standard

Matrix:	Soil
Method:	6010B
Preparation:	3050
Date Analyzed:	12/30/2013
Date Prepared:	12/27/2013
Instrument:	Thermo 6500
TALS Batches:	123949, 123775p
Prep/Reagent Factor =	50
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.299654	0.5	0.36	25
Antimony	0.231553	0.45	0.5	2.5
Arsenic	0.217923	0.5	0.53	1
Barium	0.011322	0.03	0.04	1
Beryllium	0.014513	0.02	0.015	0.25
Boron	0.385535	0.6	0.56	20
Cadmium	0.025642	0.05	0.05	0.25
Calcium	0.86399	1.5	2.185	100
Chromium	0.050606	0.1	0.135	0.5
Cobalt	0.067622	0.1	0.09	0.5
Copper	0.173703	0.5	0.64	0.5
Iron	2.534007	4	3.76	20
Lead	0.104832	0.2	0.215	0.5
Selenium	0.258884	0.5	0.465	2
Manganese	0.038111	0.05	0.085	1.5
Molybdenum	0.136448	0.35	0.38	0.5
Nickel	0.116599	0.15	0.2	1
Silver	0.118848	0.2	0.15	0.5
Sodium	0.885548	2.4	3.135	100
Thallium	0.276988	0.7	0.73	1.5
Tin	0.08729	0.15	0.19	1
Titanium	0.014529	0.03	0.01	0.5
Vanadium	0.079068	0.15	0.125	0.5
Zinc	0.108432	0.2	0.305	1.5

Job ID: 600-85318-2

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-85318-2

Comments
No additional comments.

Receipt
The samples were received on 1/10/2014 10:31 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.0º C and 3.9º C.

Except:

The following sample(s) was listed on the Chain of Custody (COC); however, no sample(s) was received: .
MW-27C(0-2) AND 2013-BSA-2A-(0-2) WERE NOT RECEIVED.

The following sample(s) was submitted for analysis; however, it was not listed on the Chain-of-Custody (COC):
EXTRA SAMPLES:
2013-AD-03-(0-0.5): 1-4oz jar
2013-AD-03-(0.5-2): 1-4oz jar
2013-AD-03-(2-4): 1-4oz jar

JX:
2- 4oz jars
2- 2oz jars

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-2

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU
Moisture	Percent Moisture	EPA	TAL HOU

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 HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-85318-5	2013-MB-3 (1.25-2)	Solid	01/08/14 12:22	01/10/14 10:31
600-85318-9	2013-MB-5 (14-16)	Solid	01/08/14 13:45	01/10/14 10:31
600-85318-15	MW-27D (2-4)	Solid	01/08/14 15:50	01/10/14 10:31
600-85318-25	MW-27B (2-4)	Solid	01/09/14 09:00	01/10/14 10:31
600-85318-27	MW-27A (2-4)	Solid	01/09/14 09:30	01/10/14 10:31
600-85318-28	2013-NDA-1A(2-4)	Solid	01/09/14 10:15	01/10/14 10:31

Client Sample ID: 2013-MB-3 (1.25-2)

Lab Sample ID: 600-85318-5

Date Collected: 01/08/14 12:22
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 76.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.489		0.322	0.0330	mg/Kg	☼	02/20/14 17:00	02/21/14 14:03	1
Lead	157		0.644	0.135	mg/Kg	☼	02/20/14 17:00	02/21/14 14:03	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23	H	1.0	1.0	%			02/25/14 13:53	1
Percent Solids	77	H	1.0	1.0	%			02/25/14 13:53	1

Client Sample ID: 2013-MB-5 (14-16)

Lab Sample ID: 600-85318-9

Date Collected: 01/08/14 13:45
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 78.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.162	J	0.311	0.0319	mg/Kg	☼	02/19/14 14:02	02/20/14 11:34	1
Lead	13.3		0.621	0.130	mg/Kg	☼	02/19/14 14:02	02/20/14 11:34	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21	H	1.0	1.0	%			02/19/14 13:24	1
Percent Solids	79	H	1.0	1.0	%			02/19/14 13:24	1

Client Sample ID: MW-27D (2-4)

Lab Sample ID: 600-85318-15

Date Collected: 01/08/14 15:50
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 77.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	3.51		0.296	0.0303	mg/Kg	☼	02/19/14 14:02	02/20/14 11:36	1
Lead	1530		0.592	0.124	mg/Kg	☼	02/19/14 14:02	02/20/14 11:36	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22	H	1.0	1.0	%			02/19/14 13:24	1
Percent Solids	78	H	1.0	1.0	%			02/19/14 13:24	1

Client Sample ID: MW-27B (2-4)

Lab Sample ID: 600-85318-25

Date Collected: 01/09/14 09:00
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 82.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.480		0.289	0.0297	mg/Kg	☼	02/19/14 14:02	02/20/14 11:39	1
Lead	27.6		0.578	0.121	mg/Kg	☼	02/19/14 14:02	02/20/14 11:39	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18	H	1.0	1.0	%			02/19/14 13:24	1
Percent Solids	82	H	1.0	1.0	%			02/19/14 13:24	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-2

Client Sample ID: MW-27A (2-4)

Lab Sample ID: 600-85318-27
Date Collected: 01/09/14 09:30
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 81.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.547		0.297	0.0305	mg/Kg	☼	02/20/14 17:00	02/21/14 14:05	1
Lead	51.9		0.595	0.125	mg/Kg	☼	02/20/14 17:00	02/21/14 14:05	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18	H	1.0	1.0	%			02/19/14 13:24	1
Percent Solids	82	H	1.0	1.0	%			02/19/14 13:24	1

Client Sample ID: 2013-NDA-1A(2-4)

Lab Sample ID: 600-85318-28
Date Collected: 01/09/14 10:15
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 81.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	4.32		0.303	0.0311	mg/Kg	☼	02/19/14 14:02	02/20/14 10:21	1
Lead	946		0.607	0.127	mg/Kg	☼	02/19/14 14:02	02/20/14 10:21	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18	H	1.0	1.0	%			02/20/14 13:42	1
Percent Solids	82	H	1.0	1.0	%			02/20/14 13:42	1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

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
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)

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-127709/1-A
Matrix: Solid
Analysis Batch: 127767

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 127709

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		02/19/14 14:02	02/20/14 10:09	1
Lead	0.105	U	0.500	0.105	mg/Kg		02/19/14 14:02	02/20/14 10:09	1

Lab Sample ID: LCSSRM 600-127709/2-A
Matrix: Solid
Analysis Batch: 127767

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 127709

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	182	196.5		mg/Kg		108.0	81.9 - 118.1
Lead	115	116.8		mg/Kg		101.6	81.8 - 119.1

Lab Sample ID: MB 600-127810/1-A
Matrix: Solid
Analysis Batch: 127873

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 127810

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		02/20/14 17:00	02/21/14 13:27	1
Lead	0.105	U	0.500	0.105	mg/Kg		02/20/14 17:00	02/21/14 13:27	1

Lab Sample ID: LCSSRM 600-127810/2-A
Matrix: Solid
Analysis Batch: 127873

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 127810

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	182	188.2		mg/Kg		103.4	81.9 - 118.1
Lead	115	116.7		mg/Kg		101.5	81.8 - 119.1

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-2

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Cadmium	0.250	0.0256	mg/Kg	6010B
Lead	0.500	0.105	mg/Kg	6010B

General Chemistry

Analyte	MQL	MDL	Units	Method
Percent Moisture	1.0	1.0	%	Moisture
Percent Solids	1.0	1.0	%	Moisture

Metals

Prep Batch: 127709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-9	2013-MB-5 (14-16)	Total/NA	Solid	3050B	
600-85318-15	MW-27D (2-4)	Total/NA	Solid	3050B	
600-85318-25	MW-27B (2-4)	Total/NA	Solid	3050B	
600-85318-28	2013-NDA-1A(2-4)	Total/NA	Solid	3050B	
LCSSRM 600-127709/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-127709/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 127767

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-9	2013-MB-5 (14-16)	Total/NA	Solid	6010B	127709
600-85318-15	MW-27D (2-4)	Total/NA	Solid	6010B	127709
600-85318-25	MW-27B (2-4)	Total/NA	Solid	6010B	127709
600-85318-28	2013-NDA-1A(2-4)	Total/NA	Solid	6010B	127709
LCSSRM 600-127709/2-A	Lab Control Sample	Total/NA	Solid	6010B	127709
MB 600-127709/1-A	Method Blank	Total/NA	Solid	6010B	127709

Prep Batch: 127810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-5	2013-MB-3 (1.25-2)	Total/NA	Solid	3050B	
600-85318-27	MW-27A (2-4)	Total/NA	Solid	3050B	
LCSSRM 600-127810/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-127810/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 127873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-5	2013-MB-3 (1.25-2)	Total/NA	Solid	6010B	127810
600-85318-27	MW-27A (2-4)	Total/NA	Solid	6010B	127810
LCSSRM 600-127810/2-A	Lab Control Sample	Total/NA	Solid	6010B	127810
MB 600-127810/1-A	Method Blank	Total/NA	Solid	6010B	127810

General Chemistry

Analysis Batch: 127707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-9	2013-MB-5 (14-16)	Total/NA	Solid	Moisture	
600-85318-15	MW-27D (2-4)	Total/NA	Solid	Moisture	
600-85318-25	MW-27B (2-4)	Total/NA	Solid	Moisture	
600-85318-27	MW-27A (2-4)	Total/NA	Solid	Moisture	

Analysis Batch: 127793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-28	2013-NDA-1A(2-4)	Total/NA	Solid	Moisture	

Analysis Batch: 128110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-5	2013-MB-3 (1.25-2)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-2

Client Sample ID: 2013-MB-3 (1.25-2)

Lab Sample ID: 600-85318-5

Date Collected: 01/08/14 12:22
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 76.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	50 mL	127810	02/20/14 17:00	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	127873	02/21/14 14:03	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			128110	02/25/14 13:53	AYS	TAL HOU

Client Sample ID: 2013-MB-5 (14-16)

Lab Sample ID: 600-85318-9

Date Collected: 01/08/14 13:45
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 78.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	50 mL	127709	02/19/14 14:02	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	127767	02/20/14 11:34	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			127707	02/19/14 13:24	AYS	TAL HOU

Client Sample ID: MW-27D (2-4)

Lab Sample ID: 600-85318-15

Date Collected: 01/08/14 15:50
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 77.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	50 mL	127709	02/19/14 14:02	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	127767	02/20/14 11:36	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			127707	02/19/14 13:24	AYS	TAL HOU

Client Sample ID: MW-27B (2-4)

Lab Sample ID: 600-85318-25

Date Collected: 01/09/14 09:00
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 82.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	127709	02/19/14 14:02	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	127767	02/20/14 11:39	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			127707	02/19/14 13:24	AYS	TAL HOU

Client Sample ID: MW-27A (2-4)

Lab Sample ID: 600-85318-27

Date Collected: 01/09/14 09:30
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 81.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	127810	02/20/14 17:00	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	127873	02/21/14 14:05	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			127707	02/19/14 13:24	AYS	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-2

Client Sample ID: 2013-NDA-1A(2-4)
Date Collected: 01/09/14 10:15
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-28
Matrix: Solid
Percent Solids: 81.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	50 mL	127709	02/19/14 14:02	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	127767	02/20/14 10:21	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			127793	02/20/14 13:42	AYS	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-2

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0759	08-04-14
Louisiana	NELAP	6	30643	06-30-14
Oklahoma	State Program	6	1309	08-31-14
Texas	NELAP	6	T104704223	10-31-14
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	TX00083	10-31-14

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain

600-85318 Chain of Custody

2/27/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier/Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 1
Company: Golder Associates Inc.				Job #:
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
2013-FFTA-01 (0-2)	01/08/14	1020	G	Solid			X	X	X	X								
2013-FFTA-02 (2-4)	01/08/14	1030	G	Solid														HOLD
2013-FFTA-03 (18-19)	01/08/14	1045	G	Solid			X	X	X	X								
2013-MB-3 (0-0.5)	01/08/14	1218	G	Solid			X						X					
2013-MB-3 (0.5-2)	01/08/14	1222	G	Solid														HOLD
2013-MB-3 (2-4)	01/08/14	1224	G	Solid														HOLD
2013-MB-5 (0-5)	01/08/14	1320	G	Solid			X	X	X	X			X					
2013-MB-5 (10-12)	01/08/14	1335	G	Solid			X	X	X	X			X					
2013-MB-5 (14-16)	01/08/14	1345	G	Solid														HOLD
2013-MB-5 (18-20)	01/08/14	1420	G	Solid														HOLD
2013-MB-4 (0-0.5)	01/08/14	1515	G	Solid			X						X					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZON	01/09/2014 1515	GOLDER	McCower	1/9/14 1515	TAL
McCower	1/9/14 1700	TAL			
			Received by:	1/10/14 1031	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

2/27/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8944	E-Mail: dean.joiner@testamericainc.com		Page: Page 2
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE - FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
2013-MB-4 (0.5-2)	01/08/14	1518	G	Solid														HOLD
2013-MB-4 (2-4)	01/08/14	1520	G	Solid														HOLD
MW-27D (0-2)	01/08/14	1545	G	Solid			X		X	X			X					
MW-27D (2-4)	01/08/14	1550	G	Solid														
MW-27C (0-2)	01/08/14	1620	G	Solid			X		X	X			X					
MW-41 (0-0.5)	01/08/14	1340	G	Solid										X				
MW-41 (0.5-2)	01/08/14	1345	G	Solid										X				
MW-42 (0-0.5)	01/08/14	1540	G	Solid										X				
MW-42 (0.5-2)	01/08/14	1545	G	Solid										X				
MW-42 (0.5-2) MS	01/08/14	1545	G	Solid										X				
MW-42 (0.5-2) MSD	01/08/14	1546	G	Solid										X				

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	JOSHUA JANZEN	01/09/2014 1515	GOLDER	[signature]	1/9/14 1515	TAL
2	[signature] McCowen	1/9/14 1700	TAL	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by: [signature]	1/10/14 0837	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

2/27/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 3
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE - FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B-As	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N			
DUP-6	01/08/14	—	G	Solid										X					
FIELD BLANK	01/08/14	1719	G	Solid			X												
RINSE BLANK-CME	01/09/14	0850	G	~~Solid~~ W										X					
MW-27B (0-2)	01/09/14	0895	G	Solid			X		X	X			X						
MW-27B (2-4)	01/09/14	0900	G	Solid															HOLD
MW-27A (0-2)	01/09/14	0925	G	Solid			X		X	X			X						
MW-27A (2-4)	01/09/14	0930	G	Solid															HOLD
2013-NDA-1A (2-4)	01/09/14	1015	G	Solid												X			
E-11C (0-0.5)	01/09/14	1025	G	Solid													X		
D-11A (0-0.5)	01/09/14	1035	G	Solid									X						
D-12A (0-0.5)	01/09/14	1050	G	Solid									X						

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/09/2014 1515	GOLDER	[signature]	1/9/14 1515	TAL
[signature]	1/9/14 1700	TAL	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 1/10/14 1037	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

2/27/2014

Client Information	Sampler: CHRIS TREUNO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 4
Company: Golder Associates Inc.				Job #:
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE - FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N					
D-13A (0-0.5)	01/09/14	1104	G	Solid									X								
2013-C2L-03 (0-0.5)	01/09/14	1126	G	Solid										X							
2013-C2L-03 (1-2)	01/09/14	1127	G	Solid																	HOLD
2013-C2L-03 (4-5)	01/09/14	1128	G	Solid																	HOLD
2013-BSA-2A (0-2)	01/09/14	1250	G	Solid												X					
2013-AD-04 (0-0.5)	01/09/14	1326	G	Solid									X								
2013-AD-04 (0.5-2)	01/09/14	1327	G	Solid																	HOLD
2013-AD-04 (2-4)	01/09/14	1328	G	Solid																	HOLD
RINSE BLANK-GEO	01/09/14	0830	G	Solid			X		X	X				X							
TRIP BLANK	01/09/14	/	G	Solid			X														
			G	Solid																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
JOSHUA JANZEN	01/09/14 1500	GOLDER	M McCowen	1/9/14 1515	TAL
M McCowen	1/9/14 1700	TAL			
				1/10/14 1031	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-85318-2

Login Number: 85318

List Source: TestAmerica Houston

List Number: 1

Creator: Lopez, Sandro R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	3.9/3.0
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.	False	Refer to Job Narrative for details.
Samples are received within Holding Time.	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	Check done at department level as required.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-85318-3
Client Project/Site: Exide Recycling Center

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
3/9/2014 8:50:12 PM
Cathy Upton, Project Management Assistant II
(713)690-4444
cathy.upton@testamericainc.com

Designee for

Dean Joiner, Project Manager II
(713)690-4444
dean.joiner@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: 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.

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-85318-3 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☐ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☐ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton		3/9/2014
Name (printed)	Signature	Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/9/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85318-3
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/9/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85318-3
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/9/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85318-3
Reviewer Name:	Dean A Joiner		

ER #[1]	Description

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Detection Check Standard

Matrix:	Water
Method:	200.7/6010
Preparation:	200.7P/3010
Date Analyzed:	12/31/2013
Date Prepared:	12/27/2013
Instrument:	Spectro01
TALs Batches:	124030, 123788p
Units:	mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.028176	0.5
Antimony	0.0063	0.01	0.010016	0.05
Arsenic	0.0033	0.01	0.008253	0.01
Barium	0.0022	0.005	0.004098	0.02
Beryllium	0.00134	0.002	0.004019	0.005
Boron	0.0077	0.02	0.019829	0.2
Cadmium	0.00073	0.001	0.001	0.005
Calcium	0.022	0.05	0.060829	1
Chromium	0.0016	0.002	0.003835	0.01
Cobalt	0.00063	0.001	0.000965	0.01
Copper	0.0014	0.002	0.002451	0.01
Iron	0.087	0.1	0.002258	0.4
Lithium	0.0024	0.005	0.006107	0.2
Lead	0.0029	0.005	0.005478	0.01
Selenium	0.0042	0.01	0.009953	0.04
Manganese	0.00084	0.002	0.001988	0.01
Molybdenum	0.0027	0.005	0.005867	0.01
Nickel	0.00179	0.005	0.005669	0.01
Silver	0.0012	0.0025	0.001901	0.01
Sodium	0.02	0.05	0.088115	1
Strontium	0.0005	0.001	0.000897	0.005
Thallium	0.0078	0.02	0.021503	0.03
Tin	0.0028	0.005	0.005708	0.01
Titanium	0.0011	0.002	0.001905	0.01
Vanadium	0.0017	0.002	0.003578	0.01
Zinc	0.0022	0.005	0.004189	0.01

Job ID: 600-85318-3

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-85318-3

Comments
No additional comments.

Receipt
The samples were received on 1/10/2014 10:31 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.0º C and 3.9º C.

Except:

The following sample(s) was activated for SPLP Metals analysis by the client on 03/03/14: 2013-MB-5 (0.5-5) (600-85318-7). This analysis was not originally requested on the chain-of-custody (COC). See attached email

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-3

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU

Protocol References:

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

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-85318-7	2013-MB-5 (0.5-5)	Solid	01/08/14 13:20	01/10/14 10:31

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-3

Client Sample ID: 2013-MB-5 (0.5-5)
Date Collected: 01/08/14 13:20
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-7
Matrix: Solid

Method: 6010B - Metals (ICP) - SPLP West

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/05/14 17:09	03/06/14 14:49	1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

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
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)

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-128791/1-A
Matrix: Solid
Analysis Batch: 128837

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 128791

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/05/14 17:09	03/06/14 13:22	1

Lab Sample ID: LCS 600-128791/2-A
Matrix: Solid
Analysis Batch: 128837

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 128791

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.500	0.5122		mg/L		102	80 - 120

Lab Sample ID: LB 600-128749/1-C
Matrix: Solid
Analysis Batch: 128837

Client Sample ID: Method Blank
Prep Type: SPLP West
Prep Batch: 128791

Analyte	LB Result	LB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/05/14 17:09	03/06/14 14:46	1

Lab Sample ID: 600-85318-7 MS
Matrix: Solid
Analysis Batch: 128837

Client Sample ID: 2013-MB-5 (0.5-5)
Prep Type: SPLP West
Prep Batch: 128791

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.000350	U	0.500	0.5116		mg/L		102	75 - 125

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-3

Method: 6010B - Metals (ICP) - SPLP West

Analyte	MQL	MDL	Units	Method
Cadmium	0.00500	0.000350	mg/L	6010B

QC Association Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-3

Metals

Leach Batch: 128749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-7	2013-MB-5 (0.5-5)	SPLP West	Solid	1312	
600-85318-7 MS	2013-MB-5 (0.5-5)	SPLP West	Solid	1312	
LB 600-128749/1-C	Method Blank	SPLP West	Solid	1312	

Prep Batch: 128791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-7	2013-MB-5 (0.5-5)	SPLP West	Solid	3010A	128749
600-85318-7 MS	2013-MB-5 (0.5-5)	SPLP West	Solid	3010A	128749
LB 600-128749/1-C	Method Blank	SPLP West	Solid	3010A	128749
LCS 600-128791/2-A	Lab Control Sample	Total/NA	Solid	3010A	
MB 600-128791/1-A	Method Blank	Total/NA	Solid	3010A	

Analysis Batch: 128837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-7	2013-MB-5 (0.5-5)	SPLP West	Solid	6010B	128791
600-85318-7 MS	2013-MB-5 (0.5-5)	SPLP West	Solid	6010B	128791
LB 600-128749/1-C	Method Blank	SPLP West	Solid	6010B	128791
LCS 600-128791/2-A	Lab Control Sample	Total/NA	Solid	6010B	128791
MB 600-128791/1-A	Method Blank	Total/NA	Solid	6010B	128791

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-3

Client Sample ID: 2013-MB-5 (0.5-5)
Date Collected: 01/08/14 13:20
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP West	Leach	1312			1.0 g	1.0 mL	128749	03/04/14 18:27	CAD	TAL HOU
SPLP West	Prep	3010A			50 mL	50 mL	128791	03/05/14 17:09	NER	TAL HOU
SPLP West	Analysis	6010B		1	50 mL	50 mL	128837	03/06/14 14:49	DCL	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-3

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0759	08-04-14
Louisiana	NELAP	6	30643	06-30-14
Oklahoma	State Program	6	1309	08-31-14
Texas	NELAP	6	T104704223	10-31-14
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	TX00083	10-31-14

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain

600-85318 Chain of Custody

3/9/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 1
Company: Golder Associates Inc.				Job #:
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:	Analysis Requested		
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
2013-FFTA-01 (0-2)	01/08/14	1020	G	Solid			X	X	X	X								
2013-FFTA-02 (2-4)	01/08/14	1030	G	Solid														HOLD
2013-FFTA-03 (18-19)	01/08/14	1045	G	Solid			X	X	X	X								
2013-MB-3 (0-0.5)	01/08/14	1218	G	Solid			X						X					
2013-MB-3 (0.5-2)	01/08/14	1222	G	Solid														HOLD
2013-MB-3 (2-4)	01/08/14	1224	G	Solid														HOLD
2013-MB-5 (0-5)	01/08/14	1320	G	Solid			X	X	X	X			X					
2013-MB-5 (10-12)	01/08/14	1335	G	Solid			X	X	X	X			X					
2013-MB-5 (14-16)	01/08/14	1345	G	Solid														HOLD
2013-MB-5 (18-20)	01/08/14	1420	G	Solid														HOLD
2013-MB-4 (0-0.5)	01/08/14	1515	G	Solid			X						X					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:				
Relinquished by: JOSHUA JANZON	Date/Time: 01/09/2014 1515	Company: GOLDER	Received by: MMcCowen	Date/Time: 1/9/14 1515	Company: TAL
Relinquished by: MMcCowen	Date/Time: 1/9/14 1700	Company: TAL	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 1/10/14 1031	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1 / 1

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

3/9/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8944	E-Mail: dean.joiner@testamericainc.com		Page: Page 2
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE - FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
2013-MB-4 (0.5-2)	01/08/14	1518	G	Solid														HOLD
2013-MB-4 (2-4)	01/08/14	1520	G	Solid														HOLD
MW-27D (0-2)	01/08/14	1545	G	Solid			X		X	X			X					
MW-27D (2-4)	01/08/14	1550	G	Solid														
MW-27C (0-2)	01/08/14	1620	G	Solid			X		X	X			X					
MW-41 (0-0.5)	01/08/14	1340	G	Solid										X				
MW-41 (0.5-2)	01/08/14	1345	G	Solid										X				
MW-42 (0-0.5)	01/08/14	1540	G	Solid										X				
MW-42 (0.5-2)	01/08/14	1545	G	Solid										X				
MW-42 (0.5-2) MS	01/08/14	1545	G	Solid										X				
MW-42 (0.5-2) MSD	01/08/14	1546	G	Solid										X				

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	JOSHUA JANZEN	01/09/2014 1515	GOLDER	[signature]	1/9/14 1515	TAL
2	[signature]	1/9/14 1700	TAL	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	[signature]	1/10/14 0837	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

3/9/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 3
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE - FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B-As	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N			
DUP-6	01/08/14	—	G	Solid										X					
FIELD BLANK	01/08/14	1719	G	Solid			X												
RINSE BLANK-CME	01/09/14	0850	G	~~Solid~~ W										X					
MW-27B (0-2)	01/09/14	0895	G	Solid			X		X	X			X						
MW-27B (2-4)	01/09/14	0900	G	Solid															HOLD
MW-27A (0-2)	01/09/14	0925	G	Solid			X		X	X			X						
MW-27A (2-4)	01/09/14	0930	G	Solid															HOLD
2013-NDA-1A (2-4)	01/09/14	1015	G	Solid												X			
E-11C (0-0.5)	01/09/14	1025	G	Solid													X		
D-11A (0-0.5)	01/09/14	1035	G	Solid									X						
D-12A (0-0.5)	01/09/14	1050	G	Solid									X						

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/09/2014 1515	GOLDER	[signature]	1/9/14 1515	TAL
[signature]	1/9/14 1700	TAL	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 1/10/14 1037	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

3/9/2014

Client Information	Sampler: CHRIS TREUNO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 4
Company: Golder Associates Inc.				Job #:
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE - FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N					
D-13A (0-0.5)	01/09/14	1104	G	Solid									X								
2013-C2L-03 (0-0.5)	01/09/14	1126	G	Solid										X							
2013-C2L-03 (1-2)	01/09/14	1127	G	Solid																	HOLD
2013-C2L-03 (4-5)	01/09/14	1128	G	Solid																	HOLD
2013-BSA-2A (0-2)	01/09/14	1250	G	Solid												X					
2013-AD-04 (0-0.5)	01/09/14	1326	G	Solid									X								
2013-AD-04 (0.5-2)	01/09/14	1327	G	Solid																	HOLD
2013-AD-04 (2-4)	01/09/14	1328	G	Solid																	HOLD
RINSE BLANK-GEO	01/09/14	0830	G	Solid			X		X	X				X							
TRIP BLANK	01/09/14	/	G	Solid			X														
			G	Solid																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
JOSHUA JANZEN	01/09/14 1500	GOLDER	M McCowen	1/9/14 1515	TAL
M McCowen	1/9/14 1700	TAL			
				1/10/14 1031	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Upton, Cathy

From: Joiner, Dean
Sent: Sunday, March 02, 2014 10:27 PM
To: Upton, Cathy
Subject: FW: Exide - SPLP Request
Importance: High
Follow Up Flag: Follow up
Flag Status: Red

Cathy, Please update. Thanks!

From: Higginbotham, Christina [mailto:Christina_Higginbotham@golder.com]
Sent: Sunday, March 02, 2014 6:21 PM
To: Joiner, Dean
Subject: Exide - SPLP Request
Importance: High

Dean, we would like to request the following samples be run for SPLP. The lab sample IDs are highlighted below. Can you have these results by Friday (5 day)? Please call me in the morning to discuss.

Sample	Depth Interval	Concentration (mg/kg)	Contaminant
2013-MB-5 / 600-85318-7	0.5-5	46.6	Cadmium
2013-NDA-C21 /600-84629-11	0-6	49.9	Cadmium
2013-C2L-06 / 600-85636-21	0-0.5	584	Lead
2013-AD-03 /600-85389-23	0-0.5	734	Lead
2013-NT-02 / 600-85473-23	0-0.5	837	Lead
2013-SDA-3B / 600-85389-21	0-0.5	1000	Lead
SCC-5B / 600-85389-29	0-0.5	1400	Lead
MW-33/2013-FWFS-5B / 600-85473-1	1-2	1420	Lead
2013-CUFT-5B / 600-85389-36	0-0.5	1340	Lead

Christina Higginbotham, P.G. | Remediation Project Manager | **Golder Associates Inc.**
500 Century Plaza Drive, Suite 190, Houston, Texas, USA 77073
T: +1 (281) 821-6868 | **F:** +1 (281) 821-6870 | **C:** +1 (281) 620-7835 | **E:** CHigginbotham@golder.com | **www.golder.com**

Work Safe, Home Safe

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Please consider the environment before printing this email.

From: Joiner, Dean [mailto:dean.joiner@testamericainc.com]
Sent: Friday, February 28, 2014 1:02 AM
To: Collier, Brenda; Higginbotham, Christina; Xi, Jing Song
Subject: Final Invoice Ready For Payment - Files from 600-86460-3 Exide Recycling Center - Water 6020

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: Project Feedback

DEAN A JOINER

TestAmerica Houston
THE LEADER IN ENVIRONMENTAL TESTING

Tel: 713.690.4444
www.testamericainc.com

Reference: [183891]
Attachments: 1

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-85318-3

Login Number: 85318

List Source: TestAmerica Houston

List Number: 1

Creator: Lopez, Sandro R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	3.9/3.0
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.	False	Refer to Job Narrative for details.
Samples are received within Holding Time.	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	Check done at department level as required.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-85318-4
Client Project/Site: Exide Recycling Center

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
4/3/2014 12:03:50 PM
Cathy Upton, Project Management Assistant II
(713)690-4444
cathy.upton@testamericainc.com

Designee for

Dean Joiner, Project Manager II
(713)690-4444
dean.joiner@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: 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.

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-85318-4 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☐ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☐ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☐ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton		4/3/2014
Name (printed)	Signature	Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/3/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85318-4
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?		X			R10B
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/3/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85318-4
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/3/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85318-4
Reviewer Name:	Dean A Joiner		

ER #[1]	Description
R10B	Method(s) 6010B: The following sample(s) was diluted to bring the concentration of lead within the calibration range: E-11C (0-0.5) (600-85318-29). Elevated reporting limits (RLs) are provided.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Detection Check Standard

Matrix:	Soil
Method:	6010B
Preparation:	3050
Date Analyzed:	12/30/2013
Date Prepared:	12/27/2013
Instrument:	Thermo 6500
TALS Batches:	123949, 123775p
Prep/Reagent Factor =	50
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.299654	0.5	0.36	25
Antimony	0.231553	0.45	0.5	2.5
Arsenic	0.217923	0.5	0.53	1
Barium	0.011322	0.03	0.04	1
Beryllium	0.014513	0.02	0.015	0.25
Boron	0.385535	0.6	0.56	20
Cadmium	0.025642	0.05	0.05	0.25
Calcium	0.86399	1.5	2.185	100
Chromium	0.050606	0.1	0.135	0.5
Cobalt	0.067622	0.1	0.09	0.5
Copper	0.173703	0.5	0.64	0.5
Iron	2.534007	4	3.76	20
Lead	0.104832	0.2	0.215	0.5
Selenium	0.258884	0.5	0.465	2
Manganese	0.038111	0.05	0.085	1.5
Molybdenum	0.136448	0.35	0.38	0.5
Nickel	0.116599	0.15	0.2	1
Silver	0.118848	0.2	0.15	0.5
Sodium	0.885548	2.4	3.135	100
Thallium	0.276988	0.7	0.73	1.5
Tin	0.08729	0.15	0.19	1
Titanium	0.014529	0.03	0.01	0.5
Vanadium	0.079068	0.15	0.125	0.5
Zinc	0.108432	0.2	0.305	1.5

Job ID: 600-85318-4

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-85318-4

Comments
This separate report was generated per the client request to report all 5 metals for sample 600-85318-29. See attached email.

Receipt
The samples were received on 1/10/2014 10:31 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.0º C and 3.9º C.

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-4

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU
Moisture	Percent Moisture	EPA	TAL HOU

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 HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-4

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-85318-29	E-11C (0-0.5)	Solid	01/09/14 10:25	01/10/14 10:31

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-4

Client Sample ID: E-11C (0-0.5)
Date Collected: 01/09/14 10:25
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-29
Matrix: Solid
Percent Solids: 79.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	49.8		2.91	0.269	mg/Kg	☼	01/13/14 14:19	01/14/14 09:31	1
Arsenic	79.8		1.16	0.253	mg/Kg	☼	01/13/14 14:19	01/14/14 09:31	1
Cadmium	62.8		0.291	0.0298	mg/Kg	☼	01/13/14 14:19	01/14/14 09:31	1
Selenium	29.2		2.33	0.301	mg/Kg	☼	01/13/14 14:19	01/14/14 09:31	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	11200		5.81	1.22	mg/Kg	☼	01/13/14 14:19	01/15/14 10:42	10

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			01/13/14 09:59	1
Percent Solids	80		1.0	1.0	%			01/13/14 09:59	1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

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
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)

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-4

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-124836/1-A
Matrix: Solid
Analysis Batch: 124882

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124836

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		01/13/14 14:19	01/14/14 08:21	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		01/13/14 14:19	01/14/14 08:21	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		01/13/14 14:19	01/14/14 08:21	1
Lead	0.105	U	0.500	0.105	mg/Kg		01/13/14 14:19	01/14/14 08:21	1
Selenium	0.259	U	2.00	0.259	mg/Kg		01/13/14 14:19	01/14/14 08:21	1

Lab Sample ID: LCS 600-124836/2-A
Matrix: Solid
Analysis Batch: 124882

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124836

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	66.54		mg/Kg		75	50 - 150
Arsenic	99.6	95.57		mg/Kg		96	78 - 122
Cadmium	182	179.3		mg/Kg		99	81 - 119
Lead	115	110.5		mg/Kg		96	79 - 121
Selenium	150	144.3		mg/Kg		96	80 - 120

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-4

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Antimony	2.50	0.232	mg/Kg	6010B
Arsenic	1.00	0.218	mg/Kg	6010B
Cadmium	0.250	0.0256	mg/Kg	6010B
Lead	0.500	0.105	mg/Kg	6010B
Selenium	2.00	0.259	mg/Kg	6010B

General Chemistry

Analyte	MQL	MDL	Units	Method
Percent Moisture	1.0	1.0	%	Moisture
Percent Solids	1.0	1.0	%	Moisture

QC Association Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-4

Metals

Prep Batch: 124836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-29	E-11C (0-0.5)	Total/NA	Solid	3050B	
600-85318-29 - DL	E-11C (0-0.5)	Total/NA	Solid	3050B	
LCS 600-124836/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-124836/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 124882

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-29	E-11C (0-0.5)	Total/NA	Solid	6010B	124836
LCS 600-124836/2-A	Lab Control Sample	Total/NA	Solid	6010B	124836
MB 600-124836/1-A	Method Blank	Total/NA	Solid	6010B	124836

Analysis Batch: 125010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-29 - DL	E-11C (0-0.5)	Total/NA	Solid	6010B	124836

General Chemistry

Analysis Batch: 124801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85318-29	E-11C (0-0.5)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-4

Client Sample ID: E-11C (0-0.5)
Date Collected: 01/09/14 10:25
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85318-29
Matrix: Solid
Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.08 g	50 mL	124836	01/13/14 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	124882	01/14/14 09:31	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.08 g	50 mL	124836	01/13/14 14:19	NER	TAL HOU
Total/NA	Analysis	6010B	DL	10	1.08 g	50 mL	125010	01/15/14 10:42	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 09:59	AYS	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85318-4

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0759	08-04-14
Louisiana	NELAP	6	30643	06-30-14
Oklahoma	State Program	6	1309	08-31-14
Texas	NELAP	6	T104704223	10-31-14
USDA	Federal		P330-08-00217	04-01-14 *
Utah	NELAP	8	TX00083	10-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain

600-85318 Chain of Custody

4/3/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier/Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 1
Company: Golder Associates Inc.				Job #:
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
2013-FFTA-01 (0-2)	01/08/14	1020	G	Solid			X	X	X	X								
2013-FFTA-02 (2-4)	01/08/14	1030	G	Solid														HOLD
2013-FFTA-03 (18-19)	01/08/14	1045	G	Solid			X	X	X	X								
2013-MB-3 (0-0.5)	01/08/14	1218	G	Solid			X						X					
2013-MB-3 (0.5-2)	01/08/14	1222	G	Solid														HOLD
2013-MB-3 (2-4)	01/08/14	1224	G	Solid														HOLD
2013-MB-5 (0-5)	01/08/14	1320	G	Solid			X	X	X	X			X					
2013-MB-5 (10-12)	01/08/14	1335	G	Solid			X	X	X	X			X					
2013-MB-5 (14-16)	01/08/14	1345	G	Solid														HOLD
2013-MB-5 (18-20)	01/08/14	1420	G	Solid														HOLD
2013-MB-4 (0-0.5)	01/08/14	1515	G	Solid			X						X					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZON	01/09/2014 1515	GOLDER	MMcCowen	1/9/14 1515	TAL
MMcCowen	1/9/14 1700	TAL	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 1/10/14	1031 Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1 / 1

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

4/3/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8944	E-Mail: dean.joiner@testamericainc.com		Page: Page 2
Company: Golder Associates Inc.				Job #: 1302086

Address: 500 Century Plaza Drive Suite 190	Due Date Requested:	
City: Houston	TAT Requested (days): 5 WD TRRP	
State, Zip: TX, 77073		
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested	
Email: Christina_Higginbotham@golder.com	WO #:	
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831	
Site: EXIDE - FRISCO	SSOW#:	

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB					Total Number of containers	Special Instructions/Note:
Preservation Code:							N	N	N	N	N	N	N	N	N	N						
203-MB-4 (0.5-2)	01/08/14	1518	G	Solid																		HOLD
203-MB-4 (2-4)	01/08/14	1520	G	Solid																		HOLD
MW-27D (0-2)	01/08/14	1545	G	Solid			X		X	X			X									
MW-27D (2-4)	01/08/14	1550	G	Solid																		
MW-27C (0-2)	01/08/14	1620	G	Solid			X		X	X			X									
MW-41 (0-0.5)	01/08/14	1340	G	Solid										X								
MW-41 (0.5-2)	01/08/14	1345	G	Solid										X								
MW-42 (0-0.5)	01/08/14	1540	G	Solid										X								
MW-42 (0.5-2)	01/08/14	1545	G	Solid										X								
MW-42 (0.5-2) MS	01/08/14	1545	G	Solid										X								
MW-42 (0.5-2) MSD	01/08/14	1546	G	Solid										X								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	JOSHUA JANZEN	01/09/2014 1515	GOLDER	[signature]	1/9/14 1515	TAL
2	[signature]	1/9/14 1700	TAL	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	[signature]	1/10/14 0837	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

4/3/2014

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Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 3
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE - FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B-As	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N			
DUP-6	01/08/14	—	G	Solid										X					
FIELD BLANK	01/08/14	1719	G	Solid			X												
RINSE BLANK-CME	01/09/14	0850	G	~~Solid~~ W										X					
MW-27B (0-2)	01/09/14	0895	G	Solid			X		X	X			X						
MW-27B (2-4)	01/09/14	0900	G	Solid															HOLD
MW-27A (0-2)	01/09/14	0925	G	Solid			X		X	X			X						
MW-27A (2-4)	01/09/14	0930	G	Solid															HOLD
2013-NDA-1A (2-4)	01/09/14	1015	G	Solid												X			
E-11C (0-0.5)	01/09/14	1025	G	Solid													X		
D-11A (0-0.5)	01/09/14	1035	G	Solid									X						
D-12A (0-0.5)	01/09/14	1050	G	Solid									X						

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/09/2014 1515	GOLDER	[signature]	1/9/14 1515	TAL
[signature]	1/9/14 1700	TAL	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 1/10/14 1037	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

4/3/2014

Client Information	Sampler: CHRIS TREUNO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 4
Company: Golder Associates Inc.				Job #:
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE - FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N					
D-13A (0-0.5)	01/09/14	1104	G	Solid									X								
2013-C2L-03 (0-0.5)	01/09/14	1126	G	Solid										X							
2013-C2L-03 (1-2)	01/09/14	1127	G	Solid																	HOLD
2013-C2L-03 (4-5)	01/09/14	1128	G	Solid																	HOLD
2013-BSA-2A (0-2)	01/09/14	1250	G	Solid												X					
2013-AD-04 (0-0.5)	01/09/14	1326	G	Solid									X								
2013-AD-04 (0.5-2)	01/09/14	1327	G	Solid																	HOLD
2013-AD-04 (2-4)	01/09/14	1328	G	Solid																	HOLD
RINSE BLANK-GEO	01/09/14	0830	G	Solid			X		X	X				X							
TRIP BLANK	01/09/14	/	G	Solid			X														
			G	Solid																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
JOSHUA JANZEN	01/09/14 1500	GOLDER	M McCowen	1/9/14 1515	TAL
M McCowen	1/9/14 1700	TAL			
				1/10/14 1031	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Upton, Cathy

From: Faeth-Boyd, Anne [Anne_Faeth-Boyd@golder.com]
Sent: Thursday, March 27, 2014 3:52 PM
To: Upton, Cathy
Cc: Joiner, Dean; Higginbotham, Christina; Forthaus, Brett; Thomas, Jim
Subject: Additional Metals Reporting
Follow Up Flag: Follow up
Flag Status: Blue

Cathy,

Could you please send revised reports to include all five metals (lead, cadmium, arsenic, antimony, selenium) for the following samples:

2013-AD-03 (0.5-2)	600-85389-24	2014-01-09
2013-C2L-06 (1-2)	600-85636-22	2014-01-14
2013-CUFT-5B (0-0.5)	600-85389-36	2014-01-10
2013-NT-02 (0-0.5)	600-85473-23	2014-01-10
2013-SDA-4B (0-0.5)	600-85389-28	2014-01-10
E-11C (0-0.5)	600-85318-29	2014-01-09
ECO-10A (0-0.5)	600-85473-16	2014-01-10
ECO-1A (0-0.5)	600-85389-16	2014-01-09
ECO-2A (0-0.5)	600-85389-18	2014-01-09
ECO-4B (0-0.5)	600-85473-41	2014-01-13
SRB-VS-9E (0-0.5)	600-85473-14	2014-01-10

Thanks,
Anne

Anne Faeth-Boyd, R.G., P.E. | Senior Project Engineer | **Golder Associates Inc.**
820 South Main Street, Suite 100, St. Charles, Missouri, USA 63301
T: +1 (636) 724-9191 | **F:** +1 (636) 724-9323 | **C:** +1 314 503-5179 | **E:** Anne_Faeth-Boyd@golder.com | **www.golder.com**

Work Safe, Home Safe

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Please consider the environment before printing this email.

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-85318-4

Login Number: 85318

List Source: TestAmerica Houston

List Number: 1

Creator: Lopez, Sandro R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	3.9/3.0
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.	False	Refer to Job Narrative for details.
Samples are received within Holding Time.	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	Check done at department level as required.

Data Usability Summary
Test America Work Orders: 600-85389-1, 600-85389-2, 600-85389-3, 600-85389-4

Sample Dates:	January 9 & 10, 2014	**Project No.:**	1302086
Laboratory:	Test America (TLAP Certification T104704223)	**Client:**	Exide Technologies Inc.
Work Orders:	Work Orders: 600-85389-1, 600-85389-2, 600-85389-3, 600-85389-4		
Intended Use	Affected Property Assessment Report (APAR)		
Site:	Exide Former Operating Plant (FOP), 7471 5th Street, Frisco, TX		

TESTS/ METHODS

Polychlorinated Biphenyls (PCBs) by SW-846 8082 – Gas Chromatography (GC)

Total Metals by SW-846 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP)

SAMPLES

36 soil samples (one of which was subjected to Synthetic Precipitation Leaching Procedure (SPLP)), 3 field duplicates, 1 equipment rinsate blank, 4 field MS/MSD pairs. See Table 1 for a complete cross-referenced listing of samples.

Golder completed a review of the above chemical analysis data for conformance with the requirements of the Texas Risk Reduction Program (TRRP) guidance document, Review and Reporting of COC Concentration Data (RGG-366/TRRP-13 Revised May 2010) and for adherence to project objectives. The results of the review are discussed in this data usability summary (DUS).

Golder completed the review using the following laboratory and project submittals:

- Laboratory reportable data as defined in TRRP-13;
- Laboratory review checklists (LRC) with the associated exception reports;
- Laboratory Electronic Data Deliverable (EDD); and
- Project field notes from the sampling event.

The review of the reportable data included the quality control (QC) parameters listed below, as required per TRRP-13, using the applicable analytical method and project requirements:

- Data Completeness
- Chain-of-Custody Procedures
- Sample Condition - Holding Time, Preservation, and Containers
- Field Procedures

- Results Reporting Procedures
- Laboratory and Field QC Blanks
- Laboratory Control Spike and Matrix Spike Recoveries
- Surrogate Recoveries
- Laboratory and Field Duplicate Precision

Additionally, Golder used the LRC to evaluate the following QC parameters:

- Method Quantitation Limits (MQLs)
- Method Detection Limits (MDLs)
- Instrument Tuning, Calibration, and Performance
- Internal Standards

Criteria used for this data usability review are as follows:

- Inorganics: 70-130% spike recovery (and not less than 30% or data is rejected) and +MQL difference or 30% RPD (for laboratory duplicates) as recommended in TRRP-13;
- Organics: 60-140% spike recovery (and not less than 30% or data is rejected) and +MQL difference or 40% RPD (for laboratory duplicates) as recommended in TRRP-13; and
- Soil Samples: + 3x MQL difference (if either result is less than 5x MQL) or 50% RPD (for field duplicates) as recommended in TRRP-13.

If an item was found outside of the review criteria, the reviewer applied a data qualifier (DQ) and bias code to the results for the affected samples in accordance with TRRP-13. A list of all qualified results and definitions of the qualifier and bias codes are given in Table 2.

GLOSSARY OF TERMS

The following definitions apply for terms related to analyte reporting limits:

MDL (Method Detection Limit) – the minimum concentration of an analyte that the laboratory can measure and report with 99% confidence that the analyte concentration is greater than zero. The MDL is determined by the laboratory for each analyte in a given reagent matrix (water or soil) generally using the procedures specified in 40 CFR Part 136, Appendix B. It is a measure of the concentration an instrument can detect or 'see' in a given reagent matrix. TRRP-13 requires that the laboratory routinely check the MDL for reasonableness.

SDL (Sample Detection Limit) – the MDL adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes than prescribed in the analytical method, and taking into account sample characteristics, sample preparation, and analytical adjustments including dry-weight adjustments. It is a measure of the concentration an instrument can detect or 'see' in a given sample. For TRRP, non-detects

are reported using the SDL. This term was originally called the SQL (Sample Quantitation Limit) before the TRRP rule revisions effective March 19, 2007.

Unadjusted MQL (Method Quantitation Limit) – the lowest non-zero concentration standard in the laboratory's initial calibration curve calculated using the normal aliquot sizes and final volumes prescribed in the analytical method. The unadjusted MQL is reported by the laboratory for each analyte in a given matrix (water or soil). It is a measure of the concentration an instrument can accurately measure in a typical sample. Per TRRP, the Unadjusted MQLs should be below the Levels of Required Performance (LORPs) for purposes of assessment as well as demonstration of conformance with critical Protective Concentration Levels (PCLs).

MQL – the unadjusted MQL adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes than prescribed in the analytical method, and takes into account sample characteristics, sample preparation, and analytical adjustments including dry-weight adjustments. It is a measure of the concentration an instrument can accurately measure in a given sample. Analytes with concentrations above the SDL but below the MQL, though present in the sample, may not be accurately measured and are thus flagged as estimated (J).

LABORATORY CERTIFICATION

At the time the laboratory data were generated for this project, the laboratory was NELAC accredited under the Texas Laboratory Accreditation Program (TLAP) for the matrices, methods and parameters of analysis requested on the chain-of-custody forms. A copy of the applicable pages of the laboratory's National Environmental Laboratory Accreditation Program (NELAP) certificate valid during the period in which the laboratory generated the data in this report is included in Appendix 10.5.

USABILITY SUMMARY

1. Usability of Unqualified Non-Detects – Non-detects are reported at the sample detection limit (SDL) as required per TRRP. Additionally, according to the LRC, an MDL study was performed for each analyte and the MDLs were checked for reasonableness for each applicable analyte. The levels of required performance (LORPs) have been established by Golder/PBW as the Residential Assessment Levels (RALs), which are the minimum of the TRRP residential Tier 1 $^{Tot}Soil_{Comb}$ and Tier 1, 2 or 3 $^{GW}Soil_{Ing}$ PCLs for a 30-acre source area. As needed per TRRP, the Unadjusted MQL stated by the laboratory is at or below the LORP for each applicable analyte, and thus the analytical methods are appropriate and the results can be used to demonstrate conformance with the criteria.
2. Usability of Qualified Data – There are no major QC deficiencies, and thus all data is usable as qualified for the intended use. As shown in Table 2, the reviewer qualified some detects as estimated (J) due to minor QC deficiencies. Detects that are biased high can be used; however, the reported concentration may be high. Detects that are estimated may be either low or high. Results with a laboratory J-flag (i.e., at a

concentration between the SDL and MQL) should be considered estimates. The actual value is not expected to exceed the sample MQL.

Reviewer: Jing Song Xi 5/9/14

QUALITY CONTROL PARAMETERS AND OUTCOMES

Data Completeness

The laboratory data packages contain all necessary data (i.e., the laboratory reportable data per TRRP-13) and the EDD contain all sample results in acceptable format. Minor revisions were required for work orders 600-85389-1 and 600-85389-4. All revisions are detailed in the laboratory narrative.

Chain-of-Custody

Proper sample custody procedures were used, which confirms that the integrity of the samples was maintained. Additionally, the information on the custody records is complete and agrees with that in the field notes and laboratory reports, except as follows:

- Minor instances of containers not matching information listed on the COC. These inconsistencies have been addressed by the laboratory and do not affect sample results.

Sample Condition

Samples were collected in appropriate containers, properly preserved in the field, and prepared and analyzed within the holding times as required in the analytical methods, which ensures that the samples were not affected by analyte degradation:

- For 600-85389, the temperatures of the coolers at receipt were 1.5°C and 2.0°C.

Field Procedures

The samples were collected and placed immediately into sterilized jars provided by the laboratory and then into a cooler with ice for overnight delivery to the laboratory.

Three field duplicates were collected with the 36 investigative samples. Four site-specific MS/MSD samples were collected. One equipment rinsate blank was collected with the samples.

Results Reporting Procedures

The hardcopy analytical results include a Result, MQL (adjusted), and SDL. The EDD includes the MDL, SDL (under the SQL column per previously used terminology) and the MQL, which is not adjusted for sample specific factors.

Results are reported in mg/kg with dry-weight correction for the metals. Non-detects are reported using the SDL as specified per TRRP and detects between the SDL and MQL are reported with a laboratory J-flag. The concentration reported for detects between the SDL and MQL is below the calibration range and thus is considered estimated.

MQLs- The LORPs have been established by Golder/PBW as the Resident Assessment Levels (RALs), which are the minimum of the TRRP residential Tier 1 Tier 1 $^{Tot}Soil_{Comb}$ and Tier 1, 2 or 3 $^{GW}Soil_{Ing}$ PCLs for a 30-acre source area. The Unadjusted MQLs for the laboratory are at or below the LORPs for each applicable analyte.

MDLs- According to the LRC, an MDL study was performed for each analyte, and the MDLs were checked for reasonableness and either adjusted or supported by the analysis of detectability check standards (DCS) for each applicable analyte as required per TRRP-13. Results for the DCS are included in the data packages.

Laboratory Blanks

Results for samples prepared in the same QC batch as a contaminated method blank may be affected by laboratory contamination. There were no detections in laboratory blanks in this work order, except for the following:

- The method blank for QC Batch 124919 contained cadmium above the MDL. All samples in the associated preparation batch have detections greater than 5x MDL, therefore, no qualifications are needed.
- The method blank for QC Batch 127929 contained lead above the MDL. All samples in the associated preparation batch have detections greater than 5x MDL, therefore, no qualifications are needed.

Field QC Blanks

One equipment rinsate blank was collected to document sufficient field decontamination procedures for soil sampling devices. Results for samples collected with a contaminated rinsate blank may be affected by field contamination. However, no analytes were detected in the rinsate blanks, and thus there is no effect on data quality.

Laboratory Control Sample

The laboratory prepared one laboratory control sample (LCS) for each analytical batch and reported recoveries for all of the analytes for each test. The LCS recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on a sample, free of matrix effects, except for the following:

- For Method 8082, aroclors are multi-component analytes and it is impossible to include all seven aroclors of interest into the LCS according to the laboratory. Only aroclors 1016 and 1260 were spiked into the LCS. As these two aroclors contain essentially all analytes found in the other five aroclors of interest, the recovery of these two aroclors in the LCS was taken to be representative of the recovery of the other five aroclors. Aroclors 1016 and 1260 recovered within specified limits.

Matrix Spike Recovery

The laboratory prepared one or more matrix spike (MS) and matrix spike duplicate (MSD) with each analytical batch plus a Post Digestion Spike (PDS) with each metals analytical batch. MS/MSD recoveries are reported for the same analytes as the LCS for MS/MSD prepared using a sample from the site, which includes 4 MS/MSD for Total Metals, as shown in Table 1.

PDS outcomes are given on the LRC for each job package; however PDS data are not reportable data per TRRP-13. According to the LRC, the PDS met method requirements, which indicates good accuracy for the analysis technique on the given sample matrix.

The MS/MSD recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on a sample free of matrix effects, except as follows:

QC Batch	Lab Sample ID	MS/MSD ID	Analyte	Parent Amount (mg/kg)	Spike Amount for MS/MSD (mg/kg)	MS % Recovery	MSD % Recovery	Qual
124919	600-85389-12	2013-WMU14-1A (5-7)	Antimony	73.3	66.0, 66.6	-67	-62	JL
124919	600-85389-12	2013-WMU14-1A (5-7)	Arsenic	52.6	66.0, 66.6	37	39	JL
124919	600-85389-12	2013-WMU14-1A (5-7)	Lead	15500	66.0, 66.6	-23248	-23042	-
124919	600-85389-13	MW-30A (2-4)	Antimony	1.55	58.2, 55.4	39	35	JL
124919	600-85389-13	MW-30A (2-4)	Lead	52.4	58.2, 55.4	63	30	JL
127810	600-85389-19	ECO-2A (0.5-2)	Antimony	0.284 U	58.9, 58.3	44	42	UJL
124939	600-85389-30	SCC-5A (0-0.5)	Antimony	0.278	59.6, 64.3	39	40	JL
124939	600-85389-45	2013-CUFT-6C (2-4)	Antimony	0.306	64.3, 66.8	38	38	JL

NA – Not available.

In all cases where the spike amount is less than four times the result in the unspiked parent sample (such as for lead in batch 124919), the data are considered inconclusive and the MS/MSD recovery check is waived.

Surrogate Recovery

Surrogate recoveries were within acceptable limits for PCBs.

Laboratory Duplicate Precision

The laboratory prepared one or more Matrix Spike Duplicate (MSD) with each analytical batch for each test. Additionally, the laboratory prepared one Matrix Duplicate (MD) with each metals and pH analytical batch. RPDs are reported for the same analytes as the LCS for MSD/MD prepared using a sample from the site, which includes 4 MSD and MD for Total Metals, as shown in Table 1.

The MSD and MD RPDs are within the TRRP recommended criteria, which indicates good precision for the preparation and analysis technique for the given sample matrix, except as follows:

QC Batch	Lab Sample ID	MS/MSD ID	Analyte	Parent Amount (mg/kg)	MSD RPD	MD RPD	Qual
124919	600-85389-12	2013-WMU14-1A (5-7)	Cadmium	5.14	0	46	J
124919	600-85389-13	MW-30A (2-4)	Cadmium	1.15	4	92	J
124919	600-85389-13	MW-30A (2-4)	Lead	52.4	5	101	J
127810	600-8539-19	ECO-2A (0.5-2)	Selenium	0.410 J	3	45	J
124939	600-85389-45	SCC-5A (0-0.5)	Cadmium	0.760	18	85	J
124939	600-85389-45	SCC-5A (0-0.5)	Lead	20.3	8	40	J

Field Duplicate Precision

Three field duplicates were collected with the samples and analyzed for cadmium and lead. Results are summarized in Table 3. The RPDs (or the absolute difference between results for concentrations <5x MQL and for non-detects) are within the TRRP criteria, which indicates good precision for the sampling, preparation, and analysis technique on the given sample matrix, except as follows:

- The results for Total lead are outside the criteria for the pair collected at 2013-WMU14-1A (5-7).
- The results for Total lead are outside the criteria for the pair collected at MW-30A (2-4).

Instrument Tuning

According to the LRC, instrument tuning met method requirements for the samples, which indicates the

GC/MS instrument was properly set up to identify analytes.

Instrument Calibration

According to the LRC, initial and continuing calibration data met method requirements for all reported results, which indicates the instruments were properly calibrated to measure analyte concentrations.

Instrument Performance

According to the LRC, the serial dilution and ICP interference check samples met method requirements, which indicates that no significant matrix interference exists, except as follows:

- The interference check standard solution associated with batch 125051 showed results for lead at a level greater than 2 times the LOD. Since this analyte was not detected in the field sample, no qualification was required.

Internal Standards

According to the LRC, area counts and retention times were within method requirements.

TABLE 1
CROSS REFERENCE OF FIELD SAMPLE IDENTIFICATIONS AND LABORATORY IDENTIFICATIONS

Lab Sample ID	Field Sample ID	Prep Batch / Analysis Batch	Sample Date	Matrix	Comments
600-85389-1	MW-44 (0-0.5)	124919/125010	1/9/2014	Soil	
600-85389-2	MW-44 (0.5-2)		1/9/2014	Soil	Not reported
600-85389-3	MW-44 (2-4)		1/9/2014	Soil	Not reported
600-85389-4	2013-AD-1A (0.5-2)	127810/127873	1/9/2014	Soil	
600-85389-5	2013-AD-1A (0-0.5)	124919/125010	1/9/2014	Soil	
600-85389-6	2013-AD-1A (2-4)		1/9/2014	Soil	Not reported
600-85389-7	2013-FOP-1A (0-0.5)	124919/125010	1/9/2014	Soil	
600-85389-8	2013-AD-5 (0-0.5)	124919/125010	1/9/2014	Soil	
600-85389-9	2013-AD-5 (0.5-2)	127810/127873	1/9/2014	Soil	
600-85389-10	2013-AD-5 (2-4)		1/9/2014	Soil	Not reported
600-85389-11	2013-WMU14-1A (0.9-2)	124919/125083	1/9/2014	Soil	
600-85389-12	2013-WMU14-1A (5-7)	124919/125083	1/9/2014	Soil	site-specific MS/MSD
600-85389-13	MW-30A (2-4)	124919/125010	1/9/2014	Soil	site-specific MS/MSD
600-85389-14	DUP 7	124919/125083	1/9/2014	Soil	Duplicate of 2013-WMU14-1A (5-7)
600-85389-15	DUP 8	124919/125010	1/9/2014	Soil	Duplicate of MW-30A (2-4)
600-85389-16	ECO-1A (0-0.5)	124919/125010	1/9/2014	Soil	
600-85389-17	ECO-1A (0.5-2)		1/9/2014	Soil	Not reported
600-85389-18	ECO-2A (0-0.5)	124919/125010	1/9/2014	Soil	
600-85389-19	ECO-2A (0.5-2)	127810/127873	1/9/2014	Soil	site-specific MS/MSD
600-85389-20	ECO-8A (0-0.5)	124919/125010	1/9/2014	Soil	
600-85389-21	2013-SDA-3B (0-0.5)	124919/125010 128791/128837	1/9/2014	Soil	
600-85389-22	RINSE BLANK-CME	124862/125051	1/10/2014	Water	Rinsate Blank
600-85389-23	2013-AD-03 (0-0.5)	125018/125110 128791/128837	1/9/2014	Soil	
600-85389-24	2013-AD-03 (0.5-2)	127929/127997	1/9/2014	Soil	
600-85389-25	2013-AD-03 (2-4)		1/9/2014	Soil	Not reported
600-85389-26	MW-36 (0-2)	124919/125010	1/10/2014	Soil	
600-85389-27	MW-35 (1-3)	124939/125010	1/10/2014	Soil	
600-85389-28	2013-SDA-4B (0-0.5)	124939/125010	1/10/2014	Soil	
600-85389-29	SCC-5B (0-0.5)	124939/125010 128791/128837	1/10/2014	Soil	
600-85389-30	SCC-5A (0-0.5)	124939/125010	1/10/2014	Soil	
600-85389-31	2013-CUFT-14 (0-2)	124838/125027 124939/125010	1/10/2014	Soil	
600-85389-32	2013-CUFT-14 (2-4)		1/10/2014	Soil	Not reported
600-85389-33	2013-CUFT-11 (0-0.5)	124939/125010	1/10/2014	Soil	
600-85389-34	2013-CUFT-11 (0.5-2)		1/10/2014	Soil	Not reported
600-85389-35	2013-CUFT-11 (2-4)		1/10/2014	Soil	Not reported
600-85389-36	2013-CUFT-5B (0-0.5)	124939/125010 128791/128837	1/10/2014	Soil	
600-85389-37	2013-CUFT-5A (0-0.5)	124939/125010	1/10/2014	Soil	
600-85389-38	2013-CUFT-5D (0-0.5)		1/10/2014	Soil	Not reported
600-85389-39	2013-CUFT-5D (2-4)	124939/125010	1/10/2014	Soil	
600-85389-40	2013-CUFT-5D (4-6)		1/10/2014	Soil	Not reported
600-85389-41	2013-CUFT-5D (6-8)		1/10/2014	Soil	Not reported
600-85389-42	2013-CUFT-5D (8-10)		1/10/2014	Soil	Not reported
600-85389-43	2013-CUFT-6A (0-0.5)	124939/125010	1/10/2014	Soil	
600-85389-44	2013-CUFT-6C (0-0.5)		1/10/2014	Soil	Not reported
600-85389-45	2013-CUFT-6C (2-4)	124939/125010	1/10/2014	Soil	site-specific MS/MSD
600-85389-46	2013-CUFT-6C (4-6)		1/10/2014	Soil	Not reported
600-85389-47	2013-CUFT-6C (6-8)		1/10/2014	Soil	Not reported
600-85389-48	2013-CUFT-6C (8-10)		1/10/2014	Soil	Not reported
600-85389-49	DUP 9	124939/125010	1/10/2014	Soil	Duplicate of 2013-CUFT-6C (2-4)
600-85389-50	2013-CUFT-6B (0-0.5)	124939/125010	1/10/2014	Soil	
600-85389-51	2013-CUFT-5C (0-0.5)	124939/125010	1/10/2014	Soil	
600-85389-52	2013-CUFT-7B (0-0.5)	125018/125110	1/10/2014	Soil	
600-85389-53	2013-CUFT-7B (2-4)	124939/125010	1/10/2014	Soil	
600-85389-54	2013-CUFT-7B (4-6)		1/10/2014	Soil	Not reported
600-85389-55	2013-CUFT-7B (6-8)		1/10/2014	Soil	Not reported
600-85389-56	2013-CUFT-7B (8-10)		1/10/2014	Soil	Not reported
600-85389-57	2013-CUFT-10D (0-0.5)		1/10/2014	Soil	Not reported
600-85389-58	2013-CUFT-10D (2-4)	124939/125010	1/10/2014	Soil	
600-85389-59	2013-CUFT-10D (4-6)		1/10/2014	Soil	Not reported
600-85389-60	2013-CUFT-10D (6-8)		1/10/2014	Soil	Not reported
600-85389-61	2013-CUFT-10D (8-10)		1/10/2014	Soil	Not reported
600-85389-62	2013-CUFT-10A (0-0.5)	124939/125010	1/10/2014	Soil	
600-85389-63	2013-CUFT-10B (0-0.5)	124939/125010	1/10/2014	Soil	
600-85389-64	2013-CUFT-10C (0-0.5)	124939/125010	1/10/2014	Soil	

TABLE 2 - QUALIFIED DATA

Lab Sample ID	Field Sample ID	Analyte	Result	Units	Qualifer	Explanation
600-85389-1	MW-44 (0-0.5)	Lead	38.6	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85389-4	2013-AD-1A (0.5-2)	Antimony	<0.258	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
600-85389-5	2013-AD-1A (0-0.5)	Lead	452	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85389-7	2013-FOP-1A (0-0.5)	Lead	85.1	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85389-8	2013-AD-5 (0-0.5)	Lead	2320	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85389-9	2013-AD-5 (0.5-2)	Antimony	8.15	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Lead	35500	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Cadmium	5.14	mg/kg	J	Matrix duplicate outside specifications
600-85389-11	2013-WMU14-1A (0.9-2)	Lead	17000	mg/kg	J	Field duplicate outside specifications
600-85389-13	MW-30A (2-4)	Lead	52.4	mg/kg	JL	Matrix Spike recovery below specifications, >30%, field duplicate outside specifications
600-85389-14	DUP-7	Lead	10500	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85389-15	DUP-8	Lead	28.9	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85389-16	ECO-1A (0-0.5)	Lead	151	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Antimony	1.46	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Arsenic	16.3	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85389-18	ECO-2A (0-0.5)	Lead	303	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Antimony	<0.284	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
600-85389-19	ECO-2A (0.5-2)	Selenium	0.41	mg/kg	J	Matrix duplicate outside specifications
		Antimony	6.70	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85389-20	ECO-8A (0-0.5)	Lead	1090	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85389-21	2013-SDA-3B (0-0.5)	Lead	1000	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85389-26	MW-36 (0-2)	Lead	3120	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85389-29	SCC-5B (0-0.5)	Antimony	3.11	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Cadmium	0.76	mg/kg	J	Matrix duplicate outside specifications
600-85389-45	2013-CUFT-6C (2-4)	Lead	20.3	mg/kg	J	Matrix duplicate outside specifications
600-85389-63	2013-CUFT-10B (0-0.5)	Antimony	1.19	mg/kg	JL	Matrix Spike recovery below specifications, >30%

Note:

Detected results between the SDL and MQL (i.e., results with a laboratory J-flag) have been included in the above table since the reported concentration is below the calibration range.

J Estimated data; The analyte was detected and identified. The associated numerical value (i.e., the reported sample concentration) is the approximate concentration of the analyte in the sample.

NJ Tentatively identified, estimated data; The analysis indicates the presence of the analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.

NS Not selected; Another result (from a secondary dilution, different analytical method, re-sampling, etc.) is selected for use based on QC outcomes and/or reported concentrations.

R Rejected data; The data is unusable. Serious QC deficiencies make it impossible to verify the absence or presence of this analyte.

U Not detected; The analyte was not detected >5x (10x for common contaminants) the level in an associated blank and thus should be considered not detected above the level of the associated numerical value (i.e., the reported sample concentration).

UJ Estimated data; The analyte was not detected above the reported sample detection limit (SDL). The numerical value of the SDL is estimated and may be inaccurate.

H Bias in sample result is likely to be high

L Bias in sample result is likely to be low

TABLE 3 - FIELD DUPLICATE PRECISION CALCULATIONS

Duplicate and Parent Sample Field Identification	Analyte	Sample Result	Duplicate Result	RPD[a]	Accept or Reject	Qualifier Added
DUP-7 / 2013-WMU14-1A (5-7)	lead	17000	10500	47.3	A	J
DUP-8 / MW-30A (2-4)	lead	52.4	28.9	57.8	A	J
DUP-9 / 2013-CUFT-6C (2-4)	cadmium	0.760	0.888	15.5	A	-
	lead	20.3	21.6	6.2	A	-

[a] RPD = ((SR - DR)*200)/(SR + DR)

A - Acceptable Data

NA - Not Analyzed

The RPD test (<50%) applies if both results are greater than 5x MQL. Otherwise, the absolute difference test (< 3x MQL) applies.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-85389-1
Client Project/Site: Exide Recycling Center
Revision: 4

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
5/9/2014 12:13:42 PM
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Designee for

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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.

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-85389-1 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☑ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☑ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton		3/5/2014
Name (printed)	Signature	Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/5/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85389-1
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		X			R01A
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				R05D
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?		X			R06A
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			R07C
		Were MS/MSD RPDs within laboratory QC limits?		X			R07D
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?		X			R08C
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
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5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/5/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85389-1
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?	X				
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?		X			S08A
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			S09A
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

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Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/5/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85389-1
Reviewer Name:	Dean A Joiner		

ER #[1]	Description
R01A	The following samples were listed on the Chain of Custody (COC); however, no samples were received: 2013-AD-03 (0.5-2) (600-85389-24), 2013-AD-03 (0-0.5) (600-85389-23), 2013-AD-03 (2-4) (600-85389-25).
R05D	Method 6010B: The method blank for batch 124919 contained Cadmium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.
R06A	Method 8082: Since Aroclors are multi-component analytes, it is not possible to include all seven Aroclors of interest into the LCS. The only two Aroclors that were spiked into the LCS were Aroclors 1016 and 1260. Since these two Aroclors essentially contain all analytes found in the other five individual Aroclors of interest, the recovery of Aroclors 1016 and 1260 in the LCS will be representative of the recovery of the other five Aroclors.
R07C	Method 6010B: 600-85389-12 MS/MSD failed the recovery criteria for the following analyte(s): Antimony, Arsenic, Lead. Matrix interference is suspected. Method 6010B: 600-85389-13 MS/MSD failed the recovery criteria for the following analyte(s): Antimony, Lead. Matrix interference is suspected. Method 6010B: 600-85389-30 MS/MSD failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected. Method 6010B: 600-85389-45 MS/MSD failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected. Method 6010B: Due to the high concentration of lead, the matrix spike / matrix spike duplicate (MS/MSD) for batch 125110 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.
R07D	Method 6010B: 600-85389-13 MSD failed the RPD criteria for the following analyte(s): Lead. Matrix interference is suspected.
R08C	Method 6010B: 600-85389-12 DU failed the RPD criteria for the following analyte(s): Arsenic and Cadmium. Non homogeneity of the sample is suspected. Method 6010B: 600-85389-13 DU failed the RPD criteria for the following analyte(s): Cadmium and Lead. Non homogeneity of the sample is suspected. Method 6010B: 600-85389-45 DU failed the RPD criteria for the following analyte(s): Cadmium and Lead. Non homogeneity of the sample is suspected.
S08A	Method 6010B: The interference check standard solution (ICSA) associated with batch 125051 showed results for arsenic, cadmium and lead at a level greater than 2 times the limit of detection (LOD). Since the interfering analytes were not detected in the client samples, no corrective action was required.
S09A	Method 6010B: The serial dilution performed for the following sample(s) associated with batch 124919 was outside control limits for Antimony: 600-85389-12 SD

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Detection Check Standard

Matrix:	Soil
Method:	6010B
Preparation:	3050
Date Analyzed:	12/30/2013
Date Prepared:	12/27/2013
Instrument:	Thermo 6500
TALS Batches:	123949, 123775p
Prep/Reagent Factor =	50
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.299654	0.5	0.36	25
Antimony	0.231553	0.45	0.5	2.5
Arsenic	0.217923	0.5	0.53	1
Barium	0.011322	0.03	0.04	1
Beryllium	0.014513	0.02	0.015	0.25
Boron	0.385535	0.6	0.56	20
Cadmium	0.025642	0.05	0.05	0.25
Calcium	0.86399	1.5	2.185	100
Chromium	0.050606	0.1	0.135	0.5
Cobalt	0.067622	0.1	0.09	0.5
Copper	0.173703	0.5	0.64	0.5
Iron	2.534007	4	3.76	20
Lead	0.104832	0.2	0.215	0.5
Selenium	0.258884	0.5	0.465	2
Manganese	0.038111	0.05	0.085	1.5
Molybdenum	0.136448	0.35	0.38	0.5
Nickel	0.116599	0.15	0.2	1
Silver	0.118848	0.2	0.15	0.5
Sodium	0.885548	2.4	3.135	100
Thallium	0.276988	0.7	0.73	1.5
Tin	0.08729	0.15	0.19	1
Titanium	0.014529	0.03	0.01	0.5
Vanadium	0.079068	0.15	0.125	0.5
Zinc	0.108432	0.2	0.305	1.5

Detection Check Standard

Matrix:	Water
Method:	200.7/6010
Preparation:	200.7P/3010
Date Analyzed:	12/31/2013
Date Prepared:	12/27/2013
Instrument:	Spectro01
TALs Batches:	124030, 123788p
Units:	mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.028176	0.5
Antimony	0.0063	0.01	0.010016	0.05
Arsenic	0.0033	0.01	0.008253	0.01
Barium	0.0022	0.005	0.004098	0.02
Beryllium	0.00134	0.002	0.004019	0.005
Boron	0.0077	0.02	0.019829	0.2
Cadmium	0.00073	0.001	0.001	0.005
Calcium	0.022	0.05	0.060829	1
Chromium	0.0016	0.002	0.003835	0.01
Cobalt	0.00063	0.001	0.000965	0.01
Copper	0.0014	0.002	0.002451	0.01
Iron	0.087	0.1	0.002258	0.4
Lithium	0.0024	0.005	0.006107	0.2
Lead	0.0029	0.005	0.005478	0.01
Selenium	0.0042	0.01	0.009953	0.04
Manganese	0.00084	0.002	0.001988	0.01
Molybdenum	0.0027	0.005	0.005867	0.01
Nickel	0.00179	0.005	0.005669	0.01
Silver	0.0012	0.0025	0.001901	0.01
Sodium	0.02	0.05	0.088115	1
Strontium	0.0005	0.001	0.000897	0.005
Thallium	0.0078	0.02	0.021503	0.03
Tin	0.0028	0.005	0.005708	0.01
Titanium	0.0011	0.002	0.001905	0.01
Vanadium	0.0017	0.002	0.003578	0.01
Zinc	0.0022	0.005	0.004189	0.01

Detection Check Standard

Matrix:	Soil
Method:	8082
Preparation:	3550
Date Analyzed:	7/18/2013
Date Prepared:	7/18/2013
TALs Batches:	600-111090/2,4,5,6,7,8,9-a
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aroclor 1016	1.6	8.3	7.03	16.7
Aroclor 1221	8.63	16.67	12.33	16.7
Aroclor 1232	6.7	16.67	10.76	16.7
Aroclor 1242	1.6	16.67	9.59	16.7
Aroclor 1248	2.49	16.67	11.92	16.7
Aroclor 1254	2.21	16.67	10.54	16.7
Aroclor 1262	13.5	16.67	14.13	16.7
Aroclor 1260	13.5	8.3	9.16	16.7

Job ID: 600-85389-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-85389-1

Comments

This report was revised February 14, 2014 updating the TRRP check list adding a MS/MSD reference for metals, replacing the final report generated on 01/20/14. The report was again revised on 03/05/14 to report total metals for samples 18, 20, 23, 29 and 63 replacing the final report generated on 02/14/14. The report was revised on 03/25/14 to update the RPD for 8082 LCS/LCSD, replacing the final report generated on 03/05/14. The report was again revised on 05/09/14 to report cadmium for samples 12 and 14 per client request, replacing the final report generated on 03/25/14. See attached email.

Receipt

The samples were received on 1/11/2014 11:47 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.5º C and 2.0º C.

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL HOU
6010B	Metals (ICP)	SW846	TAL HOU
Moisture	Percent Moisture	EPA	TAL HOU

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 HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-85389-1	MW-44 (0-0.5)	Solid	01/09/14 12:45	01/11/14 11:47
600-85389-5	2013-AD-1A (0-0.5)	Solid	01/09/14 13:42	01/11/14 11:47
600-85389-7	2013-FOP-1A (0-0.5)	Solid	01/09/14 13:58	01/11/14 11:47
600-85389-8	2013-AD-5 (0-0.5)	Solid	01/09/14 14:12	01/11/14 11:47
600-85389-11	2013-WMU14-1A (0.9-2)	Solid	01/09/14 14:40	01/11/14 11:47
600-85389-12	2013-WMU14-1A (5-7)	Solid	01/09/14 14:44	01/11/14 11:47
600-85389-13	MW-30A (2-4)	Solid	01/09/14 15:08	01/11/14 11:47
600-85389-14	DUP 7	Solid	01/09/14 00:00	01/11/14 11:47
600-85389-15	DUP 8	Solid	01/09/14 00:00	01/11/14 11:47
600-85389-20	ECO-8A (0-0.5)	Solid	01/09/14 15:59	01/11/14 11:47
600-85389-21	2013-SDA-3B (0-0.5)	Solid	01/09/14 16:05	01/11/14 11:47
600-85389-22	RINSE BLANK-CME	Water	01/09/14 08:25	01/11/14 11:47
600-85389-23	2013-AD-03 (0-0.5)	Solid	01/09/14 13:10	01/10/14 10:31
600-85389-26	MW-36 (0-2)	Solid	01/10/14 09:00	01/11/14 11:47
600-85389-27	MW-35 (1-3)	Solid	01/10/14 10:00	01/11/14 11:47
600-85389-29	SCC-5B (0-0.5)	Solid	01/10/14 08:51	01/11/14 11:47
600-85389-30	SCC-5A (0-0.5)	Solid	01/10/14 08:59	01/11/14 11:47
600-85389-31	2013-CUFT-14 (0-2)	Solid	01/10/14 09:13	01/11/14 11:47
600-85389-33	2013-CUFT-11 (0-0.5)	Solid	01/10/14 09:18	01/11/14 11:47
600-85389-37	2013-CUFT-5A (0-0.5)	Solid	01/10/14 09:43	01/11/14 11:47
600-85389-39	2013-CUFT-5D (2-4)	Solid	01/10/14 09:53	01/11/14 11:47
600-85389-43	2013-CUFT-6A (0-0.5)	Solid	01/10/14 10:14	01/11/14 11:47
600-85389-45	2013-CUFT-6C (2-4)	Solid	01/10/14 10:23	01/11/14 11:47
600-85389-49	DUP 9	Solid	01/10/14 00:00	01/11/14 11:47
600-85389-50	2013-CUFT-6B (0-0.5)	Solid	01/10/14 10:41	01/11/14 11:47
600-85389-51	2013-CUFT-5C (0-0.5)	Solid	01/10/14 10:51	01/11/14 11:47
600-85389-52	2013-CUFT-7B (0-0.5)	Solid	01/10/14 11:08	01/11/14 11:47
600-85389-53	2013-CUFT-7B (2-4)	Solid	01/10/14 11:09	01/11/14 11:47
600-85389-58	2013-CUFT-10D (2-4)	Solid	01/10/14 11:26	01/11/14 11:47
600-85389-62	2013-CUFT-10A (0-0.5)	Solid	01/10/14 11:41	01/11/14 11:47
600-85389-63	2013-CUFT-10B (0-0.5)	Solid	01/10/14 11:48	01/11/14 11:47
600-85389-64	2013-CUFT-10C (0-0.5)	Solid	01/10/14 11:55	01/11/14 11:47

Client Sample ID: MW-44 (0-0.5)

Lab Sample ID: 600-85389-1
Date Collected: 01/09/14 12:45
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 76.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.689	b	0.316	0.0324	mg/Kg	☼	01/14/14 12:46	01/15/14 13:30	1
Lead	38.6		0.633	0.133	mg/Kg	☼	01/14/14 12:46	01/15/14 13:30	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	77		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-AD-1A (0-0.5)

Lab Sample ID: 600-85389-5
Date Collected: 01/09/14 13:42
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 70.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.22	b	0.353	0.0362	mg/Kg	☼	01/14/14 12:46	01/15/14 13:32	1
Lead	452		0.705	0.148	mg/Kg	☼	01/14/14 12:46	01/15/14 13:32	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	30		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	70		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-FOP-1A (0-0.5)

Lab Sample ID: 600-85389-7
Date Collected: 01/09/14 13:58
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 81.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	85.1		0.609	0.128	mg/Kg	☼	01/14/14 12:46	01/15/14 13:34	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	81		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-AD-5 (0-0.5)

Lab Sample ID: 600-85389-8
Date Collected: 01/09/14 14:12
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 82.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	7.39	b	0.287	0.0294	mg/Kg	☼	01/14/14 12:46	01/15/14 13:37	1
Lead	2320		0.573	0.120	mg/Kg	☼	01/14/14 12:46	01/15/14 13:37	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	82		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-WMU14-1A (0.9-2)

Lab Sample ID: 600-85389-11
Date Collected: 01/09/14 14:40
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 80.8

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	35500		11.5	2.40	mg/Kg	☼	01/14/14 12:46	01/16/14 08:42	20

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	81		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-WMU14-1A (5-7)

Lab Sample ID: 600-85389-12
Date Collected: 01/09/14 14:44
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 72.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.14	b	0.324	0.0332	mg/Kg	☼	01/14/14 12:46	01/15/14 13:00	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	17000		13.0	2.72	mg/Kg	☼	01/14/14 12:46	01/16/14 08:44	20

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	27		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	73		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: MW-30A (2-4)

Lab Sample ID: 600-85389-13
Date Collected: 01/09/14 15:08
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 85.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	52.4		0.571	0.120	mg/Kg	☼	01/14/14 12:46	01/15/14 13:42	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	85		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: DUP 7

Lab Sample ID: 600-85389-14
Date Collected: 01/09/14 00:00
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 67.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.51	b	0.342	0.0350	mg/Kg	☼	01/14/14 12:46	01/15/14 13:59	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	10500		13.7	2.86	mg/Kg	☼	01/14/14 12:46	01/16/14 08:53	20

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	33		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: DUP 7

Lab Sample ID: 600-85389-14

Date Collected: 01/09/14 00:00
Matrix: Solid
Date Received: 01/11/14 11:47

General Chemistry (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	67		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: DUP 8

Lab Sample ID: 600-85389-15

Date Collected: 01/09/14 00:00
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 77.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	28.9		0.609	0.128	mg/Kg	☼	01/14/14 12:46	01/15/14 14:02	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	77		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: ECO-8A (0-0.5)

Lab Sample ID: 600-85389-20

Date Collected: 01/09/14 15:59
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 78.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	6.70		2.93	0.271	mg/Kg	☼	01/14/14 12:46	01/15/14 14:12	1
Arsenic	13.1		1.17	0.255	mg/Kg	☼	01/14/14 12:46	01/15/14 14:12	1
Cadmium	5.65	b	0.293	0.0300	mg/Kg	☼	01/14/14 12:46	01/15/14 14:12	1
Lead	1090		0.586	0.123	mg/Kg	☼	01/14/14 12:46	01/15/14 14:12	1
Selenium	0.486	J	2.34	0.303	mg/Kg	☼	01/14/14 12:46	01/15/14 14:12	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	78		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-SDA-3B (0-0.5)

Lab Sample ID: 600-85389-21

Date Collected: 01/09/14 16:05
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 83.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	4.02	b	0.292	0.0299	mg/Kg	☼	01/14/14 12:46	01/15/14 14:14	1
Lead	1000		0.583	0.122	mg/Kg	☼	01/14/14 12:46	01/15/14 14:14	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	83		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: RINSE BLANK-CME

Lab Sample ID: 600-85389-22

Date Collected: 01/09/14 08:25
Matrix: Water
Date Received: 01/11/14 11:47

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U ^	0.00500	0.000350	mg/L		01/13/14 16:05	01/15/14 13:00	1
Lead	0.00290	U ^	0.0100	0.00290	mg/L		01/13/14 16:05	01/15/14 13:00	1

Client Sample ID: 2013-AD-03 (0-0.5)

Lab Sample ID: 600-85389-23

Date Collected: 01/09/14 13:10
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 89.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.92		2.63	0.244	mg/Kg	☼	01/15/14 12:30	01/16/14 10:09	1
Arsenic	11.0		1.05	0.229	mg/Kg	☼	01/15/14 12:30	01/16/14 10:09	1
Cadmium	1.51		0.263	0.0270	mg/Kg	☼	01/15/14 12:30	01/16/14 10:09	1
Lead	734		0.526	0.110	mg/Kg	☼	01/15/14 12:30	01/16/14 10:09	1
Selenium	0.295	J	2.10	0.272	mg/Kg	☼	01/15/14 12:30	01/16/14 10:09	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	10		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	90		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: MW-36 (0-2)

Lab Sample ID: 600-85389-26

Date Collected: 01/10/14 09:00
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 72.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	2.74	b	0.333	0.0341	mg/Kg	☼	01/14/14 12:46	01/15/14 14:17	1
Lead	3120		0.665	0.139	mg/Kg	☼	01/14/14 12:46	01/15/14 14:17	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	28		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	72		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: MW-35 (1-3)

Lab Sample ID: 600-85389-27

Date Collected: 01/10/14 10:00
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 73.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	40.0		0.335	0.0343	mg/Kg	☼	01/14/14 14:21	01/15/14 14:31	1
Lead	3300		0.669	0.140	mg/Kg	☼	01/14/14 14:21	01/15/14 14:31	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	27		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	73		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: SCC-5B (0-0.5)

Lab Sample ID: 600-85389-29

Date Collected: 01/10/14 08:51
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 79.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.11		2.89	0.267	mg/Kg	☼	01/14/14 14:21	01/15/14 14:36	1
Arsenic	11.1		1.16	0.252	mg/Kg	☼	01/14/14 14:21	01/15/14 14:36	1
Cadmium	2.48		0.289	0.0296	mg/Kg	☼	01/14/14 14:21	01/15/14 14:36	1
Lead	1400		0.578	0.121	mg/Kg	☼	01/14/14 14:21	01/15/14 14:36	1
Selenium	0.299	U	2.31	0.299	mg/Kg	☼	01/14/14 14:21	01/15/14 14:36	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	79		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: SCC-5A (0-0.5)

Lab Sample ID: 600-85389-30

Date Collected: 01/10/14 08:59
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 77.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.258	J	0.301	0.0308	mg/Kg	☼	01/14/14 14:21	01/15/14 14:38	1
Lead	29.8		0.601	0.126	mg/Kg	☼	01/14/14 14:21	01/15/14 14:38	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	77		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-CUFT-14 (0-2)

Lab Sample ID: 600-85389-31

Date Collected: 01/10/14 09:13
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 85.1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.00188	U	0.0196	0.00188	mg/Kg	☼	01/13/14 14:23	01/14/14 17:19	1
PCB-1221	0.0101	U	0.0196	0.0101	mg/Kg	☼	01/13/14 14:23	01/14/14 17:19	1
PCB-1232	0.00786	U	0.0196	0.00786	mg/Kg	☼	01/13/14 14:23	01/14/14 17:19	1
PCB-1242	0.00145	U	0.0196	0.00145	mg/Kg	☼	01/13/14 14:23	01/14/14 17:19	1
PCB-1248	0.00292	U	0.0196	0.00292	mg/Kg	☼	01/13/14 14:23	01/14/14 17:19	1
PCB-1254	0.00259	U	0.0196	0.00259	mg/Kg	☼	01/13/14 14:23	01/14/14 17:19	1
PCB-1260	0.0158	U	0.0196	0.0158	mg/Kg	☼	01/13/14 14:23	01/14/14 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*118*		*58 - 164*	*01/13/14 14:23*	*01/14/14 17:19*	*1*
DCB Decachlorobiphenyl	*111*		*70 - 164*	*01/13/14 14:23*	*01/14/14 17:19*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.240	J	0.280	0.0287	mg/Kg	☼	01/14/14 14:21	01/15/14 14:48	1
Lead	14.7		0.559	0.117	mg/Kg	☼	01/14/14 14:21	01/15/14 14:48	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-CUFT-14 (0-2)

Lab Sample ID: 600-85389-31

Date Collected: 01/10/14 09:13
Matrix: Solid
Date Received: 01/11/14 11:47

General Chemistry (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-CUFT-11 (0-0.5)

Lab Sample ID: 600-85389-33

Date Collected: 01/10/14 09:18
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 73.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	51.1		0.634	0.133	mg/Kg	☼	01/14/14 14:21	01/15/14 14:57	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	74		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: 2013-CUFT-5A (0-0.5)

Lab Sample ID: 600-85389-37

Date Collected: 01/10/14 09:43
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 76.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.492		0.328	0.0336	mg/Kg	☼	01/14/14 14:21	01/15/14 15:02	1
Lead	87.8		0.656	0.138	mg/Kg	☼	01/14/14 14:21	01/15/14 15:02	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	76		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-CUFT-5D (2-4)

Lab Sample ID: 600-85389-39

Date Collected: 01/10/14 09:53
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 74.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.564		0.310	0.0318	mg/Kg	☼	01/14/14 14:21	01/15/14 15:05	1
Lead	20.0		0.620	0.130	mg/Kg	☼	01/14/14 14:21	01/15/14 15:05	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	74		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-CUFT-6A (0-0.5)

Lab Sample ID: 600-85389-43

Date Collected: 01/10/14 10:14
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 82.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.50		0.292	0.0299	mg/Kg	☼	01/14/14 14:21	01/15/14 15:07	1
Lead	603		0.583	0.122	mg/Kg	☼	01/14/14 14:21	01/15/14 15:07	1

Client Sample ID: 2013-CUFT-6A (0-0.5)

Lab Sample ID: 600-85389-43

Date Collected: 01/10/14 10:14
Matrix: Solid
Date Received: 01/11/14 11:47

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	82		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-CUFT-6C (2-4)

Lab Sample ID: 600-85389-45

Date Collected: 01/10/14 10:23
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 74.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.760		0.330	0.0339	mg/Kg	☼	01/14/14 14:21	01/15/14 15:10	1
Lead	20.3		0.661	0.139	mg/Kg	☼	01/14/14 14:21	01/15/14 15:10	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	75		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: DUP 9

Lab Sample ID: 600-85389-49

Date Collected: 01/10/14 00:00
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 72.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.888		0.315	0.0323	mg/Kg	☼	01/14/14 14:21	01/15/14 15:20	1
Lead	21.6		0.630	0.132	mg/Kg	☼	01/14/14 14:21	01/15/14 15:20	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	27		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	73		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-CUFT-6B (0-0.5)

Lab Sample ID: 600-85389-50

Date Collected: 01/10/14 10:41
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 73.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.624		0.312	0.0320	mg/Kg	☼	01/14/14 14:21	01/15/14 15:29	1
Lead	26.5		0.624	0.131	mg/Kg	☼	01/14/14 14:21	01/15/14 15:29	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	27		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	73		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-CUFT-5C (0-0.5)

Lab Sample ID: 600-85389-51

Date Collected: 01/10/14 10:51
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 75.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.719		0.324	0.0332	mg/Kg	☼	01/14/14 14:21	01/15/14 15:32	1
Lead	60.0		0.648	0.136	mg/Kg	☼	01/14/14 14:21	01/15/14 15:32	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	75		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-CUFT-7B (0-0.5)

Lab Sample ID: 600-85389-52

Date Collected: 01/10/14 11:08
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 72.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.545		0.332	0.0341	mg/Kg	☼	01/15/14 12:30	01/16/14 10:11	1
Lead	48.0		0.665	0.139	mg/Kg	☼	01/15/14 12:30	01/16/14 10:11	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	28		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	72		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: 2013-CUFT-7B (2-4)

Lab Sample ID: 600-85389-53

Date Collected: 01/10/14 11:09
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 77.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.730		0.317	0.0326	mg/Kg	☼	01/14/14 14:21	01/15/14 15:34	1
Lead	41.8		0.635	0.133	mg/Kg	☼	01/14/14 14:21	01/15/14 15:34	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	77		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-CUFT-10D (2-4)

Lab Sample ID: 600-85389-58

Date Collected: 01/10/14 11:26
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 73.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.606		0.326	0.0334	mg/Kg	☼	01/14/14 14:21	01/15/14 15:36	1
Lead	16.6		0.652	0.137	mg/Kg	☼	01/14/14 14:21	01/15/14 15:36	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	27		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	73		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-CUFT-10A (0-0.5)

Lab Sample ID: 600-85389-62

Date Collected: 01/10/14 11:41
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 76.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.618		0.319	0.0327	mg/Kg	☼	01/14/14 14:21	01/15/14 15:39	1
Lead	76.1		0.637	0.134	mg/Kg	☼	01/14/14 14:21	01/15/14 15:39	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	76		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-CUFT-10B (0-0.5)

Lab Sample ID: 600-85389-63

Date Collected: 01/10/14 11:48
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 74.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.19	J	3.09	0.286	mg/Kg	☼	01/14/14 14:21	01/15/14 15:41	1
Arsenic	11.1		1.24	0.269	mg/Kg	☼	01/14/14 14:21	01/15/14 15:41	1
Cadmium	2.19		0.309	0.0317	mg/Kg	☼	01/14/14 14:21	01/15/14 15:41	1
Lead	1290		0.618	0.130	mg/Kg	☼	01/14/14 14:21	01/15/14 15:41	1
Selenium	0.414	J	2.47	0.320	mg/Kg	☼	01/14/14 14:21	01/15/14 15:41	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	75		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-CUFT-10C (0-0.5)

Lab Sample ID: 600-85389-64

Date Collected: 01/10/14 11:55
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 74.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.878		0.318	0.0326	mg/Kg	☼	01/14/14 14:21	01/15/14 15:44	1
Lead	92.7		0.637	0.133	mg/Kg	☼	01/14/14 14:21	01/15/14 15:44	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	75		1.0	1.0	%			01/13/14 13:24	1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

Metals

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
F	Duplicate RPD exceeds the control limit
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N	MS, MSD: Spike recovery exceeds upper or lower control limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Analyte was not detected at or above the SDL.
N	RPD of the MS and MSD exceeds the control limits
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.

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
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)

Surrogate Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		TCX2	DCB2								
Lab Sample ID	Client Sample ID	(58-164)	(70-164)								
600-85389-31	2013-CUFT-14 (0-2)	118	111								
LCS 600-124838/2-A	Lab Control Sample	83	106								
MB 600-124838/1-A	Method Blank	91	110								

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 600-124838/1-A
Matrix: Solid
Analysis Batch: 125027

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124838

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.00160	U	0.0167	0.00160	mg/Kg		01/13/14 14:23	01/14/14 15:08	1
PCB-1221	0.00863	U	0.0167	0.00863	mg/Kg		01/13/14 14:23	01/14/14 15:08	1
PCB-1232	0.00670	U	0.0167	0.00670	mg/Kg		01/13/14 14:23	01/14/14 15:08	1
PCB-1242	0.00124	U	0.0167	0.00124	mg/Kg		01/13/14 14:23	01/14/14 15:08	1
PCB-1248	0.00249	U	0.0167	0.00249	mg/Kg		01/13/14 14:23	01/14/14 15:08	1
PCB-1254	0.00221	U	0.0167	0.00221	mg/Kg		01/13/14 14:23	01/14/14 15:08	1
PCB-1260	0.0135	U	0.0167	0.0135	mg/Kg		01/13/14 14:23	01/14/14 15:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*91*		*58 - 164*	*01/13/14 14:23*	*01/14/14 15:08*	*1*
DCB Decachlorobiphenyl	*110*		*70 - 164*	*01/13/14 14:23*	*01/14/14 15:08*	*1*

Lab Sample ID: LCS 600-124838/2-A
Matrix: Solid
Analysis Batch: 125027

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124838

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.167	0.1323		mg/Kg		79	68 - 122
PCB-1260	0.167	0.1460		mg/Kg		88	10 - 158

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*83*		*58 - 164*
DCB Decachlorobiphenyl	*106*		*70 - 164*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-124862/1-A
Matrix: Water
Analysis Batch: 125051

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124862

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00630	U	0.0500	0.00630	mg/L		01/13/14 16:05	01/15/14 12:56	1
Arsenic	0.00328	U ^	0.0100	0.00328	mg/L		01/13/14 16:05	01/15/14 12:56	1
Cadmium	0.000350	U ^	0.00500	0.000350	mg/L		01/13/14 16:05	01/15/14 12:56	1
Lead	0.00290	U ^	0.0100	0.00290	mg/L		01/13/14 16:05	01/15/14 12:56	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		01/13/14 16:05	01/15/14 12:56	1

Lab Sample ID: LCS 600-124862/2-A
Matrix: Water
Analysis Batch: 125051

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124862

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.00	1.005		mg/L		101	80 - 120
Arsenic	1.00	0.9633	^	mg/L		96	80 - 120
Cadmium	0.500	0.4866	^	mg/L		97	80 - 120
Lead	1.00	1.008	^	mg/L		101	80 - 120
Selenium	1.00	0.9649		mg/L		96	80 - 120

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

Lab Sample ID: MB 600-124919/1-A
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124919

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		01/14/14 12:46	01/15/14 12:51	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		01/14/14 12:46	01/15/14 12:51	1
Cadmium	0.03000	J	0.250	0.0256	mg/Kg		01/14/14 12:46	01/15/14 12:51	1
Lead	0.105	U	0.500	0.105	mg/Kg		01/14/14 12:46	01/15/14 12:51	1
Selenium	0.259	U	2.00	0.259	mg/Kg		01/14/14 12:46	01/15/14 12:51	1

Lab Sample ID: LCSSRM 600-124919/2-A
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124919

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	101.7		mg/Kg		115.3	45.4 - 231.3
Arsenic	99.6	99.60		mg/Kg		100.0	80.8 - 119.5
Cadmium	182	190.9		mg/Kg		104.9	81.9 - 118.1
Lead	115	115.8		mg/Kg		100.7	81.8 - 119.1
Selenium	150	147.1		mg/Kg		98.1	77.3 - 122.7

Lab Sample ID: 600-85389-12 MS
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: 2013-WMU14-1A (5-7)
Prep Type: Total/NA
Prep Batch: 124919

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	73.3		66.0	29.00	N	mg/Kg	☼	-67	75 - 125
Arsenic	52.6		66.0	77.29	N	mg/Kg	☼	37	75 - 125
Cadmium	5.14	b	33.0	34.10		mg/Kg	☼	88	75 - 125
Lead	15500		66.0	132.8	4	mg/Kg	☼	-23248	75 - 125
Selenium	0.434		66.0	58.10		mg/Kg	☼	87	75 - 125

Lab Sample ID: 600-85389-12 MSD
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: 2013-WMU14-1A (5-7)
Prep Type: Total/NA
Prep Batch: 124919

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	73.3		66.6	32.10	N	mg/Kg	☼	-62	75 - 125	10	20
Arsenic	52.6		66.6	78.57	N	mg/Kg	☼	39	75 - 125	2	20
Cadmium	5.14	b	33.3	33.95		mg/Kg	☼	86	75 - 125	0	20
Lead	15500		66.6	121.2	4	mg/Kg	☼	-23042	75 - 125	9	20
Selenium	0.434		66.6	58.33		mg/Kg	☼	87	75 - 125	0	20

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

Lab Sample ID: 600-85389-13 MS
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: MW-30A (2-4)
Prep Type: Total/NA
Prep Batch: 124919

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.55		58.2	24.49	N	mg/Kg	☼	39	75 - 125
Arsenic	8.87		58.2	61.35		mg/Kg	☼	90	75 - 125
Cadmium	1.15		29.1	29.13		mg/Kg	☼	96	75 - 125
Lead	52.4		58.2	89.21	N	mg/Kg	☼	63	75 - 125
Selenium	0.295		58.2	49.34		mg/Kg	☼	85	75 - 125

Lab Sample ID: 600-85389-13 MSD
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: MW-30A (2-4)
Prep Type: Total/NA
Prep Batch: 124919

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.55		55.4	21.12	N	mg/Kg	☼	35	75 - 125	15	20
Arsenic	8.87		55.4	60.23		mg/Kg	☼	93	75 - 125	2	20
Cadmium	1.15		27.7	27.95		mg/Kg	☼	97	75 - 125	4	20
Lead	52.4		55.4	69.10	N	mg/Kg	☼	30	75 - 125	25	20
Selenium	0.295		55.4	46.99		mg/Kg	☼	85	75 - 125	5	20

Lab Sample ID: 600-85389-12 DU
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: 2013-WMU14-1A (5-7)
Prep Type: Total/NA
Prep Batch: 124919

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	73.3		60.00		mg/Kg	☼	20	20
Arsenic	52.6		42.82	F	mg/Kg	☼	21	20
Cadmium	5.14	b	8.174	F	mg/Kg	☼	46	20
Selenium	0.434		0.3904	J	mg/Kg	☼	11	20

Lab Sample ID: 600-85389-13 DU
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: MW-30A (2-4)
Prep Type: Total/NA
Prep Batch: 124919

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	1.55		0.254	U	mg/Kg	☼	NC	20
Arsenic	8.87		8.996		mg/Kg	☼	1	20
Cadmium	1.15		0.4284	F	mg/Kg	☼	92	20
Lead	52.4		17.32	F	mg/Kg	☼	101	20
Selenium	0.295		0.284	U	mg/Kg	☼	NC	20

Lab Sample ID: MB 600-124939/1-A
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124939

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		01/14/14 14:21	01/15/14 14:26	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		01/14/14 14:21	01/15/14 14:26	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		01/14/14 14:21	01/15/14 14:26	1
Lead	0.105	U	0.500	0.105	mg/Kg		01/14/14 14:21	01/15/14 14:26	1
Selenium	0.259	U	2.00	0.259	mg/Kg		01/14/14 14:21	01/15/14 14:26	1

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

Lab Sample ID: LCSSRM 600-124939/2-A
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124939

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony			88.2	76.41		mg/Kg		86.6	45.4 - 231.3		
Arsenic			99.6	93.75		mg/Kg		94.1	80.8 - 119.5		
Cadmium			182	178.7		mg/Kg		98.2	81.9 - 118.1		
Lead			115	102.8		mg/Kg		89.4	81.8 - 119.1		
Selenium			150	142.5		mg/Kg		95.0	77.3 - 122.7		

Lab Sample ID: 600-85389-30 MS
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: SCC-5A (0-0.5)
Prep Type: Total/NA
Prep Batch: 124939

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony	0.278		59.6	23.01	N1	mg/Kg	☼	39	75 - 125		
Arsenic	10.2		59.6	59.62		mg/Kg	☼	83	75 - 125		
Cadmium	0.258	J	29.8	29.29		mg/Kg	☼	97	75 - 125		
Lead	29.8		59.6	81.42		mg/Kg	☼	87	75 - 125		
Selenium	0.311		59.6	49.96		mg/Kg	☼	84	75 - 125		

Lab Sample ID: 600-85389-30 MSD
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: SCC-5A (0-0.5)
Prep Type: Total/NA
Prep Batch: 124939

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.278		64.3	25.86	N1	mg/Kg	☼	40	75 - 125	12	20
Arsenic	10.2		64.3	65.88		mg/Kg	☼	87	75 - 125	10	20
Cadmium	0.258	J	32.1	32.20		mg/Kg	☼	99	75 - 125	9	20
Lead	29.8		64.3	84.01		mg/Kg	☼	84	75 - 125	3	20
Selenium	0.311		64.3	55.00		mg/Kg	☼	86	75 - 125	10	20

Lab Sample ID: 600-85389-45 MS
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: 2013-CUFT-6C (2-4)
Prep Type: Total/NA
Prep Batch: 124939

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony	0.306		64.3	24.62	N	mg/Kg	☼	38	75 - 125		
Arsenic	10.3		64.3	61.10		mg/Kg	☼	79	75 - 125		
Cadmium	0.760		32.2	29.48		mg/Kg	☼	89	75 - 125		
Lead	20.3		64.3	75.04		mg/Kg	☼	85	75 - 125		
Selenium	0.342		64.3	50.40		mg/Kg	☼	78	75 - 125		

Lab Sample ID: 600-85389-45 MSD
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: 2013-CUFT-6C (2-4)
Prep Type: Total/NA
Prep Batch: 124939

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.306		66.8	25.47	N	mg/Kg	☼	38	75 - 125	3	20

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

Lab Sample ID: 600-85389-45 MSD — **Client Sample ID: 2013-CUFT-6C (2-4)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125010 — **Prep Batch: 124939**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	10.3		66.8	71.84		mg/Kg	☼	92	75 - 125	16	20
Cadmium	0.760		33.4	35.46		mg/Kg	☼	104	75 - 125	18	20
Lead	20.3		66.8	81.59		mg/Kg	☼	92	75 - 125	8	20
Selenium	0.342		66.8	60.50		mg/Kg	☼	91	75 - 125	18	20

Lab Sample ID: 600-85389-30 DU — **Client Sample ID: SCC-5A (0-0.5)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125010 — **Prep Batch: 124939**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.278		0.289	U	mg/Kg	☼	NC	20
Arsenic	10.2		9.757		mg/Kg	☼	5	20
Cadmium	0.258	J	0.2622	J	mg/Kg	☼	1	20
Lead	29.8		24.66		mg/Kg	☼	19	20
Selenium	0.311		0.323	U	mg/Kg	☼	NC	20

Lab Sample ID: 600-85389-45 DU — **Client Sample ID: 2013-CUFT-6C (2-4)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125010 — **Prep Batch: 124939**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.306		0.284	U	mg/Kg	☼	NC	20
Arsenic	10.3		12.35		mg/Kg	☼	18	20
Cadmium	0.760		1.892	F	mg/Kg	☼	85	20
Lead	20.3		30.35	F	mg/Kg	☼	40	20
Selenium	0.342		0.317	U	mg/Kg	☼	NC	20

Lab Sample ID: MB 600-125018/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125110 — **Prep Batch: 125018**

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		01/15/14 12:30	01/16/14 09:51	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		01/15/14 12:30	01/16/14 09:51	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		01/15/14 12:30	01/16/14 09:51	1
Lead	0.105	U	0.500	0.105	mg/Kg		01/15/14 12:30	01/16/14 09:51	1
Selenium	0.259	U	2.00	0.259	mg/Kg		01/15/14 12:30	01/16/14 09:51	1

Lab Sample ID: LCSSRM 600-125018/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125110 — **Prep Batch: 125018**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	59.66		mg/Kg		67.6	45.4 - 231.3
Arsenic	99.6	98.49		mg/Kg		98.9	80.8 - 119.5
Cadmium	182	178.7		mg/Kg		98.2	81.9 - 118.1

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

Lab Sample ID: LCSSRM 600-125018/2-A
Matrix: Solid
Analysis Batch: 125110

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125018

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	115	110.8		mg/Kg		96.3	81.8 - 119.1
Selenium	150	144.7		mg/Kg		96.5	77.3 - 122.7

Method: 6010B - Metals (ICP) - DL

Lab Sample ID: 600-85389-12 DU
Matrix: Solid
Analysis Batch: 125083

Client Sample ID: 2013-WMU14-1A (5-7)
Prep Type: Total/NA
Prep Batch: 124919

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead - DL	17000		14430		mg/Kg	☼	16	20

Method: Moisture - Percent Moisture

Lab Sample ID: 600-85389-7 DU
Matrix: Solid
Analysis Batch: 124801

Client Sample ID: 2013-FOP-1A (0-0.5)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	19		19		%		3	20
Percent Solids	81		81		%		0.8	20

Lab Sample ID: 600-85389-20 DU
Matrix: Solid
Analysis Batch: 124801

Client Sample ID: ECO-8A (0-0.5)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	22		22		%		0.7	20
Percent Solids	78		78		%		0.2	20

Lab Sample ID: 600-85389-39 DU
Matrix: Solid
Analysis Batch: 124801

Client Sample ID: 2013-CUFT-5D (2-4)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	26		27		%		3	20
Percent Solids	74		73		%		1	20

Lab Sample ID: 600-85389-64 DU
Matrix: Solid
Analysis Batch: 124801

Client Sample ID: 2013-CUFT-10C (0-0.5)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	25		31		%		20	20
Percent Solids	75		69		%		8	20

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	MQL	MDL	Units	Method
PCB-1016	0.0167	0.00160	mg/Kg	8082
PCB-1221	0.0167	0.00863	mg/Kg	8082
PCB-1232	0.0167	0.00670	mg/Kg	8082
PCB-1242	0.0167	0.00124	mg/Kg	8082
PCB-1248	0.0167	0.00249	mg/Kg	8082
PCB-1254	0.0167	0.00221	mg/Kg	8082
PCB-1260	0.0167	0.0135	mg/Kg	8082

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Antimony	2.50	0.232	mg/Kg	6010B
Arsenic	1.00	0.218	mg/Kg	6010B
Cadmium	0.250	0.0256	mg/Kg	6010B
Cadmium	0.00500	0.000350	mg/L	6010B
Lead	0.500	0.105	mg/Kg	6010B
Lead	0.0100	0.00290	mg/L	6010B
Selenium	2.00	0.259	mg/Kg	6010B

General Chemistry

Analyte	MQL	MDL	Units	Method
Percent Moisture	1.0	1.0	%	Moisture
Percent Solids	1.0	1.0	%	Moisture

GC Semi VOA

Prep Batch: 124838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-31	2013-CUFT-14 (0-2)	Total/NA	Solid	3546	
LCS 600-124838/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 600-124838/1-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 125027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-31	2013-CUFT-14 (0-2)	Total/NA	Solid	8082	124838
LCS 600-124838/2-A	Lab Control Sample	Total/NA	Solid	8082	124838
MB 600-124838/1-A	Method Blank	Total/NA	Solid	8082	124838

Metals

Prep Batch: 124862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-22	RINSE BLANK-CME	Total/NA	Water	3010A	
LCS 600-124862/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-124862/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 124919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-1	MW-44 (0-0.5)	Total/NA	Solid	3050B	
600-85389-5	2013-AD-1A (0-0.5)	Total/NA	Solid	3050B	
600-85389-7	2013-FOP-1A (0-0.5)	Total/NA	Solid	3050B	
600-85389-8	2013-AD-5 (0-0.5)	Total/NA	Solid	3050B	
600-85389-11 - DL	2013-WMU14-1A (0.9-2)	Total/NA	Solid	3050B	
600-85389-12 - DL	2013-WMU14-1A (5-7)	Total/NA	Solid	3050B	
600-85389-12	2013-WMU14-1A (5-7)	Total/NA	Solid	3050B	
600-85389-12 DU	2013-WMU14-1A (5-7)	Total/NA	Solid	3050B	
600-85389-12 DU - DL	2013-WMU14-1A (5-7)	Total/NA	Solid	3050B	
600-85389-12 MS	2013-WMU14-1A (5-7)	Total/NA	Solid	3050B	
600-85389-12 MSD	2013-WMU14-1A (5-7)	Total/NA	Solid	3050B	
600-85389-13	MW-30A (2-4)	Total/NA	Solid	3050B	
600-85389-13 DU	MW-30A (2-4)	Total/NA	Solid	3050B	
600-85389-13 MS	MW-30A (2-4)	Total/NA	Solid	3050B	
600-85389-13 MSD	MW-30A (2-4)	Total/NA	Solid	3050B	
600-85389-14 - DL	DUP 7	Total/NA	Solid	3050B	
600-85389-14	DUP 7	Total/NA	Solid	3050B	
600-85389-15	DUP 8	Total/NA	Solid	3050B	
600-85389-20	ECO-8A (0-0.5)	Total/NA	Solid	3050B	
600-85389-21	2013-SDA-3B (0-0.5)	Total/NA	Solid	3050B	
600-85389-26	MW-36 (0-2)	Total/NA	Solid	3050B	
LCSSRM 600-124919/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-124919/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 124939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-27	MW-35 (1-3)	Total/NA	Solid	3050B	
600-85389-29	SCC-5B (0-0.5)	Total/NA	Solid	3050B	
600-85389-30	SCC-5A (0-0.5)	Total/NA	Solid	3050B	
600-85389-30 DU	SCC-5A (0-0.5)	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 124939 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-30 MS	SCC-5A (0-0.5)	Total/NA	Solid	3050B	
600-85389-30 MSD	SCC-5A (0-0.5)	Total/NA	Solid	3050B	
600-85389-31	2013-CUFT-14 (0-2)	Total/NA	Solid	3050B	
600-85389-33	2013-CUFT-11 (0-0.5)	Total/NA	Solid	3050B	
600-85389-37	2013-CUFT-5A (0-0.5)	Total/NA	Solid	3050B	
600-85389-39	2013-CUFT-5D (2-4)	Total/NA	Solid	3050B	
600-85389-43	2013-CUFT-6A (0-0.5)	Total/NA	Solid	3050B	
600-85389-45	2013-CUFT-6C (2-4)	Total/NA	Solid	3050B	
600-85389-45 DU	2013-CUFT-6C (2-4)	Total/NA	Solid	3050B	
600-85389-45 MS	2013-CUFT-6C (2-4)	Total/NA	Solid	3050B	
600-85389-45 MSD	2013-CUFT-6C (2-4)	Total/NA	Solid	3050B	
600-85389-49	DUP 9	Total/NA	Solid	3050B	
600-85389-50	2013-CUFT-6B (0-0.5)	Total/NA	Solid	3050B	
600-85389-51	2013-CUFT-5C (0-0.5)	Total/NA	Solid	3050B	
600-85389-53	2013-CUFT-7B (2-4)	Total/NA	Solid	3050B	
600-85389-58	2013-CUFT-10D (2-4)	Total/NA	Solid	3050B	
600-85389-62	2013-CUFT-10A (0-0.5)	Total/NA	Solid	3050B	
600-85389-63	2013-CUFT-10B (0-0.5)	Total/NA	Solid	3050B	
600-85389-64	2013-CUFT-10C (0-0.5)	Total/NA	Solid	3050B	
LCSSRM 600-124939/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-124939/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 125010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-1	MW-44 (0-0.5)	Total/NA	Solid	6010B	124919
600-85389-5	2013-AD-1A (0-0.5)	Total/NA	Solid	6010B	124919
600-85389-7	2013-FOP-1A (0-0.5)	Total/NA	Solid	6010B	124919
600-85389-8	2013-AD-5 (0-0.5)	Total/NA	Solid	6010B	124919
600-85389-12	2013-WMU14-1A (5-7)	Total/NA	Solid	6010B	124919
600-85389-12 DU	2013-WMU14-1A (5-7)	Total/NA	Solid	6010B	124919
600-85389-12 MS	2013-WMU14-1A (5-7)	Total/NA	Solid	6010B	124919
600-85389-12 MSD	2013-WMU14-1A (5-7)	Total/NA	Solid	6010B	124919
600-85389-13	MW-30A (2-4)	Total/NA	Solid	6010B	124919
600-85389-13 DU	MW-30A (2-4)	Total/NA	Solid	6010B	124919
600-85389-13 MS	MW-30A (2-4)	Total/NA	Solid	6010B	124919
600-85389-13 MSD	MW-30A (2-4)	Total/NA	Solid	6010B	124919
600-85389-14	DUP 7	Total/NA	Solid	6010B	124919
600-85389-15	DUP 8	Total/NA	Solid	6010B	124919
600-85389-20	ECO-8A (0-0.5)	Total/NA	Solid	6010B	124919
600-85389-21	2013-SDA-3B (0-0.5)	Total/NA	Solid	6010B	124919
600-85389-26	MW-36 (0-2)	Total/NA	Solid	6010B	124919
600-85389-27	MW-35 (1-3)	Total/NA	Solid	6010B	124939
600-85389-29	SCC-5B (0-0.5)	Total/NA	Solid	6010B	124939
600-85389-30	SCC-5A (0-0.5)	Total/NA	Solid	6010B	124939
600-85389-30 DU	SCC-5A (0-0.5)	Total/NA	Solid	6010B	124939
600-85389-30 MS	SCC-5A (0-0.5)	Total/NA	Solid	6010B	124939
600-85389-30 MSD	SCC-5A (0-0.5)	Total/NA	Solid	6010B	124939
600-85389-31	2013-CUFT-14 (0-2)	Total/NA	Solid	6010B	124939
600-85389-33	2013-CUFT-11 (0-0.5)	Total/NA	Solid	6010B	124939
600-85389-37	2013-CUFT-5A (0-0.5)	Total/NA	Solid	6010B	124939
600-85389-39	2013-CUFT-5D (2-4)	Total/NA	Solid	6010B	124939

Metals (Continued)

Analysis Batch: 125010 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-43	2013-CUFT-6A (0-0.5)	Total/NA	Solid	6010B	124939
600-85389-45	2013-CUFT-6C (2-4)	Total/NA	Solid	6010B	124939
600-85389-45 DU	2013-CUFT-6C (2-4)	Total/NA	Solid	6010B	124939
600-85389-45 MS	2013-CUFT-6C (2-4)	Total/NA	Solid	6010B	124939
600-85389-45 MSD	2013-CUFT-6C (2-4)	Total/NA	Solid	6010B	124939
600-85389-49	DUP 9	Total/NA	Solid	6010B	124939
600-85389-50	2013-CUFT-6B (0-0.5)	Total/NA	Solid	6010B	124939
600-85389-51	2013-CUFT-5C (0-0.5)	Total/NA	Solid	6010B	124939
600-85389-53	2013-CUFT-7B (2-4)	Total/NA	Solid	6010B	124939
600-85389-58	2013-CUFT-10D (2-4)	Total/NA	Solid	6010B	124939
600-85389-62	2013-CUFT-10A (0-0.5)	Total/NA	Solid	6010B	124939
600-85389-63	2013-CUFT-10B (0-0.5)	Total/NA	Solid	6010B	124939
600-85389-64	2013-CUFT-10C (0-0.5)	Total/NA	Solid	6010B	124939
LCSSRM 600-124919/2-A	Lab Control Sample	Total/NA	Solid	6010B	124919
LCSSRM 600-124939/2-A	Lab Control Sample	Total/NA	Solid	6010B	124939
MB 600-124919/1-A	Method Blank	Total/NA	Solid	6010B	124919
MB 600-124939/1-A	Method Blank	Total/NA	Solid	6010B	124939

Prep Batch: 125018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-23	2013-AD-03 (0-0.5)	Total/NA	Solid	3050B	
600-85389-52	2013-CUFT-7B (0-0.5)	Total/NA	Solid	3050B	
LCSSRM 600-125018/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-125018/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 125051

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-22	RINSE BLANK-CME	Total/NA	Water	6010B	124862
LCS 600-124862/2-A	Lab Control Sample	Total/NA	Water	6010B	124862
MB 600-124862/1-A	Method Blank	Total/NA	Water	6010B	124862

Analysis Batch: 125083

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-11 - DL	2013-WMU14-1A (0.9-2)	Total/NA	Solid	6010B	124919
600-85389-12 - DL	2013-WMU14-1A (5-7)	Total/NA	Solid	6010B	124919
600-85389-12 DU - DL	2013-WMU14-1A (5-7)	Total/NA	Solid	6010B	124919
600-85389-14 - DL	DUP 7	Total/NA	Solid	6010B	124919

Analysis Batch: 125110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-23	2013-AD-03 (0-0.5)	Total/NA	Solid	6010B	125018
600-85389-52	2013-CUFT-7B (0-0.5)	Total/NA	Solid	6010B	125018
LCSSRM 600-125018/2-A	Lab Control Sample	Total/NA	Solid	6010B	125018
MB 600-125018/1-A	Method Blank	Total/NA	Solid	6010B	125018

General Chemistry

Analysis Batch: 124801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-1	MW-44 (0-0.5)	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 124801 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-5	2013-AD-1A (0-0.5)	Total/NA	Solid	Moisture	
600-85389-7	2013-FOP-1A (0-0.5)	Total/NA	Solid	Moisture	
600-85389-7 DU	2013-FOP-1A (0-0.5)	Total/NA	Solid	Moisture	
600-85389-8	2013-AD-5 (0-0.5)	Total/NA	Solid	Moisture	
600-85389-11	2013-WMU14-1A (0.9-2)	Total/NA	Solid	Moisture	
600-85389-12	2013-WMU14-1A (5-7)	Total/NA	Solid	Moisture	
600-85389-12 MS	2013-WMU14-1A (5-7)	Total/NA	Solid	Moisture	
600-85389-12 MSD	2013-WMU14-1A (5-7)	Total/NA	Solid	Moisture	
600-85389-13	MW-30A (2-4)	Total/NA	Solid	Moisture	
600-85389-13 MS	MW-30A (2-4)	Total/NA	Solid	Moisture	
600-85389-13 MSD	MW-30A (2-4)	Total/NA	Solid	Moisture	
600-85389-14	DUP 7	Total/NA	Solid	Moisture	
600-85389-15	DUP 8	Total/NA	Solid	Moisture	
600-85389-20	ECO-8A (0-0.5)	Total/NA	Solid	Moisture	
600-85389-20 DU	ECO-8A (0-0.5)	Total/NA	Solid	Moisture	
600-85389-21	2013-SDA-3B (0-0.5)	Total/NA	Solid	Moisture	
600-85389-26	MW-36 (0-2)	Total/NA	Solid	Moisture	
600-85389-27	MW-35 (1-3)	Total/NA	Solid	Moisture	
600-85389-29	SCC-5B (0-0.5)	Total/NA	Solid	Moisture	
600-85389-30	SCC-5A (0-0.5)	Total/NA	Solid	Moisture	
600-85389-31	2013-CUFT-14 (0-2)	Total/NA	Solid	Moisture	
600-85389-37	2013-CUFT-5A (0-0.5)	Total/NA	Solid	Moisture	
600-85389-39	2013-CUFT-5D (2-4)	Total/NA	Solid	Moisture	
600-85389-39 DU	2013-CUFT-5D (2-4)	Total/NA	Solid	Moisture	
600-85389-43	2013-CUFT-6A (0-0.5)	Total/NA	Solid	Moisture	
600-85389-45	2013-CUFT-6C (2-4)	Total/NA	Solid	Moisture	
600-85389-45 MS	2013-CUFT-6C (2-4)	Total/NA	Solid	Moisture	
600-85389-45 MSD	2013-CUFT-6C (2-4)	Total/NA	Solid	Moisture	
600-85389-49	DUP 9	Total/NA	Solid	Moisture	
600-85389-50	2013-CUFT-6B (0-0.5)	Total/NA	Solid	Moisture	
600-85389-51	2013-CUFT-5C (0-0.5)	Total/NA	Solid	Moisture	
600-85389-53	2013-CUFT-7B (2-4)	Total/NA	Solid	Moisture	
600-85389-58	2013-CUFT-10D (2-4)	Total/NA	Solid	Moisture	
600-85389-62	2013-CUFT-10A (0-0.5)	Total/NA	Solid	Moisture	
600-85389-63	2013-CUFT-10B (0-0.5)	Total/NA	Solid	Moisture	
600-85389-64	2013-CUFT-10C (0-0.5)	Total/NA	Solid	Moisture	
600-85389-64 DU	2013-CUFT-10C (0-0.5)	Total/NA	Solid	Moisture	

Analysis Batch: 125061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-23	2013-AD-03 (0-0.5)	Total/NA	Solid	Moisture	
600-85389-33	2013-CUFT-11 (0-0.5)	Total/NA	Solid	Moisture	
600-85389-52	2013-CUFT-7B (0-0.5)	Total/NA	Solid	Moisture	

Client Sample ID: MW-44 (0-0.5)

Lab Sample ID: 600-85389-1

Date Collected: 01/09/14 12:45

Matrix: Solid

Date Received: 01/11/14 11:47

Percent Solids: 76.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	124919	01/14/14 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	125010	01/15/14 13:30	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-AD-1A (0-0.5)

Lab Sample ID: 600-85389-5

Date Collected: 01/09/14 13:42

Matrix: Solid

Date Received: 01/11/14 11:47

Percent Solids: 70.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	50 mL	124919	01/14/14 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	125010	01/15/14 13:32	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-FOP-1A (0-0.5)

Lab Sample ID: 600-85389-7

Date Collected: 01/09/14 13:58

Matrix: Solid

Date Received: 01/11/14 11:47

Percent Solids: 81.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	50 mL	124919	01/14/14 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	125010	01/15/14 13:34	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-AD-5 (0-0.5)

Lab Sample ID: 600-85389-8

Date Collected: 01/09/14 14:12

Matrix: Solid

Date Received: 01/11/14 11:47

Percent Solids: 82.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	124919	01/14/14 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	125010	01/15/14 13:37	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-WMU14-1A (0.9-2)

Lab Sample ID: 600-85389-11

Date Collected: 01/09/14 14:40

Matrix: Solid

Date Received: 01/11/14 11:47

Percent Solids: 80.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B	DL		1.08 g	50 mL	124919	01/14/14 12:46	NER	TAL HOU
Total/NA	Analysis	6010B	DL	20	1.08 g	50 mL	125083	01/16/14 08:42	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-WMU14-1A (5-7)

Lab Sample ID: 600-85389-12

Date Collected: 01/09/14 14:44
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 72.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	124919	01/14/14 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	125010	01/15/14 13:00	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.06 g	50 mL	124919	01/14/14 12:46	NER	TAL HOU
Total/NA	Analysis	6010B	DL	20	1.06 g	50 mL	125083	01/16/14 08:44	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: MW-30A (2-4)

Lab Sample ID: 600-85389-13

Date Collected: 01/09/14 15:08
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 85.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	124919	01/14/14 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	125010	01/15/14 13:42	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: DUP 7

Lab Sample ID: 600-85389-14

Date Collected: 01/09/14 00:00
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 67.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	50 mL	124919	01/14/14 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	125010	01/15/14 13:59	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.09 g	50 mL	124919	01/14/14 12:46	NER	TAL HOU
Total/NA	Analysis	6010B	DL	20	1.09 g	50 mL	125083	01/16/14 08:53	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: DUP 8

Lab Sample ID: 600-85389-15

Date Collected: 01/09/14 00:00
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 77.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	124919	01/14/14 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	125010	01/15/14 14:02	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: ECO-8A (0-0.5)

Lab Sample ID: 600-85389-20

Date Collected: 01/09/14 15:59
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 78.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	50 mL	124919	01/14/14 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	125010	01/15/14 14:12	DCL	TAL HOU

Client Sample ID: ECO-8A (0-0.5)

Lab Sample ID: 600-85389-20

Date Collected: 01/09/14 15:59

Matrix: Solid

Date Received: 01/11/14 11:47

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			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-SDA-3B (0-0.5)

Lab Sample ID: 600-85389-21

Date Collected: 01/09/14 16:05

Matrix: Solid

Date Received: 01/11/14 11:47

Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	124919	01/14/14 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	125010	01/15/14 14:14	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: RINSE BLANK-CME

Lab Sample ID: 600-85389-22

Date Collected: 01/09/14 08:25

Matrix: Water

Date Received: 01/11/14 11:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	124862	01/13/14 16:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	50 mL	50 mL	125051	01/15/14 13:00	DCL	TAL HOU

Client Sample ID: 2013-AD-03 (0-0.5)

Lab Sample ID: 600-85389-23

Date Collected: 01/09/14 13:10

Matrix: Solid

Date Received: 01/10/14 10:31

Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	125018	01/15/14 12:30	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	125110	01/16/14 10:09	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: MW-36 (0-2)

Lab Sample ID: 600-85389-26

Date Collected: 01/10/14 09:00

Matrix: Solid

Date Received: 01/11/14 11:47

Percent Solids: 72.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	50 mL	124919	01/14/14 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	125010	01/15/14 14:17	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: MW-35 (1-3)

Lab Sample ID: 600-85389-27

Date Collected: 01/10/14 10:00
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 73.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	50 mL	124939	01/14/14 14:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	125010	01/15/14 14:31	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: SCC-5B (0-0.5)

Lab Sample ID: 600-85389-29

Date Collected: 01/10/14 08:51
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 79.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	50 mL	124939	01/14/14 14:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	125010	01/15/14 14:36	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: SCC-5A (0-0.5)

Lab Sample ID: 600-85389-30

Date Collected: 01/10/14 08:59
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 77.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.08 g	50 mL	124939	01/14/14 14:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	125010	01/15/14 14:38	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-CUFT-14 (0-2)

Lab Sample ID: 600-85389-31

Date Collected: 01/10/14 09:13
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 85.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.02 g	5.00 mL	124838	01/13/14 14:23	RLK	TAL HOU
Total/NA	Analysis	8082		1	15.02 g	5.00 mL	125027	01/14/14 17:19	JAL	TAL HOU
Total/NA	Prep	3050B			1.05 g	50 mL	124939	01/14/14 14:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	125010	01/15/14 14:48	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-CUFT-11 (0-0.5)

Lab Sample ID: 600-85389-33

Date Collected: 01/10/14 09:18
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 73.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.07 g	50 mL	124939	01/14/14 14:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	125010	01/15/14 14:57	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: 2013-CUFT-5A (0-0.5)

Lab Sample ID: 600-85389-37

Date Collected: 01/10/14 09:43
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 76.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	50 mL	124939	01/14/14 14:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	125010	01/15/14 15:02	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-CUFT-5D (2-4)

Lab Sample ID: 600-85389-39

Date Collected: 01/10/14 09:53
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 74.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	50 mL	124939	01/14/14 14:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	125010	01/15/14 15:05	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-CUFT-6A (0-0.5)

Lab Sample ID: 600-85389-43

Date Collected: 01/10/14 10:14
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 82.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	50 mL	124939	01/14/14 14:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	125010	01/15/14 15:07	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-CUFT-6C (2-4)

Lab Sample ID: 600-85389-45

Date Collected: 01/10/14 10:23
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 74.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	50 mL	124939	01/14/14 14:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	125010	01/15/14 15:10	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: DUP 9

Lab Sample ID: 600-85389-49

Date Collected: 01/10/14 00:00
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 72.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	50 mL	124939	01/14/14 14:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	125010	01/15/14 15:20	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-CUFT-6B (0-0.5)

Lab Sample ID: 600-85389-50

Date Collected: 01/10/14 10:41
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 73.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	50 mL	124939	01/14/14 14:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	125010	01/15/14 15:29	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-CUFT-5C (0-0.5)

Lab Sample ID: 600-85389-51

Date Collected: 01/10/14 10:51
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 75.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	124939	01/14/14 14:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	125010	01/15/14 15:32	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-CUFT-7B (0-0.5)

Lab Sample ID: 600-85389-52

Date Collected: 01/10/14 11:08
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 72.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	50 mL	125018	01/15/14 12:30	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	125110	01/16/14 10:11	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: 2013-CUFT-7B (2-4)

Lab Sample ID: 600-85389-53

Date Collected: 01/10/14 11:09
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 77.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	50 mL	124939	01/14/14 14:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	125010	01/15/14 15:34	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-CUFT-10D (2-4)

Lab Sample ID: 600-85389-58

Date Collected: 01/10/14 11:26
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 73.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	124939	01/14/14 14:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	125010	01/15/14 15:36	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-1

Client Sample ID: 2013-CUFT-10A (0-0.5)

Lab Sample ID: 600-85389-62

Date Collected: 01/10/14 11:41
Date Received: 01/11/14 11:47

Matrix: Solid
Percent Solids: 76.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	124939	01/14/14 14:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	125010	01/15/14 15:39	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-CUFT-10B (0-0.5)

Lab Sample ID: 600-85389-63

Date Collected: 01/10/14 11:48
Date Received: 01/11/14 11:47

Matrix: Solid
Percent Solids: 74.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.08 g	50 mL	124939	01/14/14 14:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	125010	01/15/14 15:41	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-CUFT-10C (0-0.5)

Lab Sample ID: 600-85389-64

Date Collected: 01/10/14 11:55
Date Received: 01/11/14 11:47

Matrix: Solid
Percent Solids: 74.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	124939	01/14/14 14:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	125010	01/15/14 15:44	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-1

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Texas	NELAP	6	T104704223	10-31-14

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

600-85389 Chain of Custody

5/9/2014

Client Information	Sampler: CHRIS TREUNO	Lab PM: Joiner, Dean A	Carrier Tracking No:
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com	
Company: Golder Associates Inc.			
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:		
City: Houston	TAT Requested (days): 5 WD TRRP		
State, Zip: TX, 77073			
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested		
Email: Christina_Higginbotham@golder.com	WO #:		
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831		
Site: EXIDE-FRISCO	SSOW#:		

Analysis Requested

Job #:

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Pb	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N			
MW-44 (0-0.5)	01/09/14	1245	G	Solid									X						
MW-44 (0.5-2)	01/09/14	1248	G	Solid															HOLD
MW-44 (2-4)	01/09/14	1250	G	Solid															HOLD
2013-AD-1A (0.5-2)	01/09/14	1343	G	Solid															HOLD
2013-AD-1A (0-0.5)	01/09/14	1342	G	Solid									X						
2013-AD-1A (2-4)	01/09/14	1344	G	Solid															HOLD
2013-FOP-1A (0-0.5)	01/09/14	1358	G	Solid													X		
2013-AD-5 (0-0.5)	01/09/14	1412	G	Solid									X						
2013-AD-5 (0.5-2)	01/09/14	1413	G	Solid															HOLD
2013-AD-5 (2-4)	01/09/14	1414	G	Solid															HOLD
2013-WMW14-1A (0.9-2)	01/09/14	1440	G	Solid													X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/10/14 1530	COOPER	McCone	1/10/14 1530	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				1/11/14 1147	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 2
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Pb				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N						
2013-WMU14-1A (S-T)	01/09/14	1444	G	Solid													X					
2013-WMU14-1A (S-T) MS	01/09/14	1444	G	Solid													X					
2013-WMU14-1A (S-T) MSD	01/09/14	1444	G	Solid													X					
MW-30A (2-4)	01/09/14	1508	G	Solid													X					
MW-30A (2-4) MS	01/09/14	1508	G	Solid													X					
MW-30A (2-4) MSD	01/09/14	1508	G	Solid													X					
DUP 7	01/09/14	—	G	Solid													X					
DUP 8	01/09/14	—	G	Solid													X					
ECO-1A (0-0.5)	01/09/14	1546	G	Solid									X									
ECO-1A (0.5-2)	01/09/14	1547	G	Solid																		HOLD
ECO 2A (0-0.5)	01/09/14	1554	G	Solid									X									

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/10/14 1530	COURIER	[signature]	1/10/14 1530	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			[signature]	1/11/14 1147	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 3
Company: Golder Associates Inc.				Job #:
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE - FRISCO	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N					
ECO-2A (0.5-2)	01/09/14	1555	G	Solid																	HOLD
ECO-8A ~~10.5~~ (0-0.5)	01/09/14	1559	G	Solid									X								
2013-SOA-3B (0-0.5)	01/09/14	1605	G	Solid									X								
RINSE BLANK-CME	01/10/14	0825	G	~~Solid~~ W									X								
2013-AD-03 (0-0.5)	01/09/14	1310	G	Solid									X								
2013-AD-03 (0.5-2)	01/09/14	1312	G	Solid																	HOLD
2013-AD-03 (2-4)	01/09/14	1313	G	Solid																	HOLD
MW-36 (0-2)	01/10/14	0900	G	Solid									X								
MW-35 (1-3)	01/10/14	1000	G	Solid									X								
2013-SOA-4B (0-0.5)	01/10/14	0841	G	Solid									X								
SCC-SB (0-0.5)	01/10/14	0851	G	Solid									X								

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/10/14 1530	GOLDER		1/10/14 1530	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				1/11/14 1147	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

5/9/2014

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

5/9/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 4
Company: Golder Associates Inc.				Job #:
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE- FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Pb			Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N					
SCL-SA (0-0.5)	01/10/14	0859	G	Solid									X								
2013-CUFT-14(0-2)		0913	G	Solid									X			X					
2013-CUFT-14 (2-4)		0914	G	Solid					HOLD				X			X					HOLD
2013-CUFT-11 (0-0.5)		0918	G	Solid												X	X				
2013-CUFT-11 (0.5-2)		0919	G	Solid								HOLD				X	X				HOLD
2013-CUFT-11 (2-4)		0920	G	Solid								HOLD				X	X				HOLD
2013-CUFT-5B (0-0.5)		0940	G	Solid									X								
2013-CUFT-5A (0-0.5)		0943	G	Solid									X								
2013-CUFT-5D (0-0.5)		0952	G	Solid																	HOLD
2013-CUFT-5D (2-4)		0953	G	Solid									X								
2013-CUFT-5D (4-6)		0954	G	Solid																	HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOSHUA JANZON	01/10/14 1530	GOLDER		1/10/14 1530	TAL
2					1/11/14 1147	TAL
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

testamerica

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 5
Company: Golder Associates Inc.				Job #: 1302086

Address: 500 Century Plaza Drive Suite 190	Due Date Requested:
City: Houston	TAT Requested (days): 5 WD TRRP
State, Zip: TX, 77073	
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested
Email: Christina_Higginbotham@golder.com	WO #:
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831
Site: EXIDE-FRISCO	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N					
2013-CUFT-5B (6-8)	01/10/14	0955	G	Solid																	HOLD
2013-CUFT-5B (8-10)		0956	G	Solid																	HOLD
2013-CUFT-6A (0-0.5)		1014	G	Solid									X								
2013-CUFT-6C (0-0.5)		1022	G	Solid																	HOLD
2013-CUFT-6C (2-4)		1023	G	Solid									X								
2013-CUFT-6C (2-4) MS		1024 1023	G	Solid									X								
2013-CUFT-6C (2-4) MSD		1025 1023	G	Solid									X								
2013-CUFT-6C (4-6)	1024	1026 1025	G	Solid																	HOLD
2013-CUFT-6C (6-8)		1025	G	Solid																	HOLD
2013-CUFT-6C (8-10)		1026	G	Solid																	HOLD
DUP 9	↓	—	G	Solid									X								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/10/14 1530		M McCown	1/10/14 1530	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				1/11/14 1147	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

5/9/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 6
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
2013-CUFT-6B (0-0.5)	01/10/14	1041	G	Solid									X					
2013-CUFT-5C (0-0.5)		1051	G	Solid									X					
2013-CUFT-7B (0-0.5)		1108	G	Solid									X					
2013-CUFT-7B (2-4)		1109	G	Solid									X					
2013-CUFT-7B (4-6)		1110	G	Solid														HOLD
2013-CUFT-7B (6-8)		1111	G	Solid														HOLD
2013-CUFT-7B (8-10)		1112	G	Solid														HOLD
2013-CUFT-10D (0-0.5)		1125	G	Solid														HOLD
2013-CUFT-10D (2-4)		1126	G	Solid									X					
2013-CUFT-10D (4-6)		1127	G	Solid														HOLD
2013-CUFT-10D (6-8)		1128	G	Solid														HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/10/14 1530	GOLDER	M McCowen	1/10/14 1530	TKL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				1/11/14 1147	TKL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

5/9/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 7
Company: Golder Associates Inc.				Job #: 13020086

Address: 500 Century Plaza Drive Suite 190	Due Date Requested:	Analysis Requested
City: Houston	TAT Requested (days): 5 WD TRRP	
State, Zip: TX, 77073		
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested	
Email: Christina_Higginbotham@golder.com	WO #:	
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831	
Site: EXIDE - FRISCO	SSOW#:	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

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			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
2013-CUFT-10D (8-10)	01/10/14	1129	G	Solid														HOLD
2013-CUFT-10A (0-0.5)	01/10/14	1141	G	Solid									X					
2013-CUFT-10B (0-0.5)	01/10/14	1148	G	Solid									X					
2013-CUFT-10C (0-0.5)	01/10/14	1155	G	Solid									X					
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

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Special Instructions/QC Requirements:

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Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/10/14 1530	GOLDER	[signature]	1/10/14 1530	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			[signature]	1/11/14 1147	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Upton, Cathy

From: Upton, Cathy
Sent: Tuesday, March 04, 2014 3:13 PM
To: Upton, Cathy
Subject: FW: Additional Metals in Soil

Dean,

We would like to report all five metals for the samples listed below. Do you think we could get revised reports for these by Wednesday?

Location ID	Sample ID	lab_sample_id	Date Sampled	Antimony	Arsenic	Cadı
2013-SL-C15	2013-SL-C15 (0-6)	600-84633-7	2013-12-19	NA	NA	2.10
MW-42	MW-42 (0.5-2)	600-85318-20	2014-01-08	NA	13.9	1.82
MW-27B	MW-27B (0-2)	600-85318-24	2014-01-09	NA	NA	9.85
D-11A	D11A (0-0.5)	600-85318-30	2014-01-09	NA	**27.2**	1.77
2013-BSA-2A	2013-BSA-2A(0-2)	600-85318-36	2014-01-09	NA	**34.9**	16.5
ECO-2A	ECO-2A (0-0.5)	600-85389-18	2014-01-09	NA	NA	3.29
ECO-8A	ECO-8A (0-0.5)	600-85389-20	2014-01-09	NA	NA	5.65
2013-AD-3	2013-AD-03 (0-0.5)	600-85389-23	2014-01-09	NA	NA	1.51
SCC-5B	SCC-5B (0-0.5)	600-85389-29	2014-01-10	NA	NA	2.48
2013-CUFT-10B	2013-CUFT-10B (0-0.5)	600-85389-63	2014-01-10	NA	NA	2.19
SRB-VS-11A	SRB-VS-11A (0-0.5)	600-85473-15	2014-01-10	NA	NA	1.44
2013-FWFS-5A	2013-FWFS-5A (0-2)	600-85473-34	2014-01-13	NA	NA	0.52
2013-MW-17B	2013-MW-17B (0-0.5)	600-85473-38	2014-01-13	NA	NA	5.19
SCC-10B	SCC-10B (0-0.5)	600-85473-39	2014-01-13	NA	NA	1.85
2013-C2L-06	2013-C2L-06 (0-0.5)	600-85636-21	2014-01-14	NA	**22.6**	3.68
ECO-7D	ECO-7D (0-0.5)	600-85636-39	2014-01-14	NA	15.1	2.30

Thanks,
Anne

Anne Faeth-Boyd, R.G., P.E. | Senior Project Engineer | **Golder Associates Inc.**
820 South Main Street, Suite 100, St. Charles, Missouri, USA 63301
T: +1 (636) 724-9191 | **F:** +1 (636) 724-9323 | **C:** +1 314 503-5179 | **E:** Anne_Faeth-Boyd@golder.com | **www.golder.com**

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Upton, Cathy

From: Higginbotham, Christina [Christina_Higginbotham@golder.com]
Sent: Tuesday, May 06, 2014 5:02 PM
To: Upton, Cathy; Joiner, Dean
Cc: Thomas, Jim; Faeth-Boyd, Anne
Subject: Exide discrepancies - metals reporting
Follow Up Flag: Follow up
Flag Status: Red

Cathy and Dean,

The below revisions are being requested so the final laboratory reports are consistent with tabulated data that was already submitted.
It appears that some metals noted below were reported in an earlier package, and removed for the later data packages. We would like the specified data (see highlights) turned back "on" please.

Please let us know estimated time for these revisions, or if you have any questions regarding this request.

Thanks,
Christina

600-85636 REVISION

				Sb	As	Cd	Pb	Se		
2013-STB-4A	2013-STB-4A (2-4)	600-85636-1	2014-01-13	NA	NA	NA	**1540**	NA	REPORT CADMIUM (confirm Cd concentrat

600-85318 REVISIONS

2013-C2L-03	2013-C2L-03-(0-0.5)	600-85318-33	2014-01-09	NA	12.2	0.651	79.5	< 0.330 U	REPORT ARSENIC AND SELENIUM
D-12A	D12A (0-0.5)	600-85318-31	2014-01-09	NA	10.9	0.652 b	80.2	< 0.324 U	REV 4 (3/18) reports Cd, Pb only. Report dat reported As, Cd, Pb, Se REPORT ARSENIC AND SELENIUM
MW-41	MW-41 (0.5-2)	600-85318-18	2014-01-08	NA	10.1	0.810	92.5	< 0.338 U	REV 4 (3/18) reports Cd, Pb only. Report da reported As, Cd, Pb, Se. REPORT ARSENIC AND SELENIUM
MW-41	MW-41 (0-0.5)	600-85318-17	2014-01-08	NA	8.00	0.474	18.4	< 0.323 U	REV 4 (3/18) reports Cd, Pb only. Report da reported As, Cd, Pb, Se. REPORT ARSENIC AND SELENIUM
MW-42	DUP-6	600-85318-21	2014-01-08	NA	7.39	0.385	15.0	< 0.311 U	REV 4 (3/18) reports Cd, Pb only. Report da reported As, Cd, Pb, Se. REPORT ARSENIC AND SELENIUM
MW-42	MW-42 (0-0.5)	600-85318-19	2014-01-08	NA	14.2	1.56	230	0.580 J	REV 4 (3/18) reports Cd, Pb only. Report da reported As, Cd, Pb, Se. REPORT ARSENIC AND SELENIUM

600-85473 REVISIONS

2013-NT-01	2013-NT-01 (0.2-2)	600-85473-21	2014-01-10	NA	14.4	0.618	18.5	0.546 J	Report from 1/22 has results for As and Se. only lists Pb and Cd, 4/21 only lists Cd and F REPORT ARSENIC AND SELENIUM , also ple interval to "0.5-2" instead of "0.2-2".
2013-NT-01	2013-NT-01 (0-0.5)	600-85473-20	2014-01-10	NA	**15.9**	0.571	19.5	< 0.328 U	Report from 1/22 reports As and Se. Rev 3 4/21 does not. REPORT ARSENIC AND SELENIUM
2013-NT-02	2013-NT-02 (0.5-2)	600-85473-24	2014-01-10	NA	14.1	0.354	21.2	0.324 J	Report from 1/22 reports As and Se. Rev 3 4/21 does not. REPORT ARSENIC AND SELENIUM
2013-NT-02	2013-NT-02 (0-0.5)	600-85473-23	2014-01-10	NA	14.9	4.89	**837**	0.654 J	Report from 1/22 reports As and Se. Rev 3 4/21 does not. REPORT ARSENIC AND SELENIUM

600-85389 REVISION

2013-WMU14-1A (5-7)	600-85389-12	1/9/2014	na	na	5.14 J	**17000**	na	REPORT CADMIUM (confirm Cd concentratio
DUP-7	600-85389-14	1/9/2014	na	na	na	**10500**	na	REPORT CADMIUM (if 85389-12 is confirmed

Christina Higginbotham, P.G. | Remediation Project Manager | **Golder Associates Inc.**
500 Century Plaza Drive, Suite 190, Houston, Texas, USA 77073
T: +1 (281) 821-6868 | **F:** +1 (281) 821-6870 | **C:** +1 (281) 620-7835 | **E:** CHigginbotham@golder.com | **www.golder.com**

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Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-85389-1

Login Number: 85389

List Source: TestAmerica Houston

List Number: 1

Creator: Capps, Dana R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	2.0/1.5
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.	False	Refer to Job Narrative for details.
Samples are received within Holding Time.	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	Check done at department level as required.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-85389-2
Client Project/Site: Exide Recycling Center

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
2/25/2014 7:16:40 PM
Cathy Upton, Project Management Assistant II
(713)690-4444
cathy.upton@testamericainc.com

Designee for

Dean Joiner, Project Manager II
(713)690-4444
dean.joiner@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: 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.

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-85389-2 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☐ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☐ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☑ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton				2/25/2014
Name (printed)		Signature		Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	2/25/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85389-2
Reviewer Name:	Cathy Upton		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				R05D
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?			X		
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?			X		
		Were LCSs analyzed at the required frequency?			X		
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?			X		
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?			X		
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			R07C
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?		X			R08C
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	2/25/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85389-2
Reviewer Name:	Cathy Upton		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
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4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	2/25/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85389-2
Reviewer Name:	Cathy Upton		

ER #[1]	Description
R05D	Method 6010B: The method blank for batch 127929 contained Lead above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.
R07C	Method 6010B: 600-85389-19 MS failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected. Method 6010B: 600-85389-19 MSD failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected.
R08C	Method 6010B: 600-85389-19 DU failed the RPD criteria for the following analyte(s): Lead, Selenium. Matrix interference is suspected.

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3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Detection Check Standard

Matrix:	Soil
Method:	6010B
Preparation:	3050
Date Analyzed:	12/30/2013
Date Prepared:	12/27/2013
Instrument:	Thermo 6500
TALS Batches:	123949, 123775p
Prep/Reagent Factor =	50
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.299654	0.5	0.36	25
Antimony	0.231553	0.45	0.5	2.5
Arsenic	0.217923	0.5	0.53	1
Barium	0.011322	0.03	0.04	1
Beryllium	0.014513	0.02	0.015	0.25
Boron	0.385535	0.6	0.56	20
Cadmium	0.025642	0.05	0.05	0.25
Calcium	0.86399	1.5	2.185	100
Chromium	0.050606	0.1	0.135	0.5
Cobalt	0.067622	0.1	0.09	0.5
Copper	0.173703	0.5	0.64	0.5
Iron	2.534007	4	3.76	20
Lead	0.104832	0.2	0.215	0.5
Selenium	0.258884	0.5	0.465	2
Manganese	0.038111	0.05	0.085	1.5
Molybdenum	0.136448	0.35	0.38	0.5
Nickel	0.116599	0.15	0.2	1
Silver	0.118848	0.2	0.15	0.5
Sodium	0.885548	2.4	3.135	100
Thallium	0.276988	0.7	0.73	1.5
Tin	0.08729	0.15	0.19	1
Titanium	0.014529	0.03	0.01	0.5
Vanadium	0.079068	0.15	0.125	0.5
Zinc	0.108432	0.2	0.305	1.5

Job ID: 600-85389-2

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-85389-2

Comments
No additional comments.

Receipt
The samples were received on 1/11/2014 11:47 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.5º C and 2.0º C.

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-2

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU
Moisture	Percent Moisture	EPA	TAL HOU

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 HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-85389-4	2013-AD-1A (0.5-2)	Solid	01/09/14 13:43	01/11/14 11:47
600-85389-9	2013-AD-5 (0.5-2)	Solid	01/09/14 14:13	01/11/14 11:47
600-85389-19	ECO-2A (0.5-2)	Solid	01/09/14 15:55	01/11/14 11:47
600-85389-24	2013-AD-03 (0.5-2)	Solid	01/09/14 13:12	01/10/14 10:31

Client Sample ID: 2013-AD-1A (0.5-2)

Lab Sample ID: 600-85389-4
Date Collected: 01/09/14 13:43
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 88.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.258	U	2.78	0.258	mg/Kg	☼	02/20/14 17:00	02/21/14 14:08	1
Arsenic	**2.37**		1.11	0.243	mg/Kg	☼	02/20/14 17:00	02/21/14 14:08	1
Cadmium	0.0286	U	0.278	0.0286	mg/Kg	☼	02/20/14 17:00	02/21/14 14:08	1
Lead	**8.15**		0.557	0.117	mg/Kg	☼	02/20/14 17:00	02/21/14 14:08	1
Selenium	0.288	U	2.23	0.288	mg/Kg	☼	02/20/14 17:00	02/21/14 14:08	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**11**	**H**	1.0	1.0	%			02/19/14 13:24	1
Percent Solids	**89**	**H**	1.0	1.0	%			02/19/14 13:24	1

Client Sample ID: 2013-AD-5 (0.5-2)

Lab Sample ID: 600-85389-9
Date Collected: 01/09/14 14:13
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 86.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**8.15**		2.80	0.260	mg/Kg	☼	02/20/14 17:00	02/21/14 14:10	1
Arsenic	**13.2**		1.12	0.244	mg/Kg	☼	02/20/14 17:00	02/21/14 14:10	1
Cadmium	**5.66**		0.280	0.0288	mg/Kg	☼	02/20/14 17:00	02/21/14 14:10	1
Lead	**1830**		0.561	0.118	mg/Kg	☼	02/20/14 17:00	02/21/14 14:10	1
Selenium	**0.482**	**J**	2.24	0.290	mg/Kg	☼	02/20/14 17:00	02/21/14 14:10	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13**	**H**	1.0	1.0	%			02/19/14 13:24	1
Percent Solids	**87**	**H**	1.0	1.0	%			02/19/14 13:24	1

Client Sample ID: ECO-2A (0.5-2)

Lab Sample ID: 600-85389-19
Date Collected: 01/09/14 15:55
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 80.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.284	U	3.06	0.284	mg/Kg	☼	02/20/14 17:00	02/21/14 13:34	1
Arsenic	**9.87**		1.22	0.267	mg/Kg	☼	02/20/14 17:00	02/21/14 13:34	1
Cadmium	**0.557**		0.306	0.0314	mg/Kg	☼	02/20/14 17:00	02/21/14 13:34	1
Lead	**26.6**		0.612	0.128	mg/Kg	☼	02/20/14 17:00	02/21/14 13:34	1
Selenium	**0.410**	**J**	2.45	0.317	mg/Kg	☼	02/20/14 17:00	02/21/14 13:34	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**19**	**H**	1.0	1.0	%			02/19/14 13:24	1
Percent Solids	**81**	**H**	1.0	1.0	%			02/19/14 13:24	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-2

Client Sample ID: 2013-AD-03 (0.5-2)
Date Collected: 01/09/14 13:12
Date Received: 01/10/14 10:31

Lab Sample ID: 600-85389-24
Matrix: Solid
Percent Solids: 87.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.17	J	2.68	0.248	mg/Kg	☼	02/21/14 16:01	02/24/14 10:23	1
Arsenic	10.7		1.07	0.234	mg/Kg	☼	02/21/14 16:01	02/24/14 10:23	1
Cadmium	0.509		0.268	0.0275	mg/Kg	☼	02/21/14 16:01	02/24/14 10:23	1
Lead	1150	b	0.536	0.112	mg/Kg	☼	02/21/14 16:01	02/24/14 10:23	1
Selenium	0.278	U	2.14	0.278	mg/Kg	☼	02/21/14 16:01	02/24/14 10:23	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13	H	1.0	1.0	%			02/19/14 13:24	1
Percent Solids	87	H	1.0	1.0	%			02/19/14 13:24	1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
F	Duplicate RPD exceeds the control limit
N	MS, MSD: Spike recovery exceeds upper or lower control limits.
b	The compound was found in the blank and sample

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

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
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)

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-127810/1-A
Matrix: Solid
Analysis Batch: 127873

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 127810

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		02/20/14 17:00	02/21/14 13:27	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		02/20/14 17:00	02/21/14 13:27	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		02/20/14 17:00	02/21/14 13:27	1
Lead	0.105	U	0.500	0.105	mg/Kg		02/20/14 17:00	02/21/14 13:27	1
Selenium	0.259	U	2.00	0.259	mg/Kg		02/20/14 17:00	02/21/14 13:27	1

Lab Sample ID: LCSSRM 600-127810/2-A
Matrix: Solid
Analysis Batch: 127873

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 127810

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony			88.2	59.82		mg/Kg		67.8	45.4 - 231.3		
Arsenic			99.6	99.77		mg/Kg		100.2	80.8 - 119.5		
Cadmium			182	188.2		mg/Kg		103.4	81.9 - 118.1		
Lead			115	116.7		mg/Kg		101.5	81.8 - 119.1		
Selenium			150	152.7		mg/Kg		101.8	77.3 - 122.7		

Lab Sample ID: 600-85389-19 MS
Matrix: Solid
Analysis Batch: 127873

Client Sample ID: ECO-2A (0.5-2)
Prep Type: Total/NA
Prep Batch: 127810

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.284	U	58.9	25.88	N	mg/Kg	☼	44	75 - 125
Arsenic	9.87		58.9	74.61		mg/Kg	☼	110	75 - 125
Cadmium	0.557		29.4	32.54		mg/Kg	☼	109	75 - 125
Lead	26.6		58.9	85.21		mg/Kg	☼	100	75 - 125
Selenium	0.410	J	58.9	62.72		mg/Kg	☼	106	75 - 125

Lab Sample ID: 600-85389-19 MSD
Matrix: Solid
Analysis Batch: 127873

Client Sample ID: ECO-2A (0.5-2)
Prep Type: Total/NA
Prep Batch: 127810

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.284	U	58.3	24.50	N	mg/Kg	☼	42	75 - 125	5	20
Arsenic	9.87		58.3	75.37		mg/Kg	☼	112	75 - 125	1	20
Cadmium	0.557		29.2	33.31		mg/Kg	☼	112	75 - 125	2	20
Lead	26.6		58.3	82.78		mg/Kg	☼	96	75 - 125	3	20
Selenium	0.410	J	58.3	64.52		mg/Kg	☼	110	75 - 125	3	20

Lab Sample ID: 600-85389-19 DU
Matrix: Solid
Analysis Batch: 127873

Client Sample ID: ECO-2A (0.5-2)
Prep Type: Total/NA
Prep Batch: 127810

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Antimony	0.284	U		0.281	U	mg/Kg	☼			NC	20

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

Lab Sample ID: 600-85389-19 DU
Matrix: Solid
Analysis Batch: 127873

Client Sample ID: ECO-2A (0.5-2)
Prep Type: Total/NA
Prep Batch: 127810

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	9.87		9.918		mg/Kg	☼	0.5	20
Cadmium	0.557		0.6123		mg/Kg	☼	9	20
Lead	26.6		35.39	F	mg/Kg	☼	28	20
Selenium	0.410	J	0.6487	J	mg/Kg	☼	45	20

Lab Sample ID: MB 600-127929/1-A
Matrix: Solid
Analysis Batch: 127997

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 127929

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		02/21/14 16:01	02/24/14 10:03	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		02/21/14 16:01	02/24/14 10:03	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		02/21/14 16:01	02/24/14 10:03	1
Lead	0.1450	J	0.500	0.105	mg/Kg		02/21/14 16:01	02/24/14 10:03	1
Selenium	0.259	U	2.00	0.259	mg/Kg		02/21/14 16:01	02/24/14 10:03	1

Lab Sample ID: LCSSRM 600-127929/2-A
Matrix: Solid
Analysis Batch: 127997

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 127929

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	66.77		mg/Kg		75.7	45.4 - 231.3
Arsenic	99.6	96.28		mg/Kg		96.7	80.8 - 119.5
Cadmium	182	169.2		mg/Kg		93.0	81.9 - 118.1
Lead	115	113.2		mg/Kg		98.4	81.8 - 119.1
Selenium	150	142.9		mg/Kg		95.3	77.3 - 122.7

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-2

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Antimony	2.50	0.232	mg/Kg	6010B
Arsenic	1.00	0.218	mg/Kg	6010B
Cadmium	0.250	0.0256	mg/Kg	6010B
Lead	0.500	0.105	mg/Kg	6010B
Selenium	2.00	0.259	mg/Kg	6010B

General Chemistry

Analyte	MQL	MDL	Units	Method
Percent Moisture	1.0	1.0	%	Moisture
Percent Solids	1.0	1.0	%	Moisture

Metals

Prep Batch: 127810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-4	2013-AD-1A (0.5-2)	Total/NA	Solid	3050B	
600-85389-9	2013-AD-5 (0.5-2)	Total/NA	Solid	3050B	
600-85389-19	ECO-2A (0.5-2)	Total/NA	Solid	3050B	
600-85389-19 DU	ECO-2A (0.5-2)	Total/NA	Solid	3050B	
600-85389-19 MS	ECO-2A (0.5-2)	Total/NA	Solid	3050B	
600-85389-19 MSD	ECO-2A (0.5-2)	Total/NA	Solid	3050B	
LCSSRM 600-127810/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-127810/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 127873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-4	2013-AD-1A (0.5-2)	Total/NA	Solid	6010B	127810
600-85389-9	2013-AD-5 (0.5-2)	Total/NA	Solid	6010B	127810
600-85389-19	ECO-2A (0.5-2)	Total/NA	Solid	6010B	127810
600-85389-19 DU	ECO-2A (0.5-2)	Total/NA	Solid	6010B	127810
600-85389-19 MS	ECO-2A (0.5-2)	Total/NA	Solid	6010B	127810
600-85389-19 MSD	ECO-2A (0.5-2)	Total/NA	Solid	6010B	127810
LCSSRM 600-127810/2-A	Lab Control Sample	Total/NA	Solid	6010B	127810
MB 600-127810/1-A	Method Blank	Total/NA	Solid	6010B	127810

Prep Batch: 127929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-24	2013-AD-03 (0.5-2)	Total/NA	Solid	3050B	
LCSSRM 600-127929/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-127929/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 127997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-24	2013-AD-03 (0.5-2)	Total/NA	Solid	6010B	127929
LCSSRM 600-127929/2-A	Lab Control Sample	Total/NA	Solid	6010B	127929
MB 600-127929/1-A	Method Blank	Total/NA	Solid	6010B	127929

General Chemistry

Analysis Batch: 127707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-4	2013-AD-1A (0.5-2)	Total/NA	Solid	Moisture	
600-85389-9	2013-AD-5 (0.5-2)	Total/NA	Solid	Moisture	
600-85389-19	ECO-2A (0.5-2)	Total/NA	Solid	Moisture	
600-85389-24	2013-AD-03 (0.5-2)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-2

Client Sample ID: 2013-AD-1A (0.5-2)

Lab Sample ID: 600-85389-4

Date Collected: 01/09/14 13:43
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 88.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	50 mL	127810	02/20/14 17:00	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	127873	02/21/14 14:08	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			127707	02/19/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-AD-5 (0.5-2)

Lab Sample ID: 600-85389-9

Date Collected: 01/09/14 14:13
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 86.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	127810	02/20/14 17:00	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	127873	02/21/14 14:10	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			127707	02/19/14 13:24	AYS	TAL HOU

Client Sample ID: ECO-2A (0.5-2)

Lab Sample ID: 600-85389-19

Date Collected: 01/09/14 15:55
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 80.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	50 mL	127810	02/20/14 17:00	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	127873	02/21/14 13:34	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			127707	02/19/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-AD-03 (0.5-2)

Lab Sample ID: 600-85389-24

Date Collected: 01/09/14 13:12
Matrix: Solid
Date Received: 01/10/14 10:31
Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.07 g	50 mL	127929	02/21/14 16:01	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	127997	02/24/14 10:23	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			127707	02/19/14 13:24	AYS	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-2

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Texas	NELAP	6	T104704223	10-31-14

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmeri[illegible]Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

600-85389 Chain of Custody

2/25/2014

Client Information	Sampler: CHRIS TREUNO	Lab PM: Joiner, Dean A	Carrier Tracking No
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com	
Company: Golder Associates Inc.			
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:		
City: Houston	TAT Requested (days): 5 WD TRRP		
State, Zip: TX, 77073			
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested		
Email: Christina_Higginbotham@golder.com	WO #:		
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831		
Site: EXIDE-FRISCO	SSOW#:		

Analysis Requested

Job #:

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Pb	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N			
MW-44 (0-0.5)	01/09/14	1245	G	Solid									X						
MW-44 (0.5-2)	01/09/14	1248	G	Solid															HOLD
MW-44 (2-4)	01/09/14	1250	G	Solid															HOLD
2013-AD-1A (0.5-2)	01/09/14	1343	G	Solid															HOLD
2013-AD-1A (0-0.5)	01/09/14	1342	G	Solid									X						
2013-AD-1A (2-4)	01/09/14	1344	G	Solid															HOLD
2013-FOP-1A (0-0.5)	01/09/14	1358	G	Solid													X		
2013-AD-5 (0-0.5)	01/09/14	1412	G	Solid									X						
2013-AD-5 (0.5-2)	01/09/14	1413	G	Solid															HOLD
2013-AD-5 (2-4)	01/09/14	1414	G	Solid															HOLD
2013-WMW14-1A (0.9-2)	01/09/14	1440	G	Solid													X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/10/14 1530	COOPER	McCone	1/10/14 1530	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				1/11/14 1147	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 2
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Pb				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N						
2013-WMU14-1A (S-T)	01/09/14	1444	G	Solid													X					
2013-WMU14-1A (S-T) MS	01/09/14	1444	G	Solid													X					
2013-WMU14-1A (S-T) MSD	01/09/14	1444	G	Solid													X					
MW-30A (2-4)	01/09/14	1508	G	Solid													X					
MW-30A (2-4) MS	01/09/14	1508	G	Solid													X					
MW-30A (2-4) MSD	01/09/14	1508	G	Solid													X					
DUP 7	01/09/14	—	G	Solid													X					
DUP 8	01/09/14	—	G	Solid													X					
ECO-1A (0-0.5)	01/09/14	1546	G	Solid									X									
ECO-1A (0.5-2)	01/09/14	1547	G	Solid																		HOLD
ECO 2A (0-0.5)	01/09/14	1554	G	Solid									X									

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/10/14 1530	COURIER	[signature]	1/10/14 1530	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			[signature]	1/11/14 1147	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica

2/25/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 3
Company: Golder Associates Inc.				Job #:
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE - FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N					
ECO-2A (0.5-2)	01/09/14	1555	G	Solid																	HOLD
ECO-8A ~~10.5~~ (0-0.5)	01/09/14	1559	G	Solid									X								
2013-SOA-3B (0-0.5)	01/09/14	1605	G	Solid									X								
RINSE BLANK-CME	01/10/14	0825	G	~~Solid~~ W									X								
2013-AD-03 (0-0.5)	01/09/14	1310	G	Solid									X								
2013-AD-03 (0.5-2)	01/09/14	1312	G	Solid																	HOLD
2013-AD-03 (2-4)	01/09/14	1313	G	Solid																	HOLD
MW-36 (0-2)	01/10/14	0900	G	Solid									X								
MW-35 (1-3)	01/10/14	1000	G	Solid									X								
2013-SOA-4B (0-0.5)	01/10/14	0841	G	Solid									X								
SCC-SB (0-0.5)	01/10/14	0851	G	Solid									X								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOSHUA JANZEN	01/10/14 1530	GOLDER		1/10/14 1530	TAL
2					1/11/14 1147	TAL
3						

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 4
Company: Golder Associates Inc.				Job #:
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE- FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Pb			Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N					
SCL-SA (0-0.5)	01/10/14	0859	G	Solid									X								
2013-CUFT-14(0-2)		0913	G	Solid									X			X					
2013-CUFT-14 (2-4)		0914	G	Solid					HOLD				X			X					HOLD
2013-CUFT-11 (0-0.5)		0918	G	Solid												X	X				
2013-CUFT-11 (0.5-2)		0919	G	Solid								HOLD				X	X				HOLD
2013-CUFT-11 (2-4)		0920	G	Solid								HOLD				X	X				HOLD
2013-CUFT-5B (0-0.5)		0940	G	Solid									X								
2013-CUFT-5A (0-0.5)		0943	G	Solid									X								
2013-CUFT-5D (0-0.5)		0952	G	Solid																	HOLD
2013-CUFT-5D (2-4)		0953	G	Solid									X								
2013-CUFT-5D (4-6)		0954	G	Solid																	HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOSHUA JANZON	01/10/14 1530	GOLDER		1/10/14 1530	TAL
2					1/11/14 1147	TAL
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

testamerica

2/25/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 5
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:	Analysis Requested		
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB					Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N						
2013-CUFT-5D (6-8)	01/10/14	0955	G	Solid																		HOLD
2013-CUFT-5D (8-10)		0956	G	Solid																		HOLD
2013-CUFT-6A (0-0.5)		1014	G	Solid									X									
2013-CUFT-6C (0-0.5)		1022	G	Solid																		HOLD
2013-CUFT-6C (2-4)		1023	G	Solid									X									
2013-CUFT-6C (2-4) MS		1024 1023 MS	G	Solid									X									
2013-CUFT-6C (2-4) MSD		1025 1023	G	Solid									X									
2013-CUFT-6C (4-6)	1024	1026	G	Solid																		HOLD
2013-CUFT-6C (6-8)		1025	G	Solid																		HOLD
2013-CUFT-6C (8-10)		1026	G	Solid																		HOLD
DUP 9	↓	—	G	Solid									X									

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/10/14 1530		M McCown	1/10/14 1530	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				1/11/14 1147	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 6
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:	Analysis Requested		Preservation Codes:
City: Houston	TAT Requested (days): 5 WD TRRP			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			Other:
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	N	N	N	N	N	N	N	N	X	
2013-CUFT-6B (0-0.5)	01/10/14	1041	G	Solid									X					
2013-CUFT-5C (0-0.5)		1051	G	Solid									X					
2013-CUFT-7B (0-0.5)		1108	G	Solid									X					
2013-CUFT-7B (2-4)		1109	G	Solid									X					
2013-CUFT-7B (4-6)		1110	G	Solid														HOLD
2013-CUFT-7B (6-8)		1111	G	Solid														HOLD
2013-CUFT-7B (8-10)		1112	G	Solid														HOLD
2013-CUFT-10D (0-0.5)		1125	G	Solid														HOLD
2013-CUFT-10D (2-4)		1126	G	Solid									X					
2013-CUFT-10D (4-6)		1127	G	Solid														HOLD
2013-CUFT-10D (6-8)		1128	G	Solid														HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/10/14 1530	GOLDER	M McCowen	1/10/14 1530	TKL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				1/11/14 1147	TKL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

2/25/2014

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

2/25/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 7
Company: Golder Associates Inc.				Job #: 13020086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
2013-CUFT-10D (8-10)	01/10/14	1129	G	Solid														HOLD
2013-CUFT-10A (0-0.5)	01/10/14	1141	G	Solid									X					
2013-CUFT-10B (0-0.5)	01/10/14	1148	G	Solid									X					
2013-CUFT-10C (0-0.5)	01/10/14	1155	G	Solid									X					
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOSHUA JANZEN	01/10/14 1530	GOLDER	M McCown	1/10/14 1530	TAL
2					1/11/14 1147	TA
3						

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-85389-2

Login Number: 85389

List Source: TestAmerica Houston

List Number: 1

Creator: Capps, Dana R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	2.0/1.5
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.	False	Refer to Job Narrative for details.
Samples are received within Holding Time.	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	Check done at department level as required.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-85389-3
Client Project/Site: Exide Recycling Center

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
3/9/2014 8:53:40 PM
Cathy Upton, Project Management Assistant II
(713)690-4444
cathy.upton@testamericainc.com

Designee for

Dean Joiner, Project Manager II
(713)690-4444
dean.joiner@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: 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.

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-85389-3 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☐ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☐ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☐ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton		3/9/2014
Name (printed)	Signature	Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/9/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85389-3
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/9/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85389-3
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/9/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85389-3
Reviewer Name:	Dean A Joiner		

ER #[1]	Description

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Detection Check Standard

Matrix:	Water
Method:	200.7/6010
Preparation:	200.7P/3010
Date Analyzed:	12/31/2013
Date Prepared:	12/27/2013
Instrument:	Spectro01
TALs Batches:	124030, 123788p
Units:	mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.028176	0.5
Antimony	0.0063	0.01	0.010016	0.05
Arsenic	0.0033	0.01	0.008253	0.01
Barium	0.0022	0.005	0.004098	0.02
Beryllium	0.00134	0.002	0.004019	0.005
Boron	0.0077	0.02	0.019829	0.2
Cadmium	0.00073	0.001	0.001	0.005
Calcium	0.022	0.05	0.060829	1
Chromium	0.0016	0.002	0.003835	0.01
Cobalt	0.00063	0.001	0.000965	0.01
Copper	0.0014	0.002	0.002451	0.01
Iron	0.087	0.1	0.002258	0.4
Lithium	0.0024	0.005	0.006107	0.2
Lead	0.0029	0.005	0.005478	0.01
Selenium	0.0042	0.01	0.009953	0.04
Manganese	0.00084	0.002	0.001988	0.01
Molybdenum	0.0027	0.005	0.005867	0.01
Nickel	0.00179	0.005	0.005669	0.01
Silver	0.0012	0.0025	0.001901	0.01
Sodium	0.02	0.05	0.088115	1
Strontium	0.0005	0.001	0.000897	0.005
Thallium	0.0078	0.02	0.021503	0.03
Tin	0.0028	0.005	0.005708	0.01
Titanium	0.0011	0.002	0.001905	0.01
Vanadium	0.0017	0.002	0.003578	0.01
Zinc	0.0022	0.005	0.004189	0.01

Job ID: 600-85389-3

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-85389-3

Comments
No additional comments.

Receipt
The samples were received on 1/11/2014 11:47 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.5º C and 2.0º C.

Except:

The following sample(s) was activated for SPLP Metals analysis by the client on 03/3/14: 2013-AD-03 (0-0.5) (600-85389-23), 2013-CUFT-5B (0-0.5) (600-85389-36), 2013-SDA-3B (0-0.5) (600-85389-21), SCC-5B (0-0.5) (600-85389-29). This analysis was not originally requested on the chain-of-custody (COC). See attached email.

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-3

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU

Protocol References:

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

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-85389-21	2013-SDA-3B (0-0.5)	Solid	01/09/14 16:05	01/11/14 11:47
600-85389-23	2013-AD-03 (0-0.5)	Solid	01/09/14 13:10	01/10/14 10:31
600-85389-29	SCC-5B (0-0.5)	Solid	01/10/14 08:51	01/11/14 11:47
600-85389-36	2013-CUFT-5B (0-0.5)	Solid	01/10/14 09:40	01/11/14 11:47

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-3

Client Sample ID: 2013-SDA-3B (0-0.5) — **Lab Sample ID: 600-85389-21**
Date Collected: 01/09/14 16:05 — **Matrix: Solid**
Date Received: 01/11/14 11:47

Method: 6010B - Metals (ICP) - SPLP West

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.114		0.0100	0.00290	mg/L		03/05/14 17:09	03/06/14 14:53	1

Client Sample ID: 2013-AD-03 (0-0.5) — **Lab Sample ID: 600-85389-23**
Date Collected: 01/09/14 13:10 — **Matrix: Solid**
Date Received: 01/10/14 10:31

Method: 6010B - Metals (ICP) - SPLP West

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0790		0.0100	0.00290	mg/L		03/05/14 17:09	03/06/14 14:56	1

Client Sample ID: SCC-5B (0-0.5) — **Lab Sample ID: 600-85389-29**
Date Collected: 01/10/14 08:51 — **Matrix: Solid**
Date Received: 01/11/14 11:47

Method: 6010B - Metals (ICP) - SPLP West

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.209		0.0100	0.00290	mg/L		03/05/14 17:09	03/06/14 14:58	1

Client Sample ID: 2013-CUFT-5B (0-0.5) — **Lab Sample ID: 600-85389-36**
Date Collected: 01/10/14 09:40 — **Matrix: Solid**
Date Received: 01/11/14 11:47

Method: 6010B - Metals (ICP) - SPLP West

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.101		0.0100	0.00290	mg/L		03/05/14 17:09	03/06/14 15:00	1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

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
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)

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-3

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-128791/1-A
Matrix: Solid
Analysis Batch: 128837

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 128791

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00290	U	0.0100	0.00290	mg/L		03/05/14 17:09	03/06/14 13:22	1

Lab Sample ID: LCS 600-128791/2-A
Matrix: Solid
Analysis Batch: 128837

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 128791

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	1.00	0.9672		mg/L		97	80 - 120

Lab Sample ID: LB 600-128749/1-C
Matrix: Solid
Analysis Batch: 128837

Client Sample ID: Method Blank
Prep Type: SPLP West
Prep Batch: 128791

Analyte	LB Result	LB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00290	U	0.0100	0.00290	mg/L		03/05/14 17:09	03/06/14 14:46	1

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-3

Method: 6010B - Metals (ICP) - SPLP West

Analyte	MQL	MDL	Units	Method
Lead	0.0100	0.00290	mg/L	6010B

Metals

Leach Batch: 128749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-21	2013-SDA-3B (0-0.5)	SPLP West	Solid	1312	
600-85389-23	2013-AD-03 (0-0.5)	SPLP West	Solid	1312	
600-85389-29	SCC-5B (0-0.5)	SPLP West	Solid	1312	
600-85389-36	2013-CUFT-5B (0-0.5)	SPLP West	Solid	1312	
LB 600-128749/1-C	Method Blank	SPLP West	Solid	1312	

Prep Batch: 128791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-21	2013-SDA-3B (0-0.5)	SPLP West	Solid	3010A	128749
600-85389-23	2013-AD-03 (0-0.5)	SPLP West	Solid	3010A	128749
600-85389-29	SCC-5B (0-0.5)	SPLP West	Solid	3010A	128749
600-85389-36	2013-CUFT-5B (0-0.5)	SPLP West	Solid	3010A	128749
LB 600-128749/1-C	Method Blank	SPLP West	Solid	3010A	128749
LCS 600-128791/2-A	Lab Control Sample	Total/NA	Solid	3010A	
MB 600-128791/1-A	Method Blank	Total/NA	Solid	3010A	

Analysis Batch: 128837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-21	2013-SDA-3B (0-0.5)	SPLP West	Solid	6010B	128791
600-85389-23	2013-AD-03 (0-0.5)	SPLP West	Solid	6010B	128791
600-85389-29	SCC-5B (0-0.5)	SPLP West	Solid	6010B	128791
600-85389-36	2013-CUFT-5B (0-0.5)	SPLP West	Solid	6010B	128791
LB 600-128749/1-C	Method Blank	SPLP West	Solid	6010B	128791
LCS 600-128791/2-A	Lab Control Sample	Total/NA	Solid	6010B	128791
MB 600-128791/1-A	Method Blank	Total/NA	Solid	6010B	128791

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-3

Client Sample ID: 2013-SDA-3B (0-0.5)

Lab Sample ID: 600-85389-21

Date Collected: 01/09/14 16:05

Matrix: Solid

Date Received: 01/11/14 11:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP West	Leach	1312			1.0 g	1.0 mL	128749	03/04/14 18:27	CAD	TAL HOU
SPLP West	Prep	3010A			50 mL	50 mL	128791	03/05/14 17:09	NER	TAL HOU
SPLP West	Analysis	6010B		1	50 mL	50 mL	128837	03/06/14 14:53	DCL	TAL HOU

Client Sample ID: 2013-AD-03 (0-0.5)

Lab Sample ID: 600-85389-23

Date Collected: 01/09/14 13:10

Matrix: Solid

Date Received: 01/10/14 10:31

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP West	Leach	1312			1.0 g	1.0 mL	128749	03/04/14 18:27	CAD	TAL HOU
SPLP West	Prep	3010A			50 mL	50 mL	128791	03/05/14 17:09	NER	TAL HOU
SPLP West	Analysis	6010B		1	50 mL	50 mL	128837	03/06/14 14:56	DCL	TAL HOU

Client Sample ID: SCC-5B (0-0.5)

Lab Sample ID: 600-85389-29

Date Collected: 01/10/14 08:51

Matrix: Solid

Date Received: 01/11/14 11:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP West	Leach	1312			1.0 g	1.0 mL	128749	03/04/14 18:27	CAD	TAL HOU
SPLP West	Prep	3010A			50 mL	50 mL	128791	03/05/14 17:09	NER	TAL HOU
SPLP West	Analysis	6010B		1	50 mL	50 mL	128837	03/06/14 14:58	DCL	TAL HOU

Client Sample ID: 2013-CUFT-5B (0-0.5)

Lab Sample ID: 600-85389-36

Date Collected: 01/10/14 09:40

Matrix: Solid

Date Received: 01/11/14 11:47

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP West	Leach	1312			1.0 g	1.0 mL	128749	03/04/14 18:27	CAD	TAL HOU
SPLP West	Prep	3010A			50 mL	50 mL	128791	03/05/14 17:09	NER	TAL HOU
SPLP West	Analysis	6010B		1	50 mL	50 mL	128837	03/06/14 15:00	DCL	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-3

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Texas	NELAP	6	T104704223	10-31-14

Analysis Method	Prep Method	Matrix	Analyte

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

600-85389 Chain of Custody

3/9/2014

Client Information	Sampler: CHRIS TREUNO	Lab PM: Joiner, Dean A	Carrier Tracking No
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com	
Company: Golder Associates Inc.			
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:		
City: Houston	TAT Requested (days): 5 WD TRRP		
State, Zip: TX, 77073			
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested		
Email: Christina_Higginbotham@golder.com	WO #:		
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831		
Site: EXIDE-FRISCO	SSOW#:		

Analysis Requested

Job #:

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Pb	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N			
MW-44 (0-0.5)	01/09/14	1245	G	Solid									X						
MW-44 (0.5-2)	01/09/14	1248	G	Solid															HOLD
MW-44 (2-4)	01/09/14	1250	G	Solid															HOLD
2013-AD-1A (0.5-2)	01/09/14	1343	G	Solid															HOLD
2013-AD-1A (0-0.5)	01/09/14	1342	G	Solid									X						
2013-AD-1A (2-4)	01/09/14	1344	G	Solid															HOLD
2013-FOP-1A (0-0.5)	01/09/14	1358	G	Solid													X		
2013-AD-5 (0-0.5)	01/09/14	1412	G	Solid									X						
2013-AD-5 (0.5-2)	01/09/14	1413	G	Solid															HOLD
2013-AD-5 (2-4)	01/09/14	1414	G	Solid															HOLD
2013-WMW14-1A (0.9-2)	01/09/14	1440	G	Solid													X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/10/14 1530	GOLDER	[signature]	1/10/14 1530	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			[signature]	1/11/14 1147	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 2
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Pb				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N						
2013-WMU14-1A (S-T)	01/09/14	1444	G	Solid													X					
2013-WMU14-1A (S-T) MS	01/09/14	1444	G	Solid													X					
2013-WMU14-1A (S-T) MSD	01/09/14	1444	G	Solid													X					
MW-30A (2-4)	01/09/14	1508	G	Solid													X					
MW-30A (2-4) MS	01/09/14	1508	G	Solid													X					
MW-30A (2-4) MSD	01/09/14	1508	G	Solid													X					
DUP 7	01/09/14	—	G	Solid													X					
DUP 8	01/09/14	—	G	Solid													X					
ECO-1A (0-0.5)	01/09/14	1546	G	Solid									X									
ECO-1A (0.5-2)	01/09/14	1547	G	Solid																		HOLD
ECO 2A (0-0.5)	01/09/14	1554	G	Solid									X									

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/10/14 1530	COURIER		1/10/14 1530	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				1/11/14 1147	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica

3/9/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 3
Company: Golder Associates Inc.				Job #:
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE - FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N					
ECO-2A (0.5-2)	01/09/14	1555	G	Solid																	HOLD
ECO-8A ~~10.5~~ (0-0.5)	01/09/14	1559	G	Solid									X								
2013-SOA-3B (0-0.5)	01/09/14	1605	G	Solid									X								
RINSE BLANK-CME	01/10/14	0825	G	~~Solid~~ W									X								
2013-AD-03 (0-0.5)	01/09/14	1310	G	Solid									X								
2013-AD-03 (0.5-2)	01/09/14	1312	G	Solid																	HOLD
2013-AD-03 (2-4)	01/09/14	1313	G	Solid																	HOLD
MW-36 (0-2)	01/10/14	0900	G	Solid									X								
MW-35 (1-3)	01/10/14	1000	G	Solid									X								
2013-SOA-4B (0-0.5)	01/10/14	0841	G	Solid									X								
SCC-SB (0-0.5)	01/10/14	0851	G	Solid									X								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/10/14 1530	COOPER	[signature]	1/10/14 1530	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			[signature]	1/11/14 1147	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 4
Company: Golder Associates Inc.				Job #:
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE- FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Pb			Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N					
SCL-SA (0-0.5)	01/10/14	0859	G	Solid									X								
2013-CUFT-14(0-2)		0913	G	Solid									X			X					
2013-CUFT-14 (2-4)		0914	G	Solid					HOLD				X			X					HOLD
2013-CUFT-11 (0-0.5)		0918	G	Solid												X	X				
2013-CUFT-11 (0.5-2)		0919	G	Solid								HOLD				X	X				HOLD
2013-CUFT-11 (2-4)		0920	G	Solid								HOLD				X	X				HOLD
2013-CUFT-5B (0-0.5)		0940	G	Solid									X								
2013-CUFT-5A (0-0.5)		0943	G	Solid									X								
2013-CUFT-5D (0-0.5)		0952	G	Solid																	HOLD
2013-CUFT-5D (2-4)		0953	G	Solid									X								
2013-CUFT-5D (4-6)		0954	G	Solid																	HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOSHUA JANZON	01/10/14 1530	GOLDER		1/10/14 1530	TAL
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 1/11/14 1147	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

testamerica

3/9/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 5
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB				Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	N	N	N	N	N	N	N	N					
2013-CUFT-5B (6-8)	01/10/14	0955	G	Solid																	HOLD
2013-CUFT-5B (8-10)		0956	G	Solid																	HOLD
2013-CUFT-6A (0-0.5)		1014	G	Solid									X								
2013-CUFT-6C (0-0.5)		1022	G	Solid																	HOLD
2013-CUFT-6C (2-4)		1023	G	Solid									X								
2013-CUFT-6C (2-4) MS		1024 1023	G	Solid									X								
2013-CUFT-6C (2-4) MSD		1025 1023	G	Solid									X								
2013-CUFT-6C (4-6)	1024	1026 1025	G	Solid																	HOLD
2013-CUFT-6C (6-8)		1025	G	Solid																	HOLD
2013-CUFT-6C (8-10)		1026	G	Solid																	HOLD
DUP 9	↓	—	G	Solid									X								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/10/14 1530		M McCown	1/10/14 1530	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				1/11/14 1147	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 6
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
2013-CUFT-6B (0-0.5)	6/10/14	1041	G	Solid									X					
2013-CUFT-5C (0-0.5)		1051	G	Solid									X					
2013-CUFT-7B (0-0.5)		1108	G	Solid									X					
2013-CUFT-7B (2-4)		1109	G	Solid									X					
2013-CUFT-7B (4-6)		1110	G	Solid														HOLD
2013-CUFT-7B (6-8)		1111	G	Solid														HOLD
2013-CUFT-7B (8-10)		1112	G	Solid														HOLD
2013-CUFT-10D (0-0.5)		1125	G	Solid														HOLD
2013-CUFT-10D (2-4)		1126	G	Solid									X					
2013-CUFT-10D (4-6)		1127	G	Solid														HOLD
2013-CUFT-10D (6-8)		1128	G	Solid														HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	6/10/14 1530	GOLDER	M McGowen	11/10/14 1530	TKL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				11/11/14 1147	TKL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

3/9/2014

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information

Client Contact: Christina Higginbotham	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):
Company: Golder Associates Inc.	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com	COC No: 600-25571-9015.1
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:		Page: Page 7
City: Houston	TAT Requested (days): 5 WD TRRP		Job #: 13020086
State, Zip: TX, 77073			
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested		
Email: Christina_Higginbotham@golder.com	WO #:		
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831		
Site: EXIDE-FRISCO	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
2013-CUFT-10D (8-10)	01/10/14	1129	G	Solid														HOLD
2013-CUFT-10A (0-0.5)	01/10/14	1141	G	Solid									X					
2013-CUFT-10B (0-0.5)	01/10/14	1148	G	Solid									X					
2013-CUFT-10C (0-0.5)	01/10/14	1155	G	Solid									X					
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: JOSHUA JANZEN	Date/Time: 01/10/14 1530	Company: GOLDER	Received by: [signature]
Relinquished by:	Date/Time:	Company	Received by: [signature]
Relinquished by:	Date/Time:	Company	Received by: [signature]

Date/Time:	Company
1/10/14 1530	TAL
1/11/14 1147	TAL

Custody Seals Intact: △ Yes △ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Upton, Cathy

From: Joiner, Dean
Sent: Sunday, March 02, 2014 10:27 PM
To: Upton, Cathy
Subject: FW: Exide - SPLP Request
Importance: High
Follow Up Flag: Follow up
Flag Status: Red

Cathy, Please update. Thanks!

From: Higginbotham, Christina [mailto:Christina_Higginbotham@golder.com]
Sent: Sunday, March 02, 2014 6:21 PM
To: Joiner, Dean
Subject: Exide - SPLP Request
Importance: High

Dean, we would like to request the following samples be run for SPLP. The lab sample IDs are highlighted below. Can you have these results by Friday (5 day)? Please call me in the morning to discuss.

Sample	Depth Interval	Concentration (mg/kg)	Contaminant
2013-MB-5 / 600-85318-7	0.5-5	46.6	Cadmium
2013-NDA-C21 /600-84629-11	0-6	49.9	Cadmium
2013-C2L-06 / 600-85636-21	0-0.5	584	Lead
2013-AD-03 /600-85389-23	0-0.5	734	Lead
2013-NT-02 / 600-85473-23	0-0.5	837	Lead
2013-SDA-3B / 600-85389-21	0-0.5	1000	Lead
SCC-5B / 600-85389-29	0-0.5	1400	Lead
MW-33/2013-FWFS-5B / 600-85473-1	1-2	1420	Lead
2013-CUFT-5B / 600-85389-36	0-0.5	1340	Lead

Christina Higginbotham, P.G. | Remediation Project Manager | **Golder Associates Inc.**
500 Century Plaza Drive, Suite 190, Houston, Texas, USA 77073
T: +1 (281) 821-6868 | **F:** +1 (281) 821-6870 | **C:** +1 (281) 620-7835 | **E:** CHigginbotham@golder.com | **www.golder.com**

Work Safe, Home Safe

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Please consider the environment before printing this email.

From: Joiner, Dean [mailto:dean.joiner@testamericainc.com]
Sent: Friday, February 28, 2014 1:02 AM
To: Collier, Brenda; Higginbotham, Christina; Xi, Jing Song
Subject: Final Invoice Ready For Payment - Files from 600-86460-3 Exide Recycling Center - Water 6020

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: Project Feedback

DEAN A JOINER

TestAmerica Houston
THE LEADER IN ENVIRONMENTAL TESTING

Tel: 713.690.4444
www.testamericainc.com

Reference: [183891]
Attachments: 1

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-85389-3

Login Number: 85389

List Source: TestAmerica Houston

List Number: 1

Creator: Capps, Dana R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	2.0/1.5
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.	False	Refer to Job Narrative for details.
Samples are received within Holding Time.	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	Check done at department level as required.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-85389-4
Client Project/Site: Exide Recycling Center
Revision: 1

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
4/30/2014 10:55:09 AM
Cathy Upton, Project Management Assistant II
(713)690-4444
cathy.upton@testamericainc.com

Designee for

Dean Joiner, Project Manager II
(713)690-4444
dean.joiner@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: 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.

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-85389-4 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☐ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☐ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☐ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton		4/3/2014
Name (printed)	Signature	Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/3/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85389-4
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				R05D
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/3/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85389-4
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/3/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85389-4
Reviewer Name:	Dean A Joiner		

ER #[1]	Description
R05D	Method 6010B: The method blank for batch 124919 contained Cadmium above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Detection Check Standard

Matrix:	Soil
Method:	6010B
Preparation:	3050
Date Analyzed:	12/30/2013
Date Prepared:	12/27/2013
Instrument:	Thermo 6500
TALS Batches:	123949, 123775p
Prep/Reagent Factor =	50
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.299654	0.5	0.36	25
Antimony	0.231553	0.45	0.5	2.5
Arsenic	0.217923	0.5	0.53	1
Barium	0.011322	0.03	0.04	1
Beryllium	0.014513	0.02	0.015	0.25
Boron	0.385535	0.6	0.56	20
Cadmium	0.025642	0.05	0.05	0.25
Calcium	0.86399	1.5	2.185	100
Chromium	0.050606	0.1	0.135	0.5
Cobalt	0.067622	0.1	0.09	0.5
Copper	0.173703	0.5	0.64	0.5
Iron	2.534007	4	3.76	20
Lead	0.104832	0.2	0.215	0.5
Selenium	0.258884	0.5	0.465	2
Manganese	0.038111	0.05	0.085	1.5
Molybdenum	0.136448	0.35	0.38	0.5
Nickel	0.116599	0.15	0.2	1
Silver	0.118848	0.2	0.15	0.5
Sodium	0.885548	2.4	3.135	100
Thallium	0.276988	0.7	0.73	1.5
Tin	0.08729	0.15	0.19	1
Titanium	0.014529	0.03	0.01	0.5
Vanadium	0.079068	0.15	0.125	0.5
Zinc	0.108432	0.2	0.305	1.5

Job ID: 600-85389-4

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-85389-4

Comments

This separate report was generated per the client request to report all 5 metals for samples 600-85389-16, 18, 28 and 36--sample 24 reported in job 600-85389-2. See attached email.
The report was revised on 04/30/14 to dry weight correct the results, replacing the final report generated on 04/03/14.

Receipt

The samples were received on 1/11/2014 11:47 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.5° C and 2.0° C.

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-4

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU
Moisture	Percent Moisture	EPA	TAL HOU

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 HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-4

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-85389-16	ECO-1A (0-0.5)	Solid	01/09/14 15:46	01/11/14 11:47
600-85389-18	ECO-2A (0-0.5)	Solid	01/09/14 15:54	01/11/14 11:47
600-85389-28	2013-SDA-4B (0-0.5)	Solid	01/10/14 08:41	01/11/14 11:47
600-85389-36	2013-CUFT-5B (0-0.5)	Solid	01/10/14 09:40	01/11/14 11:47

Client Sample ID: ECO-1A (0-0.5)

Lab Sample ID: 600-85389-16

Date Collected: 01/09/14 15:46
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 79.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.463	J	3.01	0.279	mg/Kg	☼	01/14/14 12:46	01/15/14 14:04	1
Arsenic	12.4		1.20	0.262	mg/Kg	☼	01/14/14 12:46	01/15/14 14:04	1
Cadmium	0.692	b	0.301	0.0309	mg/Kg	☼	01/14/14 12:46	01/15/14 14:04	1
Lead	151		0.602	0.126	mg/Kg	☼	01/14/14 12:46	01/15/14 14:04	1
Selenium	0.312	U	2.41	0.312	mg/Kg	☼	01/14/14 12:46	01/15/14 14:04	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	80		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: ECO-2A (0-0.5)

Lab Sample ID: 600-85389-18

Date Collected: 01/09/14 15:54
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 78.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.46	J	3.17	0.293	mg/Kg	☼	01/14/14 12:46	01/15/14 14:06	1
Arsenic	16.3		1.27	0.276	mg/Kg	☼	01/14/14 12:46	01/15/14 14:06	1
Cadmium	3.29	b	0.317	0.0325	mg/Kg	☼	01/14/14 12:46	01/15/14 14:06	1
Lead	303		0.634	0.133	mg/Kg	☼	01/14/14 12:46	01/15/14 14:06	1
Selenium	0.564	J	2.53	0.328	mg/Kg	☼	01/14/14 12:46	01/15/14 14:06	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	79		1.0	1.0	%			01/13/14 13:24	1

Client Sample ID: 2013-SDA-4B (0-0.5)

Lab Sample ID: 600-85389-28

Date Collected: 01/10/14 08:41
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 82.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.315	J	2.92	0.270	mg/Kg	☼	01/14/14 14:21	01/15/14 14:33	1
Arsenic	11.7		1.17	0.254	mg/Kg	☼	01/14/14 14:21	01/15/14 14:33	1
Cadmium	0.671		0.292	0.0299	mg/Kg	☼	01/14/14 14:21	01/15/14 14:33	1
Lead	44.5		0.584	0.122	mg/Kg	☼	01/14/14 14:21	01/15/14 14:33	1
Selenium	0.403	J	2.33	0.302	mg/Kg	☼	01/14/14 14:21	01/15/14 14:33	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	82		1.0	1.0	%			01/13/14 13:24	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-4

Client Sample ID: 2013-CUFT-5B (0-0.5)
Date Collected: 01/10/14 09:40
Date Received: 01/11/14 11:47

Lab Sample ID: 600-85389-36
Matrix: Solid
Percent Solids: 74.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.00	J	3.21	0.298	mg/Kg	☼	01/14/14 14:21	01/15/14 15:00	1
Arsenic	7.23		1.29	0.280	mg/Kg	☼	01/14/14 14:21	01/15/14 15:00	1
Cadmium	2.35		0.321	0.0330	mg/Kg	☼	01/14/14 14:21	01/15/14 15:00	1
Lead	1340		0.643	0.135	mg/Kg	☼	01/14/14 14:21	01/15/14 15:00	1
Selenium	0.333	U	2.57	0.333	mg/Kg	☼	01/14/14 14:21	01/15/14 15:00	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26		1.0	1.0	%			01/13/14 13:24	1
Percent Solids	74		1.0	1.0	%			01/13/14 13:24	1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
b	The compound was found in the blank and sample
U	Analyte was not detected at or above the SDL.

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
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)

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-124919/1-A
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124919

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		01/14/14 12:46	01/15/14 12:51	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		01/14/14 12:46	01/15/14 12:51	1
Cadmium	0.03000	J	0.250	0.0256	mg/Kg		01/14/14 12:46	01/15/14 12:51	1
Lead	0.105	U	0.500	0.105	mg/Kg		01/14/14 12:46	01/15/14 12:51	1
Selenium	0.259	U	2.00	0.259	mg/Kg		01/14/14 12:46	01/15/14 12:51	1

Lab Sample ID: LCSSRM 600-124919/2-A
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124919

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	101.7		mg/Kg		115.3	45.4 - 231.3
Arsenic	99.6	99.60		mg/Kg		100.0	80.8 - 119.5
Cadmium	182	190.9		mg/Kg		104.9	81.9 - 118.1
Lead	115	115.8		mg/Kg		100.7	81.8 - 119.1
Selenium	150	147.1		mg/Kg		98.1	77.3 - 122.7

Lab Sample ID: MB 600-124939/1-A
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124939

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		01/14/14 14:21	01/15/14 14:26	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		01/14/14 14:21	01/15/14 14:26	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		01/14/14 14:21	01/15/14 14:26	1
Lead	0.105	U	0.500	0.105	mg/Kg		01/14/14 14:21	01/15/14 14:26	1
Selenium	0.259	U	2.00	0.259	mg/Kg		01/14/14 14:21	01/15/14 14:26	1

Lab Sample ID: LCSSRM 600-124939/2-A
Matrix: Solid
Analysis Batch: 125010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124939

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	76.41		mg/Kg		86.6	45.4 - 231.3
Arsenic	99.6	93.75		mg/Kg		94.1	80.8 - 119.5
Cadmium	182	178.7		mg/Kg		98.2	81.9 - 118.1
Lead	115	102.8		mg/Kg		89.4	81.8 - 119.1
Selenium	150	142.5		mg/Kg		95.0	77.3 - 122.7

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-4

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Antimony	2.50	0.232	mg/Kg	6010B
Arsenic	1.00	0.218	mg/Kg	6010B
Cadmium	0.250	0.0256	mg/Kg	6010B
Lead	0.500	0.105	mg/Kg	6010B
Selenium	2.00	0.259	mg/Kg	6010B

General Chemistry

Analyte	MQL	MDL	Units	Method
Percent Moisture	1.0	1.0	%	Moisture
Percent Solids	1.0	1.0	%	Moisture

QC Association Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-4

Metals

Prep Batch: 124919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-16	ECO-1A (0-0.5)	Total/NA	Solid	3050B	
600-85389-18	ECO-2A (0-0.5)	Total/NA	Solid	3050B	
LCSSRM 600-124919/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-124919/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 124939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-28	2013-SDA-4B (0-0.5)	Total/NA	Solid	3050B	
600-85389-36	2013-CUFT-5B (0-0.5)	Total/NA	Solid	3050B	
LCSSRM 600-124939/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-124939/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 125010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-16	ECO-1A (0-0.5)	Total/NA	Solid	6010B	124919
600-85389-18	ECO-2A (0-0.5)	Total/NA	Solid	6010B	124919
600-85389-28	2013-SDA-4B (0-0.5)	Total/NA	Solid	6010B	124939
600-85389-36	2013-CUFT-5B (0-0.5)	Total/NA	Solid	6010B	124939
LCSSRM 600-124919/2-A	Lab Control Sample	Total/NA	Solid	6010B	124919
LCSSRM 600-124939/2-A	Lab Control Sample	Total/NA	Solid	6010B	124939
MB 600-124919/1-A	Method Blank	Total/NA	Solid	6010B	124919
MB 600-124939/1-A	Method Blank	Total/NA	Solid	6010B	124939

General Chemistry

Analysis Batch: 124801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85389-16	ECO-1A (0-0.5)	Total/NA	Solid	Moisture	
600-85389-18	ECO-2A (0-0.5)	Total/NA	Solid	Moisture	
600-85389-28	2013-SDA-4B (0-0.5)	Total/NA	Solid	Moisture	
600-85389-36	2013-CUFT-5B (0-0.5)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-4

Client Sample ID: ECO-1A (0-0.5)

Lab Sample ID: 600-85389-16

Date Collected: 01/09/14 15:46
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	50 mL	124919	01/14/14 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	125010	01/15/14 14:04	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: ECO-2A (0-0.5)

Lab Sample ID: 600-85389-18

Date Collected: 01/09/14 15:54
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 78.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	50 mL	124919	01/14/14 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	125010	01/15/14 14:06	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-SDA-4B (0-0.5)

Lab Sample ID: 600-85389-28

Date Collected: 01/10/14 08:41
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 82.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	50 mL	124939	01/14/14 14:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	125010	01/15/14 14:33	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Client Sample ID: 2013-CUFT-5B (0-0.5)

Lab Sample ID: 600-85389-36

Date Collected: 01/10/14 09:40
Matrix: Solid
Date Received: 01/11/14 11:47
Percent Solids: 74.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	124939	01/14/14 14:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	125010	01/15/14 15:00	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			124801	01/13/14 13:24	AYS	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85389-4

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Texas	NELAP	6	T104704223	10-31-14

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmeri[illegible]Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

600-85389 Chain of Custody

4/30/2014

Client Information	Sampler: CHRIS TREUNO	Lab PM: Joiner, Dean A	Carrier Tracking No
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com	
Company: Golder Associates Inc.			
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:		
City: Houston	TAT Requested (days): 5 WD TRRP		
State, Zip: TX, 77073			
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested		
Email: Christina_Higginbotham@golder.com	WO #:		
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831		
Site: EXIDE-FRISCO	SSOW#:		

Analysis Requested

Job #:

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Pb	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N			
MW-44 (0-0.5)	01/09/14	1245	G	Solid									X						
MW-44 (0.5-2)	01/09/14	1248	G	Solid															HOLD
MW-44 (2-4)	01/09/14	1250	G	Solid															HOLD
2013-AD-1A (0.5-2)	01/09/14	1343	G	Solid															HOLD
2013-AD-1A (0-0.5)	01/09/14	1342	G	Solid									X						
2013-AD-1A (2-4)	01/09/14	1344	G	Solid															HOLD
2013-FOP-1A (0-0.5)	01/09/14	1358	G	Solid													X		
2013-AD-5 (0-0.5)	01/09/14	1412	G	Solid									X						
2013-AD-5 (0.5-2)	01/09/14	1413	G	Solid															HOLD
2013-AD-5 (2-4)	01/09/14	1414	G	Solid															HOLD
2013-WM4/14-1A (0.9-2)	01/09/14	1440	G	Solid													X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/10/14 1530	COOPER	[signature]	1/10/14 1530	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			[signature]	1/11/14 1147	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

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Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 2
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
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			Preservation Code:				N	N	N	N	N	N	N	N	N	N						
2013-WMU14-1A (S-T)	01/09/14	1444	G	Solid													X					
2013-WMU14-1A (S-T) MS	01/09/14	1444	G	Solid													X					
2013-WMU14-1A (S-T) MSD	01/09/14	1444	G	Solid													X					
MW-30A (2-4)	01/09/14	1508	G	Solid													X					
MW-30A (2-4) MS	01/09/14	1508	G	Solid													X					
MW-30A (2-4) MSD	01/09/14	1508	G	Solid													X					
DUP 7	01/09/14	—	G	Solid													X					
DUP 8	01/09/14	—	G	Solid													X					
ECO-1A (0-0.5)	01/09/14	1546	G	Solid									X									
ECO-1A (0.5-2)	01/09/14	1547	G	Solid																		HOLD
ECO 2A (0-0.5)	01/09/14	1554	G	Solid									X									

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Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/10/14 1530	COURIER	[signature]	1/10/14 1530	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			[signature]	1/11/14 1147	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica

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Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 3
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Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE - FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
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			Preservation Code:				N	N	N	N	N	N	N	N	N	N					
ECO-2A (0.5-2)	01/09/14	1555	G	Solid																	HOLD
ECO-8A ~~10.5~~ (0-0.5)	01/09/14	1559	G	Solid									X								
2013-SOA-3B (0-0.5)	01/09/14	1605	G	Solid									X								
RINSE BLANK-CME	01/10/14	0825	G	~~Solid~~ W									X								
2013-AD-03 (0-0.5)	01/09/14	1310	G	Solid									X								
2013-AD-03 (0.5-2)	01/09/14	1312	G	Solid																	HOLD
2013-AD-03 (2-4)	01/09/14	1313	G	Solid																	HOLD
MW-36 (0-2)	01/10/14	0900	G	Solid									X								
MW-35 (1-3)	01/10/14	1000	G	Solid									X								
2013-SOA-4B (0-0.5)	01/10/14	0841	G	Solid									X								
SCC-SB (0-0.5)	01/10/14	0851	G	Solid									X								

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JOSHUA JANZEN	01/10/14 1530	GOLDER	[signature]	1/10/14 1530	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			[signature]	1/11/14 1147	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

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Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
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			Preservation Code:				N	N	N	N	N	N	N	N	N	N					
SCL-SA (0-0.5)	01/10/14	0859	G	Solid									X								
2013-CUFT-14(0-2)		0913	G	Solid									X			X					
2013-CUFT-14 (2-4)		0914	G	Solid					HOLD				X			X					HOLD
2013-CUFT-11 (0-0.5)		0918	G	Solid												X	X				
2013-CUFT-11 (0.5-2)		0919	G	Solid								HOLD				X	X				HOLD
2013-CUFT-11 (2-4)		0920	G	Solid								HOLD				X	X				HOLD
2013-CUFT-5B (0-0.5)		0940	G	Solid									X								
2013-CUFT-5A (0-0.5)		0943	G	Solid									X								
2013-CUFT-5D (0-0.5)		0952	G	Solid																	HOLD
2013-CUFT-5D (2-4)		0953	G	Solid									X								
2013-CUFT-5D (4-6)		0954	G	Solid																	HOLD

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				1/11/14 1147	TAL
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testamerica

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Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

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			Preservation Code:		X	X	N	N	N	N	N	N	N	N	N	N						
2013-CUFT-5B (6-8)	01/10/14	0955	G	Solid																		HOLD
2013-CUFT-5B (8-10)		0956	G	Solid																		HOLD
2013-CUFT-6A (0-0.5)		1014	G	Solid									X									
2013-CUFT-6C (0-0.5)		1022	G	Solid																		HOLD
2013-CUFT-6C (2-4)		1023	G	Solid									X									
2013-CUFT-6C (2-4) MS		1024 1023 MS	G	Solid									X									
2013-CUFT-6C (2-4) MSD		1025 1023	G	Solid									X									
2013-CUFT-6C (4-6)	1024	1026	G	Solid																		HOLD
2013-CUFT-6C (6-8)		1025	G	Solid																		HOLD
2013-CUFT-6C (8-10)		1026	G	Solid																		HOLD
DUP 9	↓	—	G	Solid									X									

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			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
2013-CUFT-6B (0-0.5)	01/10/14	1041	G	Solid									X					
2013-CUFT-5C (0-0.5)		1051	G	Solid									X					
2013-CUFT-7B (0-0.5)		1108	G	Solid									X					
2013-CUFT-7B (2-4)		1109	G	Solid									X					
2013-CUFT-7B (4-6)		1110	G	Solid														HOLD
2013-CUFT-7B (6-8)		1111	G	Solid														HOLD
2013-CUFT-7B (8-10)		1112	G	Solid														HOLD
2013-CUFT-10D (0-0.5)		1125	G	Solid														HOLD
2013-CUFT-10D (2-4)		1126	G	Solid									X					
2013-CUFT-10D (4-6)		1127	G	Solid														HOLD
2013-CUFT-10D (6-8)		1128	G	Solid														HOLD

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Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
				1/11/14 1147	TKL
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Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

4/30/2014

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Houston, TX 77040
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Chain of Custody Record

Client Information

Client Contact: Christina Higginbotham	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):
Company: Golder Associates Inc.	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com	COC No: 600-25571-9015.1
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:		Page: Page 7
City: Houston	TAT Requested (days): 5 WD TRRP		Job #: 13020086
State, Zip: TX, 77073			
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested		
Email: Christina_Higginbotham@golder.com	WO #:		
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831		
Site: EXIDE-FRISCO	SSOW#:		

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
2013-CUFT-10D (8-10)	01/10/14	1129	G	Solid														HOLD
2013-CUFT-10A (0-0.5)	01/10/14	1141	G	Solid									X					
2013-CUFT-10B (0-0.5)	01/10/14	1148	G	Solid									X					
2013-CUFT-10C (0-0.5)	01/10/14	1155	G	Solid									X					
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: JOSHUA JANZEN	Date/Time: 01/10/14 1530	Company: GOLDER	Received by: [signature]	Date/Time: 1/10/14 1530	Company: TAL
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 1/11/14 1147	Company: TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

Upton, Cathy

From: Faeth-Boyd, Anne [Anne_Faeth-Boyd@golder.com]
Sent: Thursday, March 27, 2014 3:52 PM
To: Upton, Cathy
Cc: Joiner, Dean; Higginbotham, Christina; Forthaus, Brett; Thomas, Jim
Subject: Additional Metals Reporting
Follow Up Flag: Follow up
Flag Status: Blue

Cathy,

Could you please send revised reports to include all five metals (lead, cadmium, arsenic, antimony, selenium) for the following samples:

2013-AD-03 (0.5-2)	600-85389-24	2014-01-09
2013-C2L-06 (1-2)	600-85636-22	2014-01-14
2013-CUFT-5B (0-0.5)	600-85389-36	2014-01-10
2013-NT-02 (0-0.5)	600-85473-23	2014-01-10
2013-SDA-4B (0-0.5)	600-85389-28	2014-01-10
E-11C (0-0.5)	600-85318-29	2014-01-09
ECO-10A (0-0.5)	600-85473-16	2014-01-10
ECO-1A (0-0.5)	600-85389-16	2014-01-09
ECO-2A (0-0.5)	600-85389-18	2014-01-09
ECO-4B (0-0.5)	600-85473-41	2014-01-13
SRB-VS-9E (0-0.5)	600-85473-14	2014-01-10

Thanks,
Anne

Anne Faeth-Boyd, R.G., P.E. | Senior Project Engineer | **Golder Associates Inc.**
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Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-85389-4

Login Number: 85389

List Source: TestAmerica Houston

List Number: 1

Creator: Capps, Dana R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	2.0/1.5
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.	False	Refer to Job Narrative for details.
Samples are received within Holding Time.	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	Check done at department level as required.

Data Usability Summary
Test America Work Orders: 600-85473-1, 600-85473-2, 600-85473-3

Sample Dates:	January 10 & 13, 2013	**Project No.:**	1302086
Laboratory:	Test America (TLAP Certification T104704223)	**Client:**	Exide Technologies Inc.
Work Orders:	Work Orders: 600-85473-1, 600-85473-2, 600-85473-3		
Intended Use	Affected Property Assessment Report (APAR)		
Site:	Exide Former Operating Plant (FOP), 7471 5th Street, Frisco, TX		

TESTS/ METHODS

Polychlorinated Biphenyls (PCBs) by SW-846 8082 – Gas Chromatography (GC)

Total Metals by SW-846 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP)

SAMPLES

32 soil samples, 2 field duplicates, 2 equipment rinsate blanks, 2 field MS/MSD pairs. See Table 1 for a complete cross-referenced listing of samples.

Golder completed a review of the above chemical analysis data for conformance with the requirements of the Texas Risk Reduction Program (TRRP) guidance document, Review and Reporting of COC Concentration Data (RGG-366/TRRP-13 Revised May 2010) and for adherence to project objectives. The results of the review are discussed in this data usability summary (DUS).

Golder completed the review using the following laboratory and project submittals:

- Laboratory reportable data as defined in TRRP-13;
- Laboratory review checklists (LRC) with the associated exception reports;
- Laboratory Electronic Data Deliverable (EDD); and
- Project field notes from the sampling event.

The review of the reportable data included the quality control (QC) parameters listed below, as required per TRRP-13, using the applicable analytical method and project requirements:

- Data Completeness
- Chain-of-Custody Procedures
- Sample Condition - Holding Time, Preservation, and Containers
- Field Procedures
- Results Reporting Procedures

- Laboratory and Field QC Blanks
- Laboratory Control Spike and Matrix Spike Recoveries
- Surrogate Recoveries
- Laboratory and Field Duplicate Precision

Additionally, Golder used the LRC to evaluate the following QC parameters:

- Method Quantitation Limits (MQLs)
- Method Detection Limits (MDLs)
- Instrument Tuning, Calibration, and Performance
- Internal Standards

Criteria used for this data usability review are as follows:

- Inorganics: 70-130% spike recovery (and not less than 30% or data is rejected) and +MQL difference or 30% RPD (for laboratory duplicates) as recommended in TRRP-13;
- Organics: 60-140% spike recovery (and not less than 10% or data is rejected) and +MQL difference or 40% RPD (for laboratory duplicates) as recommended in TRRP-13; and
- Soil Samples: + 3x MQL difference (if either result is less than 5x MQL) or 50% RPD (for field duplicates) as recommended in TRRP-13.

If an item was found outside of the review criteria, the reviewer applied a data qualifier (DQ) and bias code to the results for the affected samples in accordance with TRRP-13. A list of all qualified results and definitions of the qualifier and bias codes are given in Table 2.

GLOSSARY OF TERMS

The following definitions apply for terms related to analyte reporting limits:

MDL (Method Detection Limit) – the minimum concentration of an analyte that the laboratory can measure and report with 99% confidence that the analyte concentration is greater than zero. The MDL is determined by the laboratory for each analyte in a given reagent matrix (water or soil) generally using the procedures specified in 40 CFR Part 136, Appendix B. It is a measure of the concentration an instrument can detect or 'see' in a given reagent matrix. TRRP-13 requires that the laboratory routinely check the MDL for reasonableness.

SDL (Sample Detection Limit) – the MDL adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes than prescribed in the analytical method, and taking into account sample characteristics, sample preparation, and analytical adjustments including dry-weight adjustments. It is a measure of the concentration an instrument can detect or 'see' in a given sample. For TRRP, non-detects

are reported using the SDL. This term was originally called the SQL (Sample Quantitation Limit) before the TRRP rule revisions effective March 19, 2007.

Unadjusted MQL (Method Quantitation Limit) – the lowest non-zero concentration standard in the laboratory's initial calibration curve calculated using the normal aliquot sizes and final volumes prescribed in the analytical method. The unadjusted MQL is reported by the laboratory for each analyte in a given matrix (water or soil). It is a measure of the concentration an instrument can accurately measure in a typical sample. Per TRRP, the Unadjusted MQLs should be below the Levels of Required Performance (LORPs) for purposes of assessment as well as demonstration of conformance with critical Protective Concentration Levels (PCLs).

MQL – the unadjusted MQL adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes than prescribed in the analytical method, and takes into account sample characteristics, sample preparation, and analytical adjustments including dry-weight adjustments. It is a measure of the concentration an instrument can accurately measure in a given sample. Analytes with concentrations above the SDL but below the MQL, though present in the sample, may not be accurately measured and are thus flagged as estimated (J).

LABORATORY CERTIFICATION

At the time the laboratory data were generated for this project, the laboratory was NELAC accredited under the Texas Laboratory Accreditation Program (TLAP) for the matrices, methods and parameters of analysis requested on the chain-of-custody forms. A copy of the applicable pages of the laboratory's National Environmental Laboratory Accreditation Program (NELAP) certificate valid during the period in which the laboratory generated the data in this report is included in Appendix 10.5.

USABILITY SUMMARY

1. Usability of Unqualified Non-Detects – Non-detects are reported at the sample detection limit (SDL) as required per TRRP. Additionally, according to the LRC, an MDL study was performed for each analyte and the MDLs were checked for reasonableness for each applicable analyte. The levels of required performance (LORPs) have been established by Golder/PBW as the Residential Assessment Levels (RALs), which are the minimum of the TRRP residential Tier 1 $^{Tot}Soil_{Comb}$ and Tier 1, 2 or 3 $^{GW}Soil_{Ing}$ PCLs for a 30-acre source area. As needed per TRRP, the Unadjusted MQL stated by the laboratory is at or below the LORP for each applicable analyte, and thus the analytical methods are appropriate and the results can be used to demonstrate conformance with the criteria.
2. Usability of Qualified Data – There are no major QC deficiencies, and thus all data is usable as qualified for the intended use. As shown in Table 2, the reviewer qualified some detects as estimated (J) due to minor QC deficiencies. Detects that are biased high can be used; however, the reported concentration may be high. Detects that are estimated may be either low or high. Results with a laboratory J-flag (i.e., at a

concentration between the SDL and MQL) should be considered estimates. The actual value is not expected to exceed the sample MQL.

Reviewer: Jing Song Xi 5/19/14

QUALITY CONTROL PARAMETERS AND OUTCOMES

Data Completeness

The laboratory data packages contain all necessary data (i.e., the laboratory reportable data per TRRP-13) and the EDD contain all sample results in acceptable format. Minor revisions were required for work orders 600-85473-1. All revisions are detailed in the laboratory narrative.

Chain-of-Custody

Proper sample custody procedures were used, which confirms that the integrity of the samples was maintained. Additionally, the information on the custody records is complete and agrees with that in the field notes and laboratory reports, except as follows:

- Minor instances of container labels not matching information listed on the COC. These inconsistencies have been addressed by the laboratory and do not affect sample results.

Sample Condition

Samples were collected in appropriate containers, properly preserved in the field, and prepared and analyzed within the holding times as required in the analytical methods, which ensures that the samples were not affected by analyte degradation:

- For 600-85473, the temperatures of the coolers at receipt were 2.2°C and 3.0°C.

Field Procedures

The samples were collected and placed immediately into sterilized jars provided by the laboratory and then into a cooler with ice for overnight delivery to the laboratory.

Two field duplicates were collected with the 32 investigative samples. Two site-specific MS/MSD samples were collected. Two equipment rinsate blanks were collected with the samples.

Results Reporting Procedures

The hardcopy analytical results include a Result, MQL (adjusted), and SDL. The EDD includes the MDL, SDL (under the SQL column per previously used terminology) and the MQL, which is not adjusted for sample specific factors.

Results are reported in mg/kg with dry-weight correction for the metals. Non-detects are reported using the SDL as specified per TRRP and detects between the SDL and MQL are reported with a laboratory J-flag. The concentration reported for detects between the SDL and MQL is below the calibration range and thus is considered estimated.

MQLs- The LORPs have been established by Golder/PBW as the Residential Assessment Levels (RALs), which are the minimum of the TRRP residential Tier 1 Tier 1 $^{Tot}Soil_{Comb}$ and Tier 1, 2 or 3 $^{GW}Soil_{Ing}$ PCLs for a 30-acre source area. The Unadjusted MQLs for the laboratory are at or below the LORPs for each applicable analyte.

MDLs- According to the LRC, an MDL study was performed for each analyte, and the MDLs were checked for reasonableness and either adjusted or supported by the analysis of detectability check standards (DCS) for each applicable analyte as required per TRRP-13. Results for the DCS are included in the data packages.

Laboratory Blanks

Results for samples prepared in the same QC batch as a contaminated method blank may be affected by laboratory contamination. There were no detections in the laboratory blanks.

Field QC Blanks

Two equipment rinsate blanks were collected to document sufficient field decontamination procedures for soil sampling devices. No analytes were detected in the field QC blanks. Results for samples collected with a contaminated rinsate blank may be affected by field contamination. However, analytes were not detected in the rinsate blanks, and thus there is no effect on data quality.

Laboratory Control Sample

The laboratory prepared one laboratory control sample (LCS) for each analytical batch and reported recoveries for all of the analytes for each test. The LCS recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on a sample, free of matrix effects.

Matrix Spike Recovery

The laboratory prepared one or more matrix spike (MS) and matrix spike duplicate (MSD) with each analytical batch plus a Post Digestion Spike (PDS) with each metals analytical batch. MS/MSD recoveries are reported for the same analytes as the LCS for MS/MSD prepared using a sample from the site, which includes 2 MS/MSD for Total Metals, as shown in Table 1.

PDS outcomes are given on the LRC for each job package; however PDS data are not reportable data per TRRP-13. According to the LRC, the PDS met method requirements, which indicates good accuracy for the analysis technique on the given sample matrix.

The MS/MSD recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on a sample free of matrix effects, except as follows:

QC Batch	Lab Sample ID	MS/MSD ID	Analyte	Parent Amount (mg/kg)	Spike Amount for MS/MSD (mg/kg)	MS % Recovery	MSD % Recovery	Qual
125089	600-85473-16	ECO-10A (0-0.5)	Antimony	0.263	56.8, 57.3	47	43	JL
125124	600-85473-34	2013-FWFS-5A (0-2)	Antimony	0.275	57.7, 57.2	35	34	JL
125124	600-85473-34	2013-FWFS-5A (0-2)	Lead	100	57.7, 57.2	-43	-46	JL
125124	600-85473-36	2013-BSB-8A (8-10)	Antimony	26.8	60.1, 61.8	-9	2	JL
125124	600-85473-36	2013-BSB-8A (8-10)	Cadmium	11.4	30.0, 30.9	60	70	JL
125124	600-85473-36	2013-BSB-8A (8-10)	Lead	14800	60.1, 61.8	-23109	-17640	-

NA – Not available.

In all cases where the spike amount is less than four times the result in the unspiked parent sample, the data are considered inconclusive and the MS/MSD recovery check is waived. Note that the PDS recoveries and the recoveries for the remaining MS/MSD are within the criteria.

Surrogate Recovery

Surrogate recoveries were within acceptable criteria for PCB analyses.

Laboratory Duplicate Precision

The laboratory prepared one or more Matrix Spike Duplicate (MSD) with each analytical batch for each test. Additionally, the laboratory prepared one Matrix Duplicate (MD) with each metals and pH analytical batch. RPDs are reported for the same analytes as the LCS for MSD/MD prepared using a sample from the site, which includes 2 MSD and MD for Total Metals, as shown in Table 1.

The MSD and MD RPDs are within the TRRP recommended criteria, which indicates good precision for the preparation and analysis technique for the given sample matrix, except as follows:

QC Batch	Lab Sample ID	MS/MSD ID	Analyte	Parent Amount (mg/kg)	MSD RPD	MD RPD	Qual
125124	600-85473-16	ECO-10A (0-0.5)	Cadmium	0.409	8	73	J

125124	600-85473-16	ECO-10A (0-0.5)	Lead	21.4	1	93	J
125124	600-85473-34	2013-FWFS-5A (0-2)	Lead	100	2	74	J
125124	600-85473-36	2013-BSB-8A (8-10)	Lead	14800	191	22	J

Field Duplicate Precision

Two field duplicates were collected with the samples and analyzed for cadmium and lead. Results are summarized in Table 3. The RPDs (or the absolute difference between results for concentrations <5x MQL and for non-detects) are within the TRRP criteria, which indicates good precision for the sampling, preparation, and analysis technique on the given sample matrix, except as follows:

- The results for Total lead are outside the criteria for the pair collected at 2013-FWFS-5A (0-2).
- The results for Total cadmium and Total lead are outside the criteria for the pair collected at 2013-BSB-8A (8-10).

Instrument Tuning

According to the LRC, instrument tuning met method requirements for the samples, which indicates the GC/MS instrument was properly set up to identify analytes.

Instrument Calibration

According to the LRC, initial and continuing calibration data met method requirements for all reported results, which indicates the instruments were properly calibrated to measure analyte concentrations.

Instrument Performance

According to the LRC, the serial dilution and ICP interference check samples met method requirements, which indicates that no significant matrix interference exists, except as follows:

- The interference check standard solution associated with batch 123111 showed results for lead at a level greater than 2 times the LOD. Since this analyte was not detected in the field sample, no corrective action was required.

Internal Standards

According to the LRC, area counts and retention times were within method requirements.

TABLE 1
CROSS REFERENCE OF FIELD SAMPLE IDENTIFICATIONS AND LABORATORY IDENTIFICATIONS

Lab Sample ID	Field Sample ID	Prep Batch / Analysis Batch	Sample Date	Matrix	Comments
600-85473-1	MW-33/2013-FWFS-5B (1-2)	125089/125211 128791/128837	1/10/2014	Soil	
600-85473-2	MW-33/2013-FWFS-5B (2-4)	127810/127873	1/10/2014	Soil	
600-85473-3	MW-33/2013-FWFS-5B (4-5)	125089/125211	1/10/2014	Soil	
600-85473-4	F-5D (0-0.25)	125089/125211	1/10/2014	Soil	
600-85473-5	F-5D (1)		1/10/2014	Soil	Not reported
600-85473-6	F-5E (0-0.25)	125089/125211	1/10/2014	Soil	
600-85473-7	F-5E (1)		1/10/2014	Soil	Not reported
600-85473-8	F-5B (0-0.25)	125089/125211	1/10/2014	Soil	
600-85473-9	F-5B (1)		1/10/2014	Soil	Not reported
600-85473-10	F-5A (0-0.25)	125089/125211	1/10/2014	Soil	
600-85473-11	F-5A (1)	127810/127873	1/10/2014	Soil	
600-85473-12	F-5C (0-0.25)	125089/125211	1/10/2014	Soil	
600-85473-13	F-5C (1)		1/10/2014	Soil	Not reported
600-85473-14	SRB-VS-9E (0-0.5)	125089/125211	1/10/2014	Soil	
600-85473-15	SRB-VS-11A (0-0.5)	125089/125211	1/10/2014	Soil	
600-85473-16	ECO-10A (0-0.5)	125089/125211	1/10/2014	Soil	
600-85473-17	ECO-4A (0-0.5)	125089/125211	1/10/2014	Soil	
600-85473-18	ECO-4A (0.5-2)		1/10/2014	Soil	Not reported
600-85473-19	E-11D (0-0.5)	125089/125211	1/10/2014	Soil	
600-85473-20	2013-NT-01 (0-0.5)	125089/125211	1/10/2014	Soil	
600-85473-21	2013-NT-01 (0.2-2)	125089/125211	1/10/2014	Soil	
600-85473-22	E-12A (0-0.5)	125089/125211	1/10/2014	Soil	
600-85473-23	2013-NT-02 (0-0.5)	125089/125211 128791/128837	1/10/2014	Soil	
600-85473-24	2013-NT-02 (0.5-2)	125089/125211	1/10/2014	Soil	
600-85473-25	E-13A (0-0.5)	125089/125211	1/10/2014	Soil	
600-85473-26	E-14A (0-0.5)	125089/125211	1/10/2014	Soil	
600-85473-27	Rinse Blank Geo	125237/125450 125065/125111	1/10/2014	Water	Rinsate Blank for PCBs associated with lab report J85389
600-85473-28	MW-27E (0-1)	125124/125111	1/13/2014	Soil	
600-85473-29	MW-27E (1-2)	127810/127873	1/13/2014	Soil	
600-85473-30	MW-27E (2-3)		1/13/2014	Soil	Not reported
600-85473-31	MW-29A (0-0.5)	125124/125111	1/13/2014	Soil	
600-85473-32	Dup-10	125124/125111	1/13/2014	Soil	Duplicate of 2013-FWFS-5A (0-2)
600-85473-33	Dup-11	125124/125111	1/13/2014	Soil	Duplicate of 2013-BSB-8A (8-10)
600-85473-34	2013-FWFS-5A (0-2)	125124/125111	1/13/2014	Soil	site-specific MS/MSD
600-85473-35	2013-FWFS-5A (2-4)		1/13/2014	Soil	Not reported
600-85473-36	2013-BSB-8A (8-10)	125124/125111	1/13/2014	Soil	site-specific MS/MSD
600-85473-37	2013-FWCS-12A (2-2.7)	125124/125111	1/13/2014	Soil	
600-85473-38	2013-MW-17B (0-0.5)	125124/125111	1/13/2014	Soil	
600-85473-39	SCC-10B (0-0.5)	125124/125111	1/13/2014	Soil	
600-85473-40	Rinse Blank Geo	125065/125111	1/13/2014	Water	Rinsate Blank
600-85473-41	ECO-4B (0-0.5)	125124/125111	1/13/2014	Soil	
600-85473-42	ECO-4B (0.5-2)		1/13/2014	Soil	Not reported

TABLE 2 - QUALIFIED DATA

Lab Sample ID	Field Sample ID	Analyte	Result	Units	Qualifer	Explanation
600-85473-15	SRB-VS-11A (0-0.5)	Antimony	0.602	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Antimony	<0.263	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
		Cadmium	0.409	mg/kg	J	Lab duplicate RPD outside specifications and analyte concentration >5x MQL
600-85473-16	ECO-10A (0-0.5)	Lead	21.4	mg/kg	J	Lab duplicate RPD outside specifications and analyte concentration >5x MQL
		Cadmium	1.58	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85473-28	MW-27E (0-1)	Lead	298	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Cadmium	1.27	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85473-31	MW-29A (0-0.5)	Lead	171	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Cadmium	28.3	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85473-32	DUP-10	Lead	1130	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Cadmium	0.2	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85473-33	DUP-11	Lead	59.2	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Antimony	<0.275	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
		Cadmium	0.529	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85473-34	2013-FWFS-5A (0-2)	Lead	100	mg/kg	JL	Matrix Spike recovery below specifications, >30%, Lab duplicate RPD outside specifications and analyte concentration >5x MQL
600-85473-36	2013-BSB-8A (8-10)	Lead	14800	mg/kg	JL	Matrix Spike recovery below specifications, >30%, Lab duplicate RPD outside specifications and analyte concentration >5x MQL
600-85473-37	2013-FWCS-12A (2-2.7)	Lead	106	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Antimony	32.4	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Cadmium	5.19	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85473-38	2013-MW-17B (0-0.5)	Lead	6830	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Antimony	1.69	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Cadmium	1.85	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85473-39	SCC-10B (0-0.5)	Lead	333	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Cadmium	1.21	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85473-41	ECO-4B (0-0.5)	Lead	201	mg/kg	JL	Matrix Spike recovery below specifications, >30%

Note:

Detected results between the SDL and MQL (i.e., results with a laboratory J-flag) have been included in the above table since the reported concentration is below the calibration range.

J Estimated data; The analyte was detected and identified. The associated numerical value (i.e., the reported sample concentration) is the approximate concentration of the analyte in the sample.

NJ Tentatively identified, estimated data; The analysis indicates the presence of the analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.

NS Not selected; Another result (from a secondary dilution, different analytical method, re-sampling, etc.) is selected for use based on QC outcomes and/or reported concentrations.

R Rejected data; The data is unusable. Serious QC deficiencies make it impossible to verify the absence or presence of this analyte.

U Not detected; The analyte was not detected >5x (10x for common contaminants) the level in an associated blank and thus should be considered not detected above the level of the associated numerical value (i.e., the reported sample concentration).

UJ Estimated data; The analyte was not detected above the reported sample detection limit (SDL). The numerical value of the SDL is estimated and may be inaccurate.

H Bias in sample result is likely to be high

L Bias in sample result is likely to be low

TABLE 3 - FIELD DUPLICATE PRECISION CALCULATIONS

Duplicate and Parent Sample Field Identification	Analyte	Sample Result	Duplicate Result	RPD[a]	Accept or Reject	Qualifier Added
DUP-10 / 2013-FWFS-5A (0-2)	cadmium	0.529	28.3	192.7	A	J
	lead	100	1130	167.5	A	J
DUP-11 / 2013-BSB-8A (8-10)	lead	14800	59.2	198.4	A	J

[a] RPD = ((SR - DR)*200)/(SR + DR)

A - Acceptable Data

NA - Not Analyzed

The RPD test (<50%) applies if both results are greater than 5x MQL. Otherwise, the absolute difference test (< 3x MQL) applies.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-85473-1
Client Project/Site: Exide Recycling Center
Revision: 4

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
5/9/2014 2:29:02 PM
Cathy Upton, Project Management Assistant II
(713)690-4444
cathy.upton@testamericainc.com

Designee for

Dean Joiner, Project Manager II
(713)690-4444
dean.joiner@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: 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.

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-85473-1 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☑ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☑ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton		4/21/2014
Name (printed)	Signature	Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/26/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85473-1
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?		X			R06A
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			R07C
		Were MS/MSD RPDs within laboratory QC limits?		X			R07D
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?		X			R10B
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/26/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85473-1
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?	X				
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?		X			S08A
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

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Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/26/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85473-1
Reviewer Name:	Dean A Joiner		

ER #[1]	Description
R07C	Method 8082: Since Aroclors are multi-component analytes, it is not possible to include all seven Aroclors of interest into the LCS. The only two Aroclors that were spiked into the LCS were Aroclors 1016 and 1260. Since these two Aroclors essentially contain all analytes found in the other five individual Aroclors of interest, the recovery of Aroclors 1016 and 1260 in the LCS will be representative of the recovery of the other five Aroclors.
R07C	Method 6010B: 600-85473-16 MS/MSD failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected. Method 6010B: 600-85473-34 MS/MSD failed the recovery criteria for the following analyte(s): Antimony, Lead. Matrix interference is suspected. Method 6010B: 600-85473-36 MS failed the recovery criteria for the following analyte(s): Antimony, Arsenic, Cadmium, Lead. Matrix interference is suspected. Method 6010B: 600-85473-36 MSD failed the recovery criteria for the following analyte(s): Antimony, Cadmium, Lead. Matrix interference is suspected.
R07D	Method 6010B: 600-85473-36 MSD failed the RPD criteria for the following analyte(s): Antimony, Lead. Matrix interference is suspected.
R08C	Method 6010B: 600-85473-16 DU failed the RPD criteria for the following analyte(s): Cadmium, Lead. Matrix interference is suspected. Method 6010B: 600-85473-34 DU failed the RPD criteria for the following analyte(s): Lead. Matrix interference is suspected. Method 6010B: 600-85473-36 DU failed the RPD criteria for the following analyte(s): Antimony, Lead. Matrix interference is suspected.
R10B	Method 6010B: The following sample(s) was diluted to bring the concentration of target analytes within the calibration range: 600-85473-3, 600-85473-36, 600-85473-36 DU, 600-85473-36 MS, 600-85473-36 MSD, and 600-85473-38. Elevated reporting limits (RLs) are provided.
S08A	Method 6010B: The interference check standard solution (ICSA) associated with batch 125111 showed results for Lead at a level greater than 2 times the limit of detection (LOD). Since this analyte was not detected in the client sample, no corrective action was required.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
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3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Detection Check Standard

Matrix:	Soil
Method:	6010B
Preparation:	3050
Date Analyzed:	7/2/2013
Date Prepared:	7/2/2013
Instrument:	Thermo 6500
TALS Batches:	109822, 109690
Prep/Reagent Factor =	50
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.299654	0.5	1.67	25
Antimony	0.231553	0.45	0.495	2.5
Arsenic	0.217923	0.5	0.465	1
Barium	0.011322	0.03	0.03	1
Beryllium	0.014513	0.02	0.02	0.25
Boron	0.385535	0.6	0.695	20
Cadmium	0.025642	0.05	0.05	0.25
Calcium	0.86399	1.5	3.42	100
Chromium	0.050606	0.1	0.06	0.5
Cobalt	0.067622	0.1	0.105	0.5
Copper	0.173703	0.5	0.525	0.5
Iron	2.534007	4	3.58	20
Lead	0.104832	0.2	0.205	0.5
Selenium	0.258884	0.5	0.495	2
Manganese	0.038111	0.05	0.02	1.5
Molybdenum	0.136448	0.35	0.34	0.5
Nickel	0.116599	0.15	0.145	1
Silver	0.118848	0.2	0.18	0.5
Sodium	0.885548	2.4	1.805	100
Strontium	0.00252	0.005	1.01	0.25
Thallium	0.276988	0.7	0.655	1.5
Tin	0.08729	0.15	0.12	1
Titanium	0.014529	0.03	0.05	0.5
Vanadium	0.079068	0.15	0.145	0.5
Zinc	0.108432	0.2	0.345	1.5

Detection Check Standard

Matrix:	Water
Method:	200.7/6010
Preparation:	200.7P/3010
Date Analyzed:	7/2/2013
Date Prepared:	7/2/2013
Instrument:	Thermo 6500
TALs Batches:	109822, 109666
Units:	mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.0335	0.5
Antimony	0.0063	0.01	0.0105	0.05
Arsenic	0.0033	0.01	0.0071	0.01
Barium	0.0022	0.005	0.0051	0.02
Beryllium	0.00134	0.002	0.0039	0.005
Boron	0.0077	0.02	0.0216	0.2
Cadmium	0.00073	0.001	0.0011	0.005
Calcium	0.022	0.05	0.0796	1
Chromium	0.0016	0.002	0.0031	0.01
Cobalt	0.00063	0.001	0.001	0.01
Copper	0.0014	0.002	0.0017	0.01
Iron	0.087	0.1	0.0874	0.4
Lithium	0.0024	0.005	0.0042	0.2
Lead	0.0029	0.005	0.004	0.01
Selenium	0.0042	0.01	0.0091	0.04
Manganese	0.00084	0.002	0.0013	0.01
Molybdenum	0.0027	0.005	0.0048	0.01
Nickel	0.00179	0.005	0.0047	0.01
Silver	0.0012	0.0025	0.0017	0.01
Sodium	0.02	0.05	0.0416	1
Strontium	0.0005	0.001	0.0009	0.005
Thallium	0.0078	0.02	0.0205	0.03
Tin	0.0028	0.005	0.0047	0.01
Titanium	0.0011	0.002	0.0019	0.01
Vanadium	0.0017	0.002	0.0044	0.01
Zinc	0.0022	0.005	0.0071	0.01

Detection Check Standard

Matrix:	Water
Method:	8082
Preparation:	3510
Date Analyzed:	7/9-10/2013
Date Prepared:	7/3,9/2013
TALs Batches:	600-109918/7-a,600-110312/3,4,5,6,7,8-a
Units:	ug/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Aroclor 1016	0.27	0.5	0.496	0.5
Aroclor 1221	0.22	0.5	0.323	0.5
Aroclor 1232	0.06	0.5	0.288	0.5
Aroclor 1242	0.27	0.5	0.422	0.5
Aroclor 1248	0.1	0.5	0.484	0.5
Aroclor 1254	0.07	0.5	0.37	0.5
Aroclor 1260	0.17	0.5	0.565	0.5
Aroclor 1262	0.5	0.5	0.521	0.5

Job ID: 600-85473-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-85473-1

Comments

The report was revised on 03/05/14 to report total metals for samples 15, 34, 38 and 39, replacing the final report generated on 01/22/14.
The report was revised on 04/21/14 to report all 5 metals for samples 14, 16, 23, and 41, replacing the final report generated on 03/26/14.
The report was revised on 05/09/14 to report As and Se for samples 20, 21, 23 and 24 per client request, replacing the final report generated on 04/21/14. See attached email.

Receipt

The samples were received on 1/14/2014 10:21 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.2º C and 3.3º C.

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-1

Method	Method Description	Protocol	Laboratory
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL HOU
6010B	Metals (ICP)	SW846	TAL HOU
Moisture	Percent Moisture	EPA	TAL HOU

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 HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-85473-1	MW-33/2013-FWFS-5B (1-2)	Solid	01/10/14 16:00	01/14/14 10:21
600-85473-3	MW-33/2013-FWFS-5B (4-5)	Solid	01/10/14 16:04	01/14/14 10:21
600-85473-4	F-5D (0.0-0.25)	Solid	01/10/14 13:38	01/14/14 10:21
600-85473-6	F-5E (0-0.25)	Solid	01/10/14 13:42	01/14/14 10:21
600-85473-8	F-5B (0-0.25)	Solid	01/10/14 13:47	01/14/14 10:21
600-85473-10	F-5A (0-0.25)	Solid	01/10/14 13:49	01/14/14 10:21
600-85473-12	F-5C (0-0.25)	Solid	01/10/14 13:51	01/14/14 10:21
600-85473-14	SRB-VS-9E (0-0.5)	Solid	01/10/14 14:08	01/14/14 10:21
600-85473-15	SRB-VS-11A (0-0.5)	Solid	01/10/14 14:16	01/14/14 10:21
600-85473-16	ECO-10A (0-0.5)	Solid	01/10/14 14:43	01/14/14 10:21
600-85473-17	ECO-4A (0-0.5)	Solid	01/10/14 15:10	01/14/14 10:21
600-85473-19	E-11D (0-0.5)	Solid	01/10/14 15:45	01/14/14 10:21
600-85473-20	2013-NT-01 (0-0.5)	Solid	01/10/14 15:58	01/14/14 10:21
600-85473-21	2013-NT-01 (0.5-2)	Solid	01/10/14 15:59	01/14/14 10:21
600-85473-22	E-12A (0-0.5)	Solid	01/10/14 16:01	01/14/14 10:21
600-85473-23	2013-NT-02 (0-0.5)	Solid	01/10/14 16:15	01/14/14 10:21
600-85473-24	2013-NT-02 (0.5-2))	Solid	01/10/14 16:16	01/14/14 10:21
600-85473-25	E-13A (0-0.5)	Solid	01/10/14 16:22	01/14/14 10:21
600-85473-26	E-14A (0-0.5)	Solid	01/10/14 16:30	01/14/14 10:21
600-85473-27	RINSE BLANK GEO	Water	01/10/14 08:30	01/14/14 10:21
600-85473-28	MW-27E (0-1)	Solid	01/13/14 08:42	01/14/14 10:21
600-85473-31	MW-29A (0-0.5)	Solid	01/13/14 08:52	01/14/14 10:21
600-85473-32	DUP-10	Solid	01/13/14 00:00	01/14/14 10:21
600-85473-33	DUP-11	Solid	01/13/14 00:00	01/14/14 10:21
600-85473-34	2013-FWFS-SA (0-2)	Solid	01/13/14 09:12	01/14/14 10:21
600-85473-36	2013-BSB-8A (8-10)	Solid	01/13/14 09:50	01/14/14 10:21
600-85473-37	2013-FWCS-12A (2-2.7)	Solid	01/13/14 11:05	01/14/14 10:21
600-85473-38	2013-MW-17B (0-0.5)	Solid	01/13/14 11:51	01/14/14 10:21
600-85473-39	SCC-10B (0-0.5)	Solid	01/13/14 12:04	01/14/14 10:21
600-85473-40	RINSE BLANK GEO	Water	01/13/14 13:15	01/14/14 10:21
600-85473-41	ECO04B (0-0.5)	Solid	01/13/14 13:48	01/14/14 10:21

Client Sample ID: MW-33/2013-FWFS-5B (1-2)

Lab Sample ID: 600-85473-1
Date Collected: 01/10/14 16:00
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 81.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	40.5		0.291	0.0298	mg/Kg	☼	01/16/14 10:03	01/17/14 13:56	1
Lead	1420		0.581	0.122	mg/Kg	☼	01/16/14 10:03	01/17/14 13:56	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	81		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: MW-33/2013-FWFS-5B (4-5)

Lab Sample ID: 600-85473-3
Date Collected: 01/10/14 16:04
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 73.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	7.20		0.334	0.0343	mg/Kg	☼	01/16/14 10:03	01/17/14 14:05	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	10200		13.4	2.80	mg/Kg	☼	01/16/14 10:03	01/17/14 16:12	20

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	27		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	73		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: F-5D (0.0-0.25)

Lab Sample ID: 600-85473-4
Date Collected: 01/10/14 13:38
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 75.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.07		0.329	0.0338	mg/Kg	☼	01/16/14 10:03	01/17/14 14:08	1
Lead	101		0.659	0.138	mg/Kg	☼	01/16/14 10:03	01/17/14 14:08	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	76		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: F-5E (0-0.25)

Lab Sample ID: 600-85473-6
Date Collected: 01/10/14 13:42
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 68.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	2.14		0.336	0.0345	mg/Kg	☼	01/16/14 10:03	01/17/14 14:10	1
Lead	161		0.673	0.141	mg/Kg	☼	01/16/14 10:03	01/17/14 14:10	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	31		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: F-5E (0-0.25)

Lab Sample ID: 600-85473-6
Date Collected: 01/10/14 13:42
Matrix: Solid
Date Received: 01/14/14 10:21

General Chemistry (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	69		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: F-5B (0-0.25)

Lab Sample ID: 600-85473-8
Date Collected: 01/10/14 13:47
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 73.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.30		0.332	0.0340	mg/Kg	☼	01/16/14 10:03	01/17/14 14:13	1
Lead	116		0.663	0.139	mg/Kg	☼	01/16/14 10:03	01/17/14 14:13	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	27		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	73		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: F-5A (0-0.25)

Lab Sample ID: 600-85473-10
Date Collected: 01/10/14 13:49
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 72.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.11		0.318	0.0327	mg/Kg	☼	01/16/14 10:03	01/17/14 14:15	1
Lead	60.7		0.637	0.133	mg/Kg	☼	01/16/14 10:03	01/17/14 14:15	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	28		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	72		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: F-5C (0-0.25)

Lab Sample ID: 600-85473-12
Date Collected: 01/10/14 13:51
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 70.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.55		0.327	0.0335	mg/Kg	☼	01/16/14 10:03	01/17/14 14:17	1
Lead	162		0.654	0.137	mg/Kg	☼	01/16/14 10:03	01/17/14 14:17	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	29		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	71		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: SRB-VS-9E (0-0.5)

Lab Sample ID: 600-85473-14
Date Collected: 01/10/14 14:08
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 80.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.278	U	3.00	0.278	mg/Kg	☼	01/16/14 10:03	01/17/14 14:20	1

Client Sample ID: SRB-VS-9E (0-0.5)

Lab Sample ID: 600-85473-14
Date Collected: 01/10/14 14:08
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 80.9

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.26		1.20	0.262	mg/Kg	☼	01/16/14 10:03	01/17/14 14:20	1
Cadmium	0.210	J	0.300	0.0308	mg/Kg	☼	01/16/14 10:03	01/17/14 14:20	1
Lead	31.0		0.600	0.126	mg/Kg	☼	01/16/14 10:03	01/17/14 14:20	1
Selenium	0.311	U	2.40	0.311	mg/Kg	☼	01/16/14 10:03	01/17/14 14:20	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	81		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: SRB-VS-11A (0-0.5)

Lab Sample ID: 600-85473-15
Date Collected: 01/10/14 14:16
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 83.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.602	J	2.79	0.258	mg/Kg	☼	01/16/14 10:03	01/17/14 14:22	1
Arsenic	11.4		1.12	0.243	mg/Kg	☼	01/16/14 10:03	01/17/14 14:22	1
Cadmium	1.44		0.279	0.0286	mg/Kg	☼	01/16/14 10:03	01/17/14 14:22	1
Lead	273		0.558	0.117	mg/Kg	☼	01/16/14 10:03	01/17/14 14:22	1
Selenium	0.491	J	2.23	0.289	mg/Kg	☼	01/16/14 10:03	01/17/14 14:22	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	83		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: ECO-10A (0-0.5)

Lab Sample ID: 600-85473-16
Date Collected: 01/10/14 14:43
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 85.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.263	U	2.84	0.263	mg/Kg	☼	01/16/14 10:03	01/17/14 14:24	1
Arsenic	6.76		1.14	0.248	mg/Kg	☼	01/16/14 10:03	01/17/14 14:24	1
Cadmium	0.409		0.284	0.0291	mg/Kg	☼	01/16/14 10:03	01/17/14 14:24	1
Lead	21.4		0.568	0.119	mg/Kg	☼	01/16/14 10:03	01/17/14 14:24	1
Selenium	0.534	J	2.27	0.294	mg/Kg	☼	01/16/14 10:03	01/17/14 14:24	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	85		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: ECO-4A (0-0.5)

Lab Sample ID: 600-85473-17
Date Collected: 01/10/14 15:10
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 80.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.64		0.308	0.0316	mg/Kg	☼	01/16/14 10:03	01/17/14 14:41	1

Client Sample ID: ECO-4A (0-0.5)

Lab Sample ID: 600-85473-17
Date Collected: 01/10/14 15:10
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 80.5

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	245		0.615	0.129	mg/Kg	☼	01/16/14 10:03	01/17/14 14:41	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	80		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: E-11D (0-0.5)

Lab Sample ID: 600-85473-19
Date Collected: 01/10/14 15:45
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 75.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.22		0.305	0.0313	mg/Kg	☼	01/16/14 10:03	01/17/14 14:44	1
Lead	152		0.610	0.128	mg/Kg	☼	01/16/14 10:03	01/17/14 14:44	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	75		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: 2013-NT-01 (0-0.5)

Lab Sample ID: 600-85473-20
Date Collected: 01/10/14 15:58
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 76.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	15.9		1.27	0.276	mg/Kg	☼	01/16/14 10:03	01/17/14 14:46	1
Cadmium	0.571		0.317	0.0325	mg/Kg	☼	01/16/14 10:03	01/17/14 14:46	1
Lead	19.5		0.634	0.133	mg/Kg	☼	01/16/14 10:03	01/17/14 14:46	1
Selenium	0.328	U	2.54	0.328	mg/Kg	☼	01/16/14 10:03	01/17/14 14:46	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	77		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: 2013-NT-01 (0.5-2)

Lab Sample ID: 600-85473-21
Date Collected: 01/10/14 15:59
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 74.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14.4		1.30	0.283	mg/Kg	☼	01/16/14 10:03	01/17/14 14:48	1
Cadmium	0.618		0.325	0.0334	mg/Kg	☼	01/16/14 10:03	01/17/14 14:48	1
Lead	18.5		0.650	0.136	mg/Kg	☼	01/16/14 10:03	01/17/14 14:48	1
Selenium	0.546	J	2.60	0.337	mg/Kg	☼	01/16/14 10:03	01/17/14 14:48	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: 2013-NT-01 (0.5-2)

Lab Sample ID: 600-85473-21

Date Collected: 01/10/14 15:59
Matrix: Solid
Date Received: 01/14/14 10:21

General Chemistry (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	75		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: E-12A (0-0.5)

Lab Sample ID: 600-85473-22

Date Collected: 01/10/14 16:01
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 77.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.54		0.302	0.0310	mg/Kg	☼	01/16/14 10:03	01/17/14 14:51	1
Lead	201		0.604	0.127	mg/Kg	☼	01/16/14 10:03	01/17/14 14:51	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	77		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: 2013-NT-02 (0-0.5)

Lab Sample ID: 600-85473-23

Date Collected: 01/10/14 16:15
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 75.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.13	J	3.21	0.297	mg/Kg	☼	01/16/14 10:03	01/17/14 14:53	1
Arsenic	14.9		1.28	0.280	mg/Kg	☼	01/16/14 10:03	01/17/14 14:53	1
Cadmium	4.89		0.321	0.0329	mg/Kg	☼	01/16/14 10:03	01/17/14 14:53	1
Lead	837		0.641	0.134	mg/Kg	☼	01/16/14 10:03	01/17/14 14:53	1
Selenium	0.654	J	2.57	0.332	mg/Kg	☼	01/16/14 10:03	01/17/14 14:53	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	76		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: 2013-NT-02 (0.5-2))

Lab Sample ID: 600-85473-24

Date Collected: 01/10/14 16:16
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 77.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14.1		1.20	0.262	mg/Kg	☼	01/16/14 10:03	01/17/14 14:56	1
Cadmium	0.354		0.300	0.0308	mg/Kg	☼	01/16/14 10:03	01/17/14 14:56	1
Lead	21.2		0.600	0.126	mg/Kg	☼	01/16/14 10:03	01/17/14 14:56	1
Selenium	0.324	J	2.40	0.311	mg/Kg	☼	01/16/14 10:03	01/17/14 14:56	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	77		1.0	1.0	%			01/15/14 15:56	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-1

Client Sample ID: E-13A (0-0.5)

Lab Sample ID: 600-85473-25
Date Collected: 01/10/14 16:22
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 76.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.492		0.307	0.0315	mg/Kg	☼	01/16/14 10:03	01/17/14 14:58	1
Lead	44.4		0.615	0.129	mg/Kg	☼	01/16/14 10:03	01/17/14 14:58	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	77		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: E-14A (0-0.5)

Lab Sample ID: 600-85473-26
Date Collected: 01/10/14 16:30
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 71.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.84		0.335	0.0344	mg/Kg	☼	01/16/14 10:03	01/17/14 15:07	1
Lead	349		0.670	0.140	mg/Kg	☼	01/16/14 10:03	01/17/14 15:07	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	28		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	72		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: RINSE BLANK GEO

Lab Sample ID: 600-85473-27
Date Collected: 01/10/14 08:30
Matrix: Water
Date Received: 01/14/14 10:21

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.000270	U	0.000500	0.000270	mg/L		01/17/14 14:01	01/20/14 15:39	1
PCB-1221	0.000220	U	0.000500	0.000220	mg/L		01/17/14 14:01	01/20/14 15:39	1
PCB-1232	0.0000600	U	0.000500	0.0000600	mg/L		01/17/14 14:01	01/20/14 15:39	1
PCB-1242	0.0000800	U	0.000500	0.0000800	mg/L		01/17/14 14:01	01/20/14 15:39	1
PCB-1248	0.000100	U	0.000500	0.000100	mg/L		01/17/14 14:01	01/20/14 15:39	1
PCB-1254	0.0000700	U	0.000500	0.0000700	mg/L		01/17/14 14:01	01/20/14 15:39	1
PCB-1260	0.000170	U	0.000500	0.000170	mg/L		01/17/14 14:01	01/20/14 15:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*81*		*35 - 133*	*01/17/14 14:01*	*01/20/14 15:39*	*1*
DCB Decachlorobiphenyl	*36*		*28 - 174*	*01/17/14 14:01*	*01/20/14 15:39*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		01/15/14 16:45	01/16/14 16:14	1
Lead	0.00290	U ^	0.0100	0.00290	mg/L		01/15/14 16:45	01/16/14 16:14	1

Client Sample ID: MW-27E (0-1)

Lab Sample ID: 600-85473-28
Date Collected: 01/13/14 08:42
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 77.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.58		0.312	0.0320	mg/Kg	☼	01/16/14 13:47	01/17/14 12:49	1
Lead	298		0.623	0.131	mg/Kg	☼	01/16/14 13:47	01/17/14 12:49	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	77		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: MW-29A (0-0.5)

Lab Sample ID: 600-85473-31
Date Collected: 01/13/14 08:52
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 76.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.27		0.308	0.0316	mg/Kg	☼	01/16/14 13:47	01/17/14 12:51	1
Lead	171		0.616	0.129	mg/Kg	☼	01/16/14 13:47	01/17/14 12:51	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	77		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: DUP-10

Lab Sample ID: 600-85473-32
Date Collected: 01/13/14 00:00
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 76.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	28.3		0.299	0.0307	mg/Kg	☼	01/16/14 13:47	01/17/14 12:54	1
Lead	1130		0.599	0.126	mg/Kg	☼	01/16/14 13:47	01/17/14 12:54	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	77		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: DUP-11

Lab Sample ID: 600-85473-33
Date Collected: 01/13/14 00:00
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 87.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.200	J	0.278	0.0285	mg/Kg	☼	01/16/14 13:47	01/17/14 13:03	1
Lead	59.2		0.555	0.116	mg/Kg	☼	01/16/14 13:47	01/17/14 13:03	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	87		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: 2013-FWFS-SA (0-2)

Lab Sample ID: 600-85473-34
Date Collected: 01/13/14 09:12
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 80.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.275	U	2.97	0.275	mg/Kg	☼	01/16/14 13:47	01/17/14 13:05	1
Arsenic	**11.4**		1.19	0.259	mg/Kg	☼	01/16/14 13:47	01/17/14 13:05	1
Cadmium	**0.529**		0.297	0.0305	mg/Kg	☼	01/16/14 13:47	01/17/14 13:05	1
Lead	**100**		0.594	0.125	mg/Kg	☼	01/16/14 13:47	01/17/14 13:05	1
Selenium	0.308	U	2.38	0.308	mg/Kg	☼	01/16/14 13:47	01/17/14 13:05	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**20**		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	**80**		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: 2013-BSB-8A (8-10)

Lab Sample ID: 600-85473-36
Date Collected: 01/13/14 09:50
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 77.1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**14800**		12.1	2.54	mg/Kg	☼	01/16/14 13:47	01/17/14 16:00	20

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**23**		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	**77**		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: 2013-FWCS-12A (2-2.7)

Lab Sample ID: 600-85473-37
Date Collected: 01/13/14 11:05
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 76.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**106**		0.641	0.134	mg/Kg	☼	01/16/14 13:47	01/17/14 13:25	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**24**		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	**76**		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: 2013-MW-17B (0-0.5)

Lab Sample ID: 600-85473-38
Date Collected: 01/13/14 11:51
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 80.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**32.4**		2.96	0.275	mg/Kg	☼	01/16/14 13:47	01/17/14 13:34	1
Arsenic	**36.7**		1.19	0.258	mg/Kg	☼	01/16/14 13:47	01/17/14 13:34	1
Cadmium	**5.19**		0.296	0.0304	mg/Kg	☼	01/16/14 13:47	01/17/14 13:34	1
Selenium	**1.35**	**J**	2.37	0.307	mg/Kg	☼	01/16/14 13:47	01/17/14 13:34	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**6830**		11.9	2.49	mg/Kg	☼	01/16/14 13:47	01/17/14 16:09	20

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-1

Client Sample ID: 2013-MW-17B (0-0.5)

Lab Sample ID: 600-85473-38

Date Collected: 01/13/14 11:51
Matrix: Solid
Date Received: 01/14/14 10:21

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	80		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: SCC-10B (0-0.5)

Lab Sample ID: 600-85473-39

Date Collected: 01/13/14 12:04
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 77.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.69	J	3.01	0.278	mg/Kg	☼	01/16/14 13:47	01/17/14 13:37	1
Arsenic	14.0		1.20	0.262	mg/Kg	☼	01/16/14 13:47	01/17/14 13:37	1
Cadmium	1.85		0.301	0.0308	mg/Kg	☼	01/16/14 13:47	01/17/14 13:37	1
Lead	333		0.601	0.126	mg/Kg	☼	01/16/14 13:47	01/17/14 13:37	1
Selenium	0.601	J	2.40	0.311	mg/Kg	☼	01/16/14 13:47	01/17/14 13:37	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	77		1.0	1.0	%			01/15/14 15:56	1

Client Sample ID: RINSE BLANK GEO

Lab Sample ID: 600-85473-40

Date Collected: 01/13/14 13:15
Matrix: Water
Date Received: 01/14/14 10:21

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		01/15/14 16:45	01/16/14 16:21	1
Lead	0.00290	U ^	0.0100	0.00290	mg/L		01/15/14 16:45	01/16/14 16:21	1

Client Sample ID: ECO04B (0-0.5)

Lab Sample ID: 600-85473-41

Date Collected: 01/13/14 13:48
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 74.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.752	J	3.19	0.295	mg/Kg	☼	01/16/14 13:47	01/17/14 13:39	1
Arsenic	31.5		1.27	0.278	mg/Kg	☼	01/16/14 13:47	01/17/14 13:39	1
Cadmium	1.21		0.319	0.0327	mg/Kg	☼	01/16/14 13:47	01/17/14 13:39	1
Lead	201		0.637	0.134	mg/Kg	☼	01/16/14 13:47	01/17/14 13:39	1
Selenium	0.573	J	2.55	0.330	mg/Kg	☼	01/16/14 13:47	01/17/14 13:39	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25		1.0	1.0	%			01/15/14 15:56	1
Percent Solids	75		1.0	1.0	%			01/15/14 15:56	1

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

Metals

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
F	Duplicate RPD exceeds the control limit
N	MS, MSD: Spike recovery exceeds upper or lower control limits.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
N	RPD of the MS and MSD exceeds the control limits

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
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)

Surrogate Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		TCX1	DCB1								
Lab Sample ID	Client Sample ID	(35-133)	(28-174)								
600-85473-27	RINSE BLANK GEO	81	36								
LCS 600-125237/3-A	Lab Control Sample	73	58								
MB 600-125237/1-A	Method Blank	72	57								

Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 600-125237/1-A
Matrix: Water
Analysis Batch: 125450

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 125237

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	0.000270	U	0.000500	0.000270	mg/L		01/17/14 14:01	01/20/14 12:22	1
PCB-1221	0.000220	U	0.000500	0.000220	mg/L		01/17/14 14:01	01/20/14 12:22	1
PCB-1232	0.0000600	U	0.000500	0.0000600	mg/L		01/17/14 14:01	01/20/14 12:22	1
PCB-1242	0.0000800	U	0.000500	0.0000800	mg/L		01/17/14 14:01	01/20/14 12:22	1
PCB-1248	0.000100	U	0.000500	0.000100	mg/L		01/17/14 14:01	01/20/14 12:22	1
PCB-1254	0.0000700	U	0.000500	0.0000700	mg/L		01/17/14 14:01	01/20/14 12:22	1
PCB-1260	0.000170	U	0.000500	0.000170	mg/L		01/17/14 14:01	01/20/14 12:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*72*		*35 - 133*	*01/17/14 14:01*	*01/20/14 12:22*	*1*
DCB Decachlorobiphenyl	*57*		*28 - 174*	*01/17/14 14:01*	*01/20/14 12:22*	*1*

Lab Sample ID: LCS 600-125237/3-A
Matrix: Water
Analysis Batch: 125450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125237

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	0.0200	0.01503		mg/L		75	53 - 119
PCB-1260	0.0200	0.01407		mg/L		70	22 - 144

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*73*		*35 - 133*
DCB Decachlorobiphenyl	*58*		*28 - 174*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-125065/1-A
Matrix: Water
Analysis Batch: 125111

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 125065

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00630	U	0.0500	0.00630	mg/L		01/15/14 16:45	01/16/14 15:55	1
Arsenic	0.00328	U	0.0100	0.00328	mg/L		01/15/14 16:45	01/16/14 15:55	1
Cadmium	0.000350	U	0.00500	0.000350	mg/L		01/15/14 16:45	01/16/14 15:55	1
Lead	0.00290	U ^	0.0100	0.00290	mg/L		01/15/14 16:45	01/16/14 15:55	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		01/15/14 16:45	01/16/14 15:55	1

Lab Sample ID: LCS 600-125065/2-A
Matrix: Water
Analysis Batch: 125111

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125065

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.00	1.106		mg/L		111	80 - 120
Arsenic	1.00	1.035		mg/L		104	80 - 120
Cadmium	0.500	0.5196		mg/L		104	80 - 120
Lead	1.00	1.045	^	mg/L		105	80 - 120
Selenium	1.00	1.028		mg/L		103	80 - 120

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

Lab Sample ID: MB 600-125089/1-A
Matrix: Solid
Analysis Batch: 125211

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 125089

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		01/16/14 10:03	01/17/14 13:42	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		01/16/14 10:03	01/17/14 13:42	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		01/16/14 10:03	01/17/14 13:42	1
Lead	0.105	U	0.500	0.105	mg/Kg		01/16/14 10:03	01/17/14 13:42	1
Selenium	0.259	U	2.00	0.259	mg/Kg		01/16/14 10:03	01/17/14 13:42	1

Lab Sample ID: LCSSRM 600-125089/2-A
Matrix: Solid
Analysis Batch: 125211

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125089

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony			88.2	66.67		mg/Kg		75.6	45.4 - 231.3		
Arsenic			99.6	95.92		mg/Kg		96.3	80.8 - 119.5		
Cadmium			182	168.8		mg/Kg		92.7	81.9 - 118.1		
Lead			115	109.8		mg/Kg		95.5	81.8 - 119.1		
Selenium			150	136.7		mg/Kg		91.1	77.3 - 122.7		

Lab Sample ID: 600-85473-16 MS
Matrix: Solid
Analysis Batch: 125211

Client Sample ID: ECO-10A (0-0.5)
Prep Type: Total/NA
Prep Batch: 125089

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.263	U	56.8	26.68	N	mg/Kg	☼	47	75 - 125
Arsenic	6.76		56.8	67.64		mg/Kg	☼	107	75 - 125
Cadmium	0.409		28.4	30.67		mg/Kg	☼	107	75 - 125
Lead	21.4		56.8	67.69		mg/Kg	☼	81	75 - 125
Selenium	0.534	J	56.8	54.08		mg/Kg	☼	94	75 - 125

Lab Sample ID: 600-85473-16 MSD
Matrix: Solid
Analysis Batch: 125211

Client Sample ID: ECO-10A (0-0.5)
Prep Type: Total/NA
Prep Batch: 125089

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.263	U	57.3	24.70	N	mg/Kg	☼	43	75 - 125	8	20
Arsenic	6.76		57.3	66.18		mg/Kg	☼	104	75 - 125	2	20
Cadmium	0.409		28.7	30.88		mg/Kg	☼	106	75 - 125	1	20
Lead	21.4		57.3	67.04		mg/Kg	☼	80	75 - 125	1	20
Selenium	0.534	J	57.3	55.03		mg/Kg	☼	95	75 - 125	2	20

Lab Sample ID: 600-85473-16 DU
Matrix: Solid
Analysis Batch: 125211

Client Sample ID: ECO-10A (0-0.5)
Prep Type: Total/NA
Prep Batch: 125089

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Antimony	0.263	U		0.260	U	mg/Kg	☼			NC	20

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

Lab Sample ID: 600-85473-16 DU — **Client Sample ID: ECO-10A (0-0.5)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125211 — **Prep Batch: 125089**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	6.76		5.630		mg/Kg	☼	18	20
Cadmium	0.409		0.1912	J	mg/Kg	☼	73	20
Lead	21.4		7.778	F	mg/Kg	☼	93	20
Selenium	0.534	J	0.291	U	mg/Kg	☼	NC	20

Lab Sample ID: MB 600-125124/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125211 — **Prep Batch: 125124**

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		01/16/14 13:47	01/17/14 12:04	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		01/16/14 13:47	01/17/14 12:04	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		01/16/14 13:47	01/17/14 12:04	1
Lead	0.105	U	0.500	0.105	mg/Kg		01/16/14 13:47	01/17/14 12:04	1
Selenium	0.259	U	2.00	0.259	mg/Kg		01/16/14 13:47	01/17/14 12:04	1

Lab Sample ID: LCSSRM 600-125124/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125211 — **Prep Batch: 125124**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	70.92		mg/Kg		80.4	45.4 - 231.3
Arsenic	99.6	98.87		mg/Kg		99.3	80.8 - 119.5
Cadmium	182	175.4		mg/Kg		96.4	81.9 - 118.1
Lead	115	114.7		mg/Kg		99.7	81.8 - 119.1
Selenium	150	141.5		mg/Kg		94.3	77.3 - 122.7

Lab Sample ID: 600-85473-34 MS — **Client Sample ID: 2013-FWFS-SA (0-2)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125211 — **Prep Batch: 125124**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.275	U	57.7	20.13	N	mg/Kg	☼	35	75 - 125
Arsenic	11.4		57.7	66.75		mg/Kg	☼	96	75 - 125
Cadmium	0.529		28.9	28.91		mg/Kg	☼	98	75 - 125
Lead	100		57.7	75.64	N	mg/Kg	☼	-43	75 - 125
Selenium	0.308	U	57.7	49.92		mg/Kg	☼	86	75 - 125

Lab Sample ID: 600-85473-34 MSD — **Client Sample ID: 2013-FWFS-SA (0-2)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125211 — **Prep Batch: 125124**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.275	U	57.2	19.33	N	mg/Kg	☼	34	75 - 125	4	20
Arsenic	11.4		57.2	61.85		mg/Kg	☼	88	75 - 125	8	20

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

Lab Sample ID: 600-85473-34 MSD — **Client Sample ID: 2013-FWFS-SA (0-2)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125211 — **Prep Batch: 125124**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	0.529		28.6	28.10		mg/Kg	☼	96	75 - 125	3	20
Lead	100		57.2	73.98	N	mg/Kg	☼	-46	75 - 125	2	20
Selenium	0.308	U	57.2	49.32		mg/Kg	☼	86	75 - 125	1	20

Lab Sample ID: 600-85473-36 MS — **Client Sample ID: 2013-BSB-8A (8-10)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125211 — **Prep Batch: 125124**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	26.8		60.1	21.16	N	mg/Kg	☼	-9	75 - 125
Arsenic	23.3		60.1	67.64	N	mg/Kg	☼	74	75 - 125
Cadmium	11.4		30.0	29.52	N	mg/Kg	☼	60	75 - 125
Lead	14000		60.1	85.84	4	mg/Kg	☼	-23109	75 - 125
Selenium	0.733		60.1	51.38		mg/Kg	☼	84	75 - 125

Lab Sample ID: 600-85473-36 MSD — **Client Sample ID: 2013-BSB-8A (8-10)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125211 — **Prep Batch: 125124**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	26.8		61.8	27.79	N	mg/Kg	☼	2	75 - 125	27	20
Arsenic	23.3		61.8	71.92		mg/Kg	☼	79	75 - 125	6	20
Cadmium	11.4		30.9	33.12	N	mg/Kg	☼	70	75 - 125	12	20
Selenium	0.733		61.8	54.90		mg/Kg	☼	88	75 - 125	7	20

Lab Sample ID: 600-85473-34 DU — **Client Sample ID: 2013-FWFS-SA (0-2)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125211 — **Prep Batch: 125124**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.275	U	0.265	U	mg/Kg	☼	NC	20
Arsenic	11.4		11.80		mg/Kg	☼	3	20
Cadmium	0.529		0.5378		mg/Kg	☼	2	20
Lead	100		217.5	F	mg/Kg	☼	74	20
Selenium	0.308	U	0.296	U	mg/Kg	☼	NC	20

Lab Sample ID: 600-85473-36 DU — **Client Sample ID: 2013-BSB-8A (8-10)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125211 — **Prep Batch: 125124**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	26.8		20.83	F	mg/Kg	☼	25	20
Arsenic	23.3		19.33		mg/Kg	☼	18	20
Cadmium	11.4		10.80		mg/Kg	☼	6	20
Selenium	0.733		0.7534	J	mg/Kg	☼	3	20

Method: 6010B - Metals (ICP) - DL

Lab Sample ID: 600-85473-36 MSD
Matrix: Solid
Analysis Batch: 125211

Client Sample ID: 2013-BSB-8A (8-10)
Prep Type: Total/NA
Prep Batch: 125124

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead - DL	14800		61.8	3947	4 N	mg/Kg	☼	-1764 0	75 - 125	191	20

Lab Sample ID: 600-85473-36 DU
Matrix: Solid
Analysis Batch: 125211

Client Sample ID: 2013-BSB-8A (8-10)
Prep Type: Total/NA
Prep Batch: 125124

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead - DL	14800		11860	F	mg/Kg	☼	22	20

Method: Moisture - Percent Moisture

Lab Sample ID: 600-85473-1 DU
Matrix: Solid
Analysis Batch: 125061

Client Sample ID: MW-33/2013-FWFS-5B (1-2)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	19		19		%		1	20
Percent Solids	81		81		%		0.3	20

Lab Sample ID: 600-85473-17 DU
Matrix: Solid
Analysis Batch: 125061

Client Sample ID: ECO-4A (0-0.5)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	20		20		%		0.2	20
Percent Solids	80		80		%		0.05	20

Lab Sample ID: 600-85473-31 DU
Matrix: Solid
Analysis Batch: 125061

Client Sample ID: MW-29A (0-0.5)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	23		23		%		1	20
Percent Solids	77		77		%		0.4	20

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-1

Method: 8082 - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	MQL	MDL	Units	Method
PCB-1016	0.000500	0.000270	mg/L	8082
PCB-1221	0.000500	0.000220	mg/L	8082
PCB-1232	0.000500	0.0000600	mg/L	8082
PCB-1242	0.000500	0.0000800	mg/L	8082
PCB-1248	0.000500	0.000100	mg/L	8082
PCB-1254	0.000500	0.0000700	mg/L	8082
PCB-1260	0.000500	0.000170	mg/L	8082

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Antimony	2.50	0.232	mg/Kg	6010B
Arsenic	1.00	0.218	mg/Kg	6010B
Cadmium	0.250	0.0256	mg/Kg	6010B
Cadmium	0.00500	0.000350	mg/L	6010B
Lead	0.500	0.105	mg/Kg	6010B
Lead	0.0100	0.00290	mg/L	6010B
Selenium	2.00	0.259	mg/Kg	6010B

General Chemistry

Analyte	MQL	MDL	Units	Method
Percent Moisture	1.0	1.0	%	Moisture
Percent Solids	1.0	1.0	%	Moisture

GC Semi VOA

Prep Batch: 125237

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85473-27	RINSE BLANK GEO	Total/NA	Water	3510C	
LCS 600-125237/3-A	Lab Control Sample	Total/NA	Water	3510C	
MB 600-125237/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 125450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85473-27	RINSE BLANK GEO	Total/NA	Water	8082	125237
LCS 600-125237/3-A	Lab Control Sample	Total/NA	Water	8082	125237
MB 600-125237/1-A	Method Blank	Total/NA	Water	8082	125237

Metals

Prep Batch: 125065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85473-27	RINSE BLANK GEO	Total/NA	Water	3010A	
600-85473-40	RINSE BLANK GEO	Total/NA	Water	3010A	
LCS 600-125065/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-125065/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 125089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85473-1	MW-33/2013-FWFS-5B (1-2)	Total/NA	Solid	3050B	
600-85473-3	MW-33/2013-FWFS-5B (4-5)	Total/NA	Solid	3050B	
600-85473-3 - DL	MW-33/2013-FWFS-5B (4-5)	Total/NA	Solid	3050B	
600-85473-4	F-5D (0.0-0.25)	Total/NA	Solid	3050B	
600-85473-6	F-5E (0-0.25)	Total/NA	Solid	3050B	
600-85473-8	F-5B (0-0.25)	Total/NA	Solid	3050B	
600-85473-10	F-5A (0-0.25)	Total/NA	Solid	3050B	
600-85473-12	F-5C (0-0.25)	Total/NA	Solid	3050B	
600-85473-14	SRB-VS-9E (0-0.5)	Total/NA	Solid	3050B	
600-85473-15	SRB-VS-11A (0-0.5)	Total/NA	Solid	3050B	
600-85473-16	ECO-10A (0-0.5)	Total/NA	Solid	3050B	
600-85473-16 DU	ECO-10A (0-0.5)	Total/NA	Solid	3050B	
600-85473-16 MS	ECO-10A (0-0.5)	Total/NA	Solid	3050B	
600-85473-16 MSD	ECO-10A (0-0.5)	Total/NA	Solid	3050B	
600-85473-17	ECO-4A (0-0.5)	Total/NA	Solid	3050B	
600-85473-19	E-11D (0-0.5)	Total/NA	Solid	3050B	
600-85473-20	2013-NT-01 (0-0.5)	Total/NA	Solid	3050B	
600-85473-21	2013-NT-01 (0.5-2)	Total/NA	Solid	3050B	
600-85473-22	E-12A (0-0.5)	Total/NA	Solid	3050B	
600-85473-23	2013-NT-02 (0-0.5)	Total/NA	Solid	3050B	
600-85473-24	2013-NT-02 (0.5-2))	Total/NA	Solid	3050B	
600-85473-25	E-13A (0-0.5)	Total/NA	Solid	3050B	
600-85473-26	E-14A (0-0.5)	Total/NA	Solid	3050B	
LCSSRM 600-125089/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-125089/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 125111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85473-27	RINSE BLANK GEO	Total/NA	Water	6010B	125065

Metals (Continued)

Analysis Batch: 125111 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85473-40	RINSE BLANK GEO	Total/NA	Water	6010B	125065
LCS 600-125065/2-A	Lab Control Sample	Total/NA	Water	6010B	125065
MB 600-125065/1-A	Method Blank	Total/NA	Water	6010B	125065

Prep Batch: 125124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85473-28	MW-27E (0-1)	Total/NA	Solid	3050B	
600-85473-31	MW-29A (0-0.5)	Total/NA	Solid	3050B	
600-85473-32	DUP-10	Total/NA	Solid	3050B	
600-85473-33	DUP-11	Total/NA	Solid	3050B	
600-85473-34	2013-FWFS-SA (0-2)	Total/NA	Solid	3050B	
600-85473-34 DU	2013-FWFS-SA (0-2)	Total/NA	Solid	3050B	
600-85473-34 MS	2013-FWFS-SA (0-2)	Total/NA	Solid	3050B	
600-85473-34 MSD	2013-FWFS-SA (0-2)	Total/NA	Solid	3050B	
600-85473-36 - DL	2013-BSB-8A (8-10)	Total/NA	Solid	3050B	
600-85473-36 DU - DL	2013-BSB-8A (8-10)	Total/NA	Solid	3050B	
600-85473-36 DU	2013-BSB-8A (8-10)	Total/NA	Solid	3050B	
600-85473-36 MS	2013-BSB-8A (8-10)	Total/NA	Solid	3050B	
600-85473-36 MSD - DL	2013-BSB-8A (8-10)	Total/NA	Solid	3050B	
600-85473-36 MSD	2013-BSB-8A (8-10)	Total/NA	Solid	3050B	
600-85473-37	2013-FWCS-12A (2-2.7)	Total/NA	Solid	3050B	
600-85473-38 - DL	2013-MW-17B (0-0.5)	Total/NA	Solid	3050B	
600-85473-38	2013-MW-17B (0-0.5)	Total/NA	Solid	3050B	
600-85473-39	SCC-10B (0-0.5)	Total/NA	Solid	3050B	
600-85473-41	ECO04B (0-0.5)	Total/NA	Solid	3050B	
LCSSRM 600-125124/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-125124/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 125211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85473-1	MW-33/2013-FWFS-5B (1-2)	Total/NA	Solid	6010B	125089
600-85473-3	MW-33/2013-FWFS-5B (4-5)	Total/NA	Solid	6010B	125089
600-85473-3 - DL	MW-33/2013-FWFS-5B (4-5)	Total/NA	Solid	6010B	125089
600-85473-4	F-5D (0.0-0.25)	Total/NA	Solid	6010B	125089
600-85473-6	F-5E (0-0.25)	Total/NA	Solid	6010B	125089
600-85473-8	F-5B (0-0.25)	Total/NA	Solid	6010B	125089
600-85473-10	F-5A (0-0.25)	Total/NA	Solid	6010B	125089
600-85473-12	F-5C (0-0.25)	Total/NA	Solid	6010B	125089
600-85473-14	SRB-VS-9E (0-0.5)	Total/NA	Solid	6010B	125089
600-85473-15	SRB-VS-11A (0-0.5)	Total/NA	Solid	6010B	125089
600-85473-16	ECO-10A (0-0.5)	Total/NA	Solid	6010B	125089
600-85473-16 DU	ECO-10A (0-0.5)	Total/NA	Solid	6010B	125089
600-85473-16 MS	ECO-10A (0-0.5)	Total/NA	Solid	6010B	125089
600-85473-16 MSD	ECO-10A (0-0.5)	Total/NA	Solid	6010B	125089
600-85473-17	ECO-4A (0-0.5)	Total/NA	Solid	6010B	125089
600-85473-19	E-11D (0-0.5)	Total/NA	Solid	6010B	125089
600-85473-20	2013-NT-01 (0-0.5)	Total/NA	Solid	6010B	125089
600-85473-21	2013-NT-01 (0.5-2)	Total/NA	Solid	6010B	125089
600-85473-22	E-12A (0-0.5)	Total/NA	Solid	6010B	125089
600-85473-23	2013-NT-02 (0-0.5)	Total/NA	Solid	6010B	125089
600-85473-24	2013-NT-02 (0.5-2))	Total/NA	Solid	6010B	125089

Metals (Continued)

Analysis Batch: 125211 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85473-25	E-13A (0-0.5)	Total/NA	Solid	6010B	125089
600-85473-26	E-14A (0-0.5)	Total/NA	Solid	6010B	125089
600-85473-28	MW-27E (0-1)	Total/NA	Solid	6010B	125124
600-85473-31	MW-29A (0-0.5)	Total/NA	Solid	6010B	125124
600-85473-32	DUP-10	Total/NA	Solid	6010B	125124
600-85473-33	DUP-11	Total/NA	Solid	6010B	125124
600-85473-34	2013-FWFS-SA (0-2)	Total/NA	Solid	6010B	125124
600-85473-34 DU	2013-FWFS-SA (0-2)	Total/NA	Solid	6010B	125124
600-85473-34 MS	2013-FWFS-SA (0-2)	Total/NA	Solid	6010B	125124
600-85473-34 MSD	2013-FWFS-SA (0-2)	Total/NA	Solid	6010B	125124
600-85473-36 - DL	2013-BSB-8A (8-10)	Total/NA	Solid	6010B	125124
600-85473-36 DU	2013-BSB-8A (8-10)	Total/NA	Solid	6010B	125124
600-85473-36 DU - DL	2013-BSB-8A (8-10)	Total/NA	Solid	6010B	125124
600-85473-36 MS	2013-BSB-8A (8-10)	Total/NA	Solid	6010B	125124
600-85473-36 MSD	2013-BSB-8A (8-10)	Total/NA	Solid	6010B	125124
600-85473-36 MSD - DL	2013-BSB-8A (8-10)	Total/NA	Solid	6010B	125124
600-85473-37	2013-FWCS-12A (2-2.7)	Total/NA	Solid	6010B	125124
600-85473-38	2013-MW-17B (0-0.5)	Total/NA	Solid	6010B	125124
600-85473-38 - DL	2013-MW-17B (0-0.5)	Total/NA	Solid	6010B	125124
600-85473-39	SCC-10B (0-0.5)	Total/NA	Solid	6010B	125124
600-85473-41	ECO04B (0-0.5)	Total/NA	Solid	6010B	125124
LCSSRM 600-125089/2-A	Lab Control Sample	Total/NA	Solid	6010B	125089
LCSSRM 600-125124/2-A	Lab Control Sample	Total/NA	Solid	6010B	125124
MB 600-125089/1-A	Method Blank	Total/NA	Solid	6010B	125089
MB 600-125124/1-A	Method Blank	Total/NA	Solid	6010B	125124

General Chemistry

Analysis Batch: 125061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85473-1	MW-33/2013-FWFS-5B (1-2)	Total/NA	Solid	Moisture	
600-85473-1 DU	MW-33/2013-FWFS-5B (1-2)	Total/NA	Solid	Moisture	
600-85473-3	MW-33/2013-FWFS-5B (4-5)	Total/NA	Solid	Moisture	
600-85473-4	F-5D (0.0-0.25)	Total/NA	Solid	Moisture	
600-85473-6	F-5E (0-0.25)	Total/NA	Solid	Moisture	
600-85473-8	F-5B (0-0.25)	Total/NA	Solid	Moisture	
600-85473-10	F-5A (0-0.25)	Total/NA	Solid	Moisture	
600-85473-12	F-5C (0-0.25)	Total/NA	Solid	Moisture	
600-85473-14	SRB-VS-9E (0-0.5)	Total/NA	Solid	Moisture	
600-85473-15	SRB-VS-11A (0-0.5)	Total/NA	Solid	Moisture	
600-85473-16	ECO-10A (0-0.5)	Total/NA	Solid	Moisture	
600-85473-17	ECO-4A (0-0.5)	Total/NA	Solid	Moisture	
600-85473-17 DU	ECO-4A (0-0.5)	Total/NA	Solid	Moisture	
600-85473-19	E-11D (0-0.5)	Total/NA	Solid	Moisture	
600-85473-20	2013-NT-01 (0-0.5)	Total/NA	Solid	Moisture	
600-85473-21	2013-NT-01 (0.5-2)	Total/NA	Solid	Moisture	
600-85473-22	E-12A (0-0.5)	Total/NA	Solid	Moisture	
600-85473-23	2013-NT-02 (0-0.5)	Total/NA	Solid	Moisture	
600-85473-24	2013-NT-02 (0.5-2))	Total/NA	Solid	Moisture	
600-85473-25	E-13A (0-0.5)	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 125061 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85473-26	E-14A (0-0.5)	Total/NA	Solid	Moisture	
600-85473-28	MW-27E (0-1)	Total/NA	Solid	Moisture	
600-85473-31	MW-29A (0-0.5)	Total/NA	Solid	Moisture	
600-85473-31 DU	MW-29A (0-0.5)	Total/NA	Solid	Moisture	
600-85473-32	DUP-10	Total/NA	Solid	Moisture	
600-85473-33	DUP-11	Total/NA	Solid	Moisture	
600-85473-34	2013-FWFS-SA (0-2)	Total/NA	Solid	Moisture	
600-85473-34 MS	2013-FWFS-SA (0-2)	Total/NA	Solid	Moisture	
600-85473-34 MSD	2013-FWFS-SA (0-2)	Total/NA	Solid	Moisture	
600-85473-36	2013-BSB-8A (8-10)	Total/NA	Solid	Moisture	
600-85473-36 MS	2013-BSB-8A (8-10)	Total/NA	Solid	Moisture	
600-85473-36 MSD	2013-BSB-8A (8-10)	Total/NA	Solid	Moisture	
600-85473-37	2013-FWCS-12A (2-2.7)	Total/NA	Solid	Moisture	
600-85473-38	2013-MW-17B (0-0.5)	Total/NA	Solid	Moisture	
600-85473-39	SCC-10B (0-0.5)	Total/NA	Solid	Moisture	
600-85473-41	ECO04B (0-0.5)	Total/NA	Solid	Moisture	

Client Sample ID: MW-33/2013-FWFS-5B (1-2)

Lab Sample ID: 600-85473-1

Date Collected: 01/10/14 16:00
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 81.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	125211	01/17/14 13:56	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: MW-33/2013-FWFS-5B (4-5)

Lab Sample ID: 600-85473-3

Date Collected: 01/10/14 16:04
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 73.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	125211	01/17/14 14:05	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.02 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B	DL	20	1.02 g	50 mL	125211	01/17/14 16:12	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: F-5D (0.0-0.25)

Lab Sample ID: 600-85473-4

Date Collected: 01/10/14 13:38
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 75.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	125211	01/17/14 14:08	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: F-5E (0-0.25)

Lab Sample ID: 600-85473-6

Date Collected: 01/10/14 13:42
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 68.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.08 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	125211	01/17/14 14:10	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: F-5B (0-0.25)

Lab Sample ID: 600-85473-8

Date Collected: 01/10/14 13:47
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 73.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	125211	01/17/14 14:13	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: F-5A (0-0.25)

Lab Sample ID: 600-85473-10

Date Collected: 01/10/14 13:49
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 72.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	125211	01/17/14 14:15	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: F-5C (0-0.25)

Lab Sample ID: 600-85473-12

Date Collected: 01/10/14 13:51
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 70.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.08 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	125211	01/17/14 14:17	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: SRB-VS-9E (0-0.5)

Lab Sample ID: 600-85473-14

Date Collected: 01/10/14 14:08
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 80.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	125211	01/17/14 14:20	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: SRB-VS-11A (0-0.5)

Lab Sample ID: 600-85473-15

Date Collected: 01/10/14 14:16
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 83.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.08 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	125211	01/17/14 14:22	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: ECO-10A (0-0.5)

Lab Sample ID: 600-85473-16

Date Collected: 01/10/14 14:43
Matrix: Solid
Date Received: 01/14/14 10:21
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			1.03 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	125211	01/17/14 14:24	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: ECO-4A (0-0.5)

Lab Sample ID: 600-85473-17

Date Collected: 01/10/14 15:10

Matrix: Solid

Date Received: 01/14/14 10:21

Percent Solids: 80.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	125211	01/17/14 14:41	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: E-11D (0-0.5)

Lab Sample ID: 600-85473-19

Date Collected: 01/10/14 15:45

Matrix: Solid

Date Received: 01/14/14 10:21

Percent Solids: 75.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	125211	01/17/14 14:44	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: 2013-NT-01 (0-0.5)

Lab Sample ID: 600-85473-20

Date Collected: 01/10/14 15:58

Matrix: Solid

Date Received: 01/14/14 10:21

Percent Solids: 76.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	125211	01/17/14 14:46	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: 2013-NT-01 (0.5-2)

Lab Sample ID: 600-85473-21

Date Collected: 01/10/14 15:59

Matrix: Solid

Date Received: 01/14/14 10:21

Percent Solids: 74.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	125211	01/17/14 14:48	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: E-12A (0-0.5)

Lab Sample ID: 600-85473-22

Date Collected: 01/10/14 16:01

Matrix: Solid

Date Received: 01/14/14 10:21

Percent Solids: 77.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.07 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	125211	01/17/14 14:51	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: 2013-NT-02 (0-0.5)

Lab Sample ID: 600-85473-23

Date Collected: 01/10/14 16:15
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 75.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	125211	01/17/14 14:53	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: 2013-NT-02 (0.5-2))

Lab Sample ID: 600-85473-24

Date Collected: 01/10/14 16:16
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 77.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.08 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	125211	01/17/14 14:56	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: E-13A (0-0.5)

Lab Sample ID: 600-85473-25

Date Collected: 01/10/14 16:22
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 76.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	125211	01/17/14 14:58	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: E-14A (0-0.5)

Lab Sample ID: 600-85473-26

Date Collected: 01/10/14 16:30
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 71.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	50 mL	125089	01/16/14 10:03	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	125211	01/17/14 15:07	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: RINSE BLANK GEO

Lab Sample ID: 600-85473-27

Date Collected: 01/10/14 08:30
Matrix: Water
Date Received: 01/14/14 10:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			125 mL	5.0 mL	125237	01/17/14 14:01	LMB	TAL HOU
Total/NA	Analysis	8082		1	125 mL	5.0 mL	125450	01/20/14 15:39	JAL	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	125065	01/15/14 16:45	NER	TAL HOU
Total/NA	Analysis	6010B		1	50 mL	50 mL	125111	01/16/14 16:14	DCL	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-1

Client Sample ID: MW-27E (0-1)

Lab Sample ID: 600-85473-28

Date Collected: 01/13/14 08:42
Date Received: 01/14/14 10:21

Matrix: Solid
Percent Solids: 77.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	50 mL	125124	01/16/14 13:47	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	125211	01/17/14 12:49	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: MW-29A (0-0.5)

Lab Sample ID: 600-85473-31

Date Collected: 01/13/14 08:52
Date Received: 01/14/14 10:21

Matrix: Solid
Percent Solids: 76.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	125124	01/16/14 13:47	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	125211	01/17/14 12:51	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: DUP-10

Lab Sample ID: 600-85473-32

Date Collected: 01/13/14 00:00
Date Received: 01/14/14 10:21

Matrix: Solid
Percent Solids: 76.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	50 mL	125124	01/16/14 13:47	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	125211	01/17/14 12:54	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: DUP-11

Lab Sample ID: 600-85473-33

Date Collected: 01/13/14 00:00
Date Received: 01/14/14 10:21

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	3050B			1.03 g	50 mL	125124	01/16/14 13:47	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	125211	01/17/14 13:03	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: 2013-FWFS-SA (0-2)

Lab Sample ID: 600-85473-34

Date Collected: 01/13/14 09:12
Date Received: 01/14/14 10:21

Matrix: Solid
Percent Solids: 80.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	125124	01/16/14 13:47	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	125211	01/17/14 13:05	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: 2013-BSB-8A (8-10)

Lab Sample ID: 600-85473-36

Date Collected: 01/13/14 09:50
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 77.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B	DL		1.07 g	50 mL	125124	01/16/14 13:47	NER	TAL HOU
Total/NA	Analysis	6010B	DL	20	1.07 g	50 mL	125211	01/17/14 16:00	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: 2013-FWCS-12A (2-2.7)

Lab Sample ID: 600-85473-37

Date Collected: 01/13/14 11:05
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 76.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	50 mL	125124	01/16/14 13:47	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	125211	01/17/14 13:25	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: 2013-MW-17B (0-0.5)

Lab Sample ID: 600-85473-38

Date Collected: 01/13/14 11:51
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 80.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	125124	01/16/14 13:47	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	125211	01/17/14 13:34	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.05 g	50 mL	125124	01/16/14 13:47	NER	TAL HOU
Total/NA	Analysis	6010B	DL	20	1.05 g	50 mL	125211	01/17/14 16:09	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: SCC-10B (0-0.5)

Lab Sample ID: 600-85473-39

Date Collected: 01/13/14 12:04
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 77.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.08 g	50 mL	125124	01/16/14 13:47	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	125211	01/17/14 13:37	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Client Sample ID: RINSE BLANK GEO

Lab Sample ID: 600-85473-40

Date Collected: 01/13/14 13:15
Matrix: Water
Date Received: 01/14/14 10:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			50 mL	50 mL	125065	01/15/14 16:45	NER	TAL HOU
Total/NA	Analysis	6010B		1	50 mL	50 mL	125111	01/16/14 16:21	DCL	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-1

Client Sample ID: ECO04B (0-0.5)
Date Collected: 01/13/14 13:48
Date Received: 01/14/14 10:21

Lab Sample ID: 600-85473-41
Matrix: Solid
Percent Solids: 74.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	125124	01/16/14 13:47	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	125211	01/17/14 13:39	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125061	01/15/14 15:56	AYS	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-1

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0759	08-04-14
Louisiana	NELAP	6	30643	06-30-14
Oklahoma	State Program	6	1309	08-31-14
Texas	NELAP	6	T104704223	10-31-14
USDA	Federal		P330-08-00217	04-01-14 *
Utah	NELAP	8	TX00083	10-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Houston
3310 Rothway Street
Houston, TX 77040

Chain of Custody Record

600-85473 Chain of Custody

Client Information

Client Contact: Christina Higginbotham	Phone: 817-808-8144	Lab PM: Joiner, Dean A	Carrier Tracking No(s):
Company: Golder Associates Inc.		E-Mail: dean.joiner@testamericainc.com	
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:		
City: Houston	TAT Requested (days): 5 WD TRRP		
State, Zip: TX, 77073			
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested		
Email: Christina_Higginbotham@golder.com	WO #:		
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831		
Site: EXIDE-FRISCO	SSOW#:		

Analysis Requested

Job #: 13020866

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB				Total Number of containers	Special Instructions/Note:
Preservation Code:							N	N	N	N	N	N	N	N	N	N					
SW-33/2013-FWFS-5B (1-2)	01/10/14	1600	G	Solid									X								
SW-33/2013-FWFS-5B (2-4)	01/10/14	1602	G	Solid																	HOLD
SW-33/2013-FWFS-5B (4-5)	01/10/14	1604	G	Solid									X								
F-5D (0-0.25)	01/10/14	1338	G	Solid									X								
F-5D (1)	01/10/14	1339	G	Solid																	HOLD
F-5E (0-0.25)	01/10/14	1342	G	Solid									X								
F-5E (1)	01/10/14	1343	G	Solid																	HOLD
F-5B (0-0.25)	01/10/14	1347	G	Solid									X								
F-5B (1)	01/10/14	1348	G	Solid																	HOLD
F-5A (0-0.25)	01/10/14	1349	G	Solid									X								
F-5A (1)	01/10/14	1350	G	Solid																	HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: JOSHUA JANZEN	Date/Time: 01/13/14 1500	Company: GOLDER	Received by: McClowen
Relinquished by: McClowen	Date/Time: 1/13/14 1700	Company: TAL	Received by:
Relinquished by:	Date/Time:	Company	Received by:

Received by: McClowen	Date/Time: 1/13/14 1500	Company: TAL	
Received by:	Date/Time:	Company	
Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040

Chain of Custody Record

Client Information	Lab PM:	Carrier Tracking No(s):	COC No:
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com	600-25571-9015.1
Company: Golder Associates Inc.			Page: Page 2
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:		Job #:
City: Houston	TAT Requested (days): 5 WD TRRP		
State, Zip: TX, 77073			
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested		
Email: Christina_Higginbotham@golder.com	WO #:		
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831		
Site: EXIDE-FRISCO	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	N	N	N	N	N	N	N	N	N		
F-5C (0-0.25)	01/10/14	1351	G	Solid									X					
F-5C (1)	01/10/14	1352	G	Solid														HOLD
SRB-VS-9E (0-0.5)	01/10/14	1408	G	Solid									X					
SRB-VS-11A (0-0.5)	01/10/14	1416	G	Solid									X					
ECO-10A (0-0.5)	01/10/14	1443	G	Solid									X					
ECO-4A (0-0.5)	01/10/14	1510	G	Solid									X					
ECO-4A (0.5-2)	01/10/14	1511	G	Solid														HOLD
E-11D (0-0.5)	01/10/14	1545	G	Solid									X					
2013-NT-01 (0-0.5)	01/10/14	1558	G	Solid										X				
2013-NT-01 (0.2-2)	01/10/14	1559	G	Solid										X				
E-12A (0-0.5)	01/10/14	1601	G	Solid									X					

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Joshua Janzen	01/13/14 1500	Golder	M McGowen	1/13/14 1500	TA
2	M McGowen	1/13/14 1700	TAL	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Page 81 of 151
5/9/2014

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 3
Company: Golder Associates Inc.				Job #: 1302-086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Pb	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	N	N	N	N	N	N	N	N	N			
2013-NT-02 (0-0.5)	01/10/14	1615	G	Solid										X					
2013-NT-02 (0.5-2)	01/10/14	1616	G	Solid										X					
E-13A SD (0-0.5)	01/10/14	1622	G	Solid									X						
E-14A (0-0.5)	01/10/14	1630	G	Solid									X						
RINSE BLANK GED	01/10/14	0930	G	Solid										X		X			
MW-27E (0-1)	01/13/14	0842	G	Solid									X						
MW-27E (1-2)	01/13/14	0843	G	Solid															HOLD
MW-27E (2-3)	01/13/14	0844	G	Solid															HOLD
MW-29A (0-0.5)	01/13/14	0852	G	Solid									X						
DUP-10	01/13/14	—	G	Solid									X						
DUP-11	01/13/14	—	G	Solid									\				X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Joshua JANZEN	01/13/14 1500	GOLDER	MCGinnis	1/13/14 1500	TAL
2	MCGinnis	1/13/14 1700	TAL		/ /	
3		/ /			/ /	

Custody Seals Intact: △ Yes △ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Page 14 of 51

1/29/2014

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-805-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 4
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8280B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Pb				Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	N	N	N	N	N	N	N	N	N	N					X	
2013-FWFS-SA(0-2)	01/13/14	0912	G	Solid									X									
2013-FWFS-SA(0-2)MS	01/13/14	0912	G	Solid									X									
2013-FWFS-SA(0-2)MSD	01/13/14	0912	G	Solid									X									
2013-FWFS-SA(2-4)	01/13/14	0913	G	Solid																		HOLD
2013-BSB-8A(8-10)	01/13/14	0950	G	Solid													X					
2013-BSB-8A(8-10)MS	01/13/14	0950	G	Solid													X					
2013-BSB-8A(8-10)MSD	01/13/14	0950	G	Solid													X					
2013-FWCS-12A(2-2.7)	01/13/14	1105	G	Solid													X					
2013-MW-17B(0-0.5)	01/13/14	1151	G	Solid									X									
SCL-10B(0-0.5)	01/13/14	1204	G	Solid									X									
RINSE BLANK 0120	01/13/14	1315	G	Solid									X									

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOSHUA JANZEN	01/13/14 1500	GOLDER	[signature]	1/13/14 1500	TA
2	[signature]	1/13/14 1700	TA	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Page 52 of 59
1/29/2014

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040

Chain of Custody Record

Client Information		Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9915.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 5
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB				Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	N	N	N	N	N	N	N	N	N	N				X	
ECO-4B (0-0.5)	01/13/14	1348	G	Solid									X								
ECO-4B (0.5-2)	01/13/14	1349	G	Solid																	HOLD
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOSHUA HANSEN	01/13/14 1500	GOLDER		1/13/14 1500	TAL
2		1/13/14 1700	TAL	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Upton, Cathy

From: Upton, Cathy
Sent: Tuesday, March 04, 2014 3:13 PM
To: Upton, Cathy
Subject: FW: Additional Metals in Soil

Dean,

We would like to report all five metals for the samples listed below. Do you think we could get revised reports for these by Wednesday?

Location ID	Sample ID	lab_sample_id	Date Sampled	Antimony	Arsenic	Cadı
2013-SL-C15	2013-SL-C15 (0-6)	600-84633-7	2013-12-19	NA	NA	2.10
MW-42	MW-42 (0.5-2)	600-85318-20	2014-01-08	NA	13.9	1.82
MW-27B	MW-27B (0-2)	600-85318-24	2014-01-09	NA	NA	9.85
D-11A	D11A (0-0.5)	600-85318-30	2014-01-09	NA	**27.2**	1.77
2013-BSA-2A	2013-BSA-2A(0-2)	600-85318-36	2014-01-09	NA	**34.9**	16.5
ECO-2A	ECO-2A (0-0.5)	600-85389-18	2014-01-09	NA	NA	3.29
ECO-8A	ECO-8A (0-0.5)	600-85389-20	2014-01-09	NA	NA	5.65
2013-AD-3	2013-AD-03 (0-0.5)	600-85389-23	2014-01-09	NA	NA	1.51
SCC-5B	SCC-5B (0-0.5)	600-85389-29	2014-01-10	NA	NA	2.48
2013-CUFT-10B	2013-CUFT-10B (0-0.5)	600-85389-63	2014-01-10	NA	NA	2.19
SRB-VS-11A	SRB-VS-11A (0-0.5)	600-85473-15	2014-01-10	NA	NA	1.44
2013-FWFS-5A	2013-FWFS-5A (0-2)	600-85473-34	2014-01-13	NA	NA	0.52
2013-MW-17B	2013-MW-17B (0-0.5)	600-85473-38	2014-01-13	NA	NA	5.19
SCC-10B	SCC-10B (0-0.5)	600-85473-39	2014-01-13	NA	NA	1.85
2013-C2L-06	2013-C2L-06 (0-0.5)	600-85636-21	2014-01-14	NA	**22.6**	3.68
ECO-7D	ECO-7D (0-0.5)	600-85636-39	2014-01-14	NA	15.1	2.30

Thanks,
Anne

Anne Faeth-Boyd, R.G., P.E. | Senior Project Engineer | **Golder Associates Inc.**
820 South Main Street, Suite 100, St. Charles, Missouri, USA 63301
T: +1 (636) 724-9191 | **F:** +1 (636) 724-9323 | **C:** +1 314 503-5179 | **E:** Anne_Faeth-Boyd@golder.com |
www.golder.com

Work Safe, Home Safe

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Please consider the environment before printing this email.

Upton, Cathy

From: Faeth-Boyd, Anne [Anne_Faeth-Boyd@golder.com]
Sent: Thursday, March 27, 2014 3:52 PM
To: Upton, Cathy
Cc: Joiner, Dean; Higginbotham, Christina; Forthaus, Brett; Thomas, Jim
Subject: Additional Metals Reporting
Follow Up Flag: Follow up
Flag Status: Blue

Cathy,

Could you please send revised reports to include all five metals (lead, cadmium, arsenic, antimony, selenium) for the following samples:

2013-AD-03 (0.5-2)	600-85389-24	2014-01-09
2013-C2L-06 (1-2)	600-85636-22	2014-01-14
2013-CUFT-5B (0-0.5)	600-85389-36	2014-01-10
2013-NT-02 (0-0.5)	600-85473-23	2014-01-10
2013-SDA-4B (0-0.5)	600-85389-28	2014-01-10
E-11C (0-0.5)	600-85318-29	2014-01-09
ECO-10A (0-0.5)	600-85473-16	2014-01-10
ECO-1A (0-0.5)	600-85389-16	2014-01-09
ECO-2A (0-0.5)	600-85389-18	2014-01-09
ECO-4B (0-0.5)	600-85473-41	2014-01-13
SRB-VS-9E (0-0.5)	600-85473-14	2014-01-10

Thanks,
Anne

Anne Faeth-Boyd, R.G., P.E. | Senior Project Engineer | **Golder Associates Inc.**
820 South Main Street, Suite 100, St. Charles, Missouri, USA 63301
T: +1 (636) 724-9191 | **F:** +1 (636) 724-9323 | **C:** +1 314 503-5179 | **E:** Anne_Faeth-Boyd@golder.com | **www.golder.com**

Work Safe, Home Safe

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Please consider the environment before printing this email.

Upton, Cathy

From: Higginbotham, Christina [Christina_Higginbotham@golder.com]
Sent: Tuesday, May 06, 2014 5:02 PM
To: Upton, Cathy; Joiner, Dean
Cc: Thomas, Jim; Faeth-Boyd, Anne
Subject: Exide discrepancies - metals reporting
Follow Up Flag: Follow up
Flag Status: Red

Cathy and Dean,

The below revisions are being requested so the final laboratory reports are consistent with tabulated data that was already submitted.
It appears that some metals noted below were reported in an earlier package, and removed for the later data packages. We would like the specified data (see highlights) turned back "on" please.

Please let us know estimated time for these revisions, or if you have any questions regarding this request.

Thanks,
Christina

600-85636 REVISION

				Sb	As	Cd	Pb	Se		
2013-STB-4A	2013-STB-4A (2-4)	600-85636-1	2014-01-13	NA	NA	NA	**1540**	NA	REPORT CADMIUM (confirm Cd concentrat

600-85318 REVISIONS

2013-C2L-03	2013-C2L-03-(0-0.5)	600-85318-33	2014-01-09	NA	12.2	0.651	79.5	< 0.330 U	REPORT ARSENIC AND SELENIUM
D-12A	D12A (0-0.5)	600-85318-31	2014-01-09	NA	10.9	0.652 b	80.2	< 0.324 U	REV 4 (3/18) reports Cd, Pb only. Report dat reported As, Cd, Pb, Se REPORT ARSENIC AND SELENIUM
MW-41	MW-41 (0.5-2)	600-85318-18	2014-01-08	NA	10.1	0.810	92.5	< 0.338 U	REV 4 (3/18) reports Cd, Pb only. Report da reported As, Cd, Pb, Se. REPORT ARSENIC AND SELENIUM
MW-41	MW-41 (0-0.5)	600-85318-17	2014-01-08	NA	8.00	0.474	18.4	< 0.323 U	REV 4 (3/18) reports Cd, Pb only. Report da reported As, Cd, Pb, Se. REPORT ARSENIC AND SELENIUM
MW-42	DUP-6	600-85318-21	2014-01-08	NA	7.39	0.385	15.0	< 0.311 U	REV 4 (3/18) reports Cd, Pb only. Report da reported As, Cd, Pb, Se. REPORT ARSENIC AND SELENIUM
MW-42	MW-42 (0-0.5)	600-85318-19	2014-01-08	NA	14.2	1.56	230	0.580 J	REV 4 (3/18) reports Cd, Pb only. Report da reported As, Cd, Pb, Se. REPORT ARSENIC AND SELENIUM

600-85473 REVISIONS

2013-NT-01	2013-NT-01 (0.2-2)	600-85473-21	2014-01-10	NA	14.4	0.618	18.5	0.546 J	Report from 1/22 has results for As and Se. only lists Pb and Cd, 4/21 only lists Cd and F REPORT ARSENIC AND SELENIUM , also ple interval to "0.5-2" instead of "0.2-2".
2013-NT-01	2013-NT-01 (0-0.5)	600-85473-20	2014-01-10	NA	**15.9**	0.571	19.5	< 0.328 U	Report from 1/22 reports As and Se. Rev 3 4/21 does not. REPORT ARSENIC AND SELENIUM
2013-NT-02	2013-NT-02 (0.5-2)	600-85473-24	2014-01-10	NA	14.1	0.354	21.2	0.324 J	Report from 1/22 reports As and Se. Rev 3 4/21 does not. REPORT ARSENIC AND SELENIUM
2013-NT-02	2013-NT-02 (0-0.5)	600-85473-23	2014-01-10	NA	14.9	4.89	**837**	0.654 J	Report from 1/22 reports As and Se. Rev 3 4/21 does not. REPORT ARSENIC AND SELENIUM

600-85389 REVISION

2013-WMU14-1A (5-7)	600-85389-12	1/9/2014	na	na	5.14 J	**17000**	na	REPORT CADMIUM (confirm Cd concentratio
DUP-7	600-85389-14	1/9/2014	na	na	na	**10500**	na	REPORT CADMIUM (if 85389-12 is confirmed

Christina Higginbotham, P.G. | Remediation Project Manager | **Golder Associates Inc.**
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Work Safe, Home Safe

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Please consider the environment before printing this email.

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-85473-1

Login Number: 85473

List Source: TestAmerica Houston

List Number: 1

Creator: Capps, Dana R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	2.2/3.3
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.	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	Check done at department level as required.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-85473-2
Client Project/Site: Exide Recycling Center

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
2/27/2014 1:56:43 PM
Cathy Upton, Project Management Assistant II
(713)690-4444
cathy.upton@testamericainc.com

Designee for

Dean Joiner, Project Manager II
(713)690-4444
dean.joiner@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: 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.

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-85473-2 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☐ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☐ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☐ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☑ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton				2/25/2014
Name (printed)		Signature		Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	2/24/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85473-2
Reviewer Name:	Cathy Upton		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?			X		
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?			X		
		Were LCSs analyzed at the required frequency?			X		
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?			X		
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?			X		
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?			X		
		Were MS/MSD analyzed at the appropriate frequency?			X		
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?			X		
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	2/24/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85473-2
Reviewer Name:	Cathy Upton		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
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Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	2/24/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85473-2
Reviewer Name:	Cathy Upton		

ER #[1]	Description

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
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3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Detection Check Standard

Matrix:	Soil
Method:	6010B
Preparation:	3050
Date Analyzed:	12/30/2013
Date Prepared:	12/27/2013
Instrument:	Thermo 6500
TALS Batches:	123949, 123775p
Prep/Reagent Factor =	50
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.299654	0.5	0.36	25
Antimony	0.231553	0.45	0.5	2.5
Arsenic	0.217923	0.5	0.53	1
Barium	0.011322	0.03	0.04	1
Beryllium	0.014513	0.02	0.015	0.25
Boron	0.385535	0.6	0.56	20
Cadmium	0.025642	0.05	0.05	0.25
Calcium	0.86399	1.5	2.185	100
Chromium	0.050606	0.1	0.135	0.5
Cobalt	0.067622	0.1	0.09	0.5
Copper	0.173703	0.5	0.64	0.5
Iron	2.534007	4	3.76	20
Lead	0.104832	0.2	0.215	0.5
Selenium	0.258884	0.5	0.465	2
Manganese	0.038111	0.05	0.085	1.5
Molybdenum	0.136448	0.35	0.38	0.5
Nickel	0.116599	0.15	0.2	1
Silver	0.118848	0.2	0.15	0.5
Sodium	0.885548	2.4	3.135	100
Thallium	0.276988	0.7	0.73	1.5
Tin	0.08729	0.15	0.19	1
Titanium	0.014529	0.03	0.01	0.5
Vanadium	0.079068	0.15	0.125	0.5
Zinc	0.108432	0.2	0.305	1.5

Job ID: 600-85473-2

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-85473-2

Comments
No additional comments.

Receipt
The samples were received on 1/14/2014 10:21 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.2º C and 3.3º C.

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-2

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU
Moisture	Percent Moisture	EPA	TAL HOU

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 HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-85473-2	MW-33/2013-FWFS-5B (2-4)	Solid	01/10/14 16:02	01/14/14 10:21
600-85473-11	F-5A (1)	Solid	01/10/14 13:50	01/14/14 10:21
600-85473-29	MW-27E (1-2)	Solid	01/13/14 08:43	01/14/14 10:21

Client Sample ID: MW-33/2013-FWFS-5B (2-4)

Lab Sample ID: 600-85473-2

Date Collected: 01/10/14 16:02
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 78.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.30		0.306	0.0314	mg/Kg	☼	02/20/14 17:00	02/21/14 14:13	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7390		12.3	2.57	mg/Kg	☼	02/20/14 17:00	02/21/14 15:43	20

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22	H	1.0	1.0	%			02/19/14 13:24	1
Percent Solids	78	H	1.0	1.0	%			02/19/14 13:24	1

Client Sample ID: F-5A (1)

Lab Sample ID: 600-85473-11

Date Collected: 01/10/14 13:50
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 78.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.275	J	0.320	0.0328	mg/Kg	☼	02/20/14 17:00	02/21/14 14:15	1
Lead	17.6		0.640	0.134	mg/Kg	☼	02/20/14 17:00	02/21/14 14:15	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22	H	1.0	1.0	%			02/19/14 13:24	1
Percent Solids	78	H	1.0	1.0	%			02/19/14 13:24	1

Client Sample ID: MW-27E (1-2)

Lab Sample ID: 600-85473-29

Date Collected: 01/13/14 08:43
Matrix: Solid
Date Received: 01/14/14 10:21
Percent Solids: 81.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	15.2		0.281	0.0288	mg/Kg	☼	02/20/14 17:00	02/21/14 14:18	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4830		5.62	1.18	mg/Kg	☼	02/20/14 17:00	02/21/14 15:45	10

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18	H	1.0	1.0	%			02/19/14 13:24	1
Percent Solids	82	H	1.0	1.0	%			02/19/14 13:24	1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

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
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)

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-127810/1-A
Matrix: Solid
Analysis Batch: 127873

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 127810

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		02/20/14 17:00	02/21/14 13:27	1
Lead	0.105	U	0.500	0.105	mg/Kg		02/20/14 17:00	02/21/14 13:27	1

Lab Sample ID: LCSSRM 600-127810/2-A
Matrix: Solid
Analysis Batch: 127873

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 127810

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	182	188.2		mg/Kg		103.4	81.9 - 118.1
Lead	115	116.7		mg/Kg		101.5	81.8 - 119.1

Method: Moisture - Percent Moisture

Lab Sample ID: 600-85473-2 DU
Matrix: Solid
Analysis Batch: 127707

Client Sample ID: MW-33/2013-FWFS-5B (2-4)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	22	H	21		%		0.5	20
Percent Solids	78	H	79		%		0.1	20

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-2

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Cadmium	0.250	0.0256	mg/Kg	6010B
Lead	0.500	0.105	mg/Kg	6010B

General Chemistry

Analyte	MQL	MDL	Units	Method
Percent Moisture	1.0	1.0	%	Moisture
Percent Solids	1.0	1.0	%	Moisture

Metals

Prep Batch: 127810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85473-2 - DL	MW-33/2013-FWFS-5B (2-4)	Total/NA	Solid	3050B	
600-85473-2	MW-33/2013-FWFS-5B (2-4)	Total/NA	Solid	3050B	
600-85473-11	F-5A (1)	Total/NA	Solid	3050B	
600-85473-29 - DL	MW-27E (1-2)	Total/NA	Solid	3050B	
600-85473-29	MW-27E (1-2)	Total/NA	Solid	3050B	
LCSSRM 600-127810/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-127810/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 127873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85473-2	MW-33/2013-FWFS-5B (2-4)	Total/NA	Solid	6010B	127810
600-85473-2 - DL	MW-33/2013-FWFS-5B (2-4)	Total/NA	Solid	6010B	127810
600-85473-11	F-5A (1)	Total/NA	Solid	6010B	127810
600-85473-29	MW-27E (1-2)	Total/NA	Solid	6010B	127810
600-85473-29 - DL	MW-27E (1-2)	Total/NA	Solid	6010B	127810
LCSSRM 600-127810/2-A	Lab Control Sample	Total/NA	Solid	6010B	127810
MB 600-127810/1-A	Method Blank	Total/NA	Solid	6010B	127810

General Chemistry

Analysis Batch: 127707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85473-2	MW-33/2013-FWFS-5B (2-4)	Total/NA	Solid	Moisture	
600-85473-2 DU	MW-33/2013-FWFS-5B (2-4)	Total/NA	Solid	Moisture	
600-85473-11	F-5A (1)	Total/NA	Solid	Moisture	
600-85473-29	MW-27E (1-2)	Total/NA	Solid	Moisture	

Client Sample ID: MW-33/2013-FWFS-5B (2-4)

Lab Sample ID: 600-85473-2

Date Collected: 01/10/14 16:02

Matrix: Solid

Date Received: 01/14/14 10:21

Percent Solids: 78.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	50 mL	127810	02/20/14 17:00	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	127873	02/21/14 14:13	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.04 g	50 mL	127810	02/20/14 17:00	NER	TAL HOU
Total/NA	Analysis	6010B	DL	20	1.04 g	50 mL	127873	02/21/14 15:43	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			127707	02/19/14 13:24	AYS	TAL HOU

Client Sample ID: F-5A (1)

Lab Sample ID: 600-85473-11

Date Collected: 01/10/14 13:50

Matrix: Solid

Date Received: 01/14/14 10:21

Percent Solids: 78.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	50 mL	127810	02/20/14 17:00	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	127873	02/21/14 14:15	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			127707	02/19/14 13:24	AYS	TAL HOU

Client Sample ID: MW-27E (1-2)

Lab Sample ID: 600-85473-29

Date Collected: 01/13/14 08:43

Matrix: Solid

Date Received: 01/14/14 10:21

Percent Solids: 81.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B	DL		1.09 g	50 mL	127810	02/20/14 17:00	NER	TAL HOU
Total/NA	Analysis	6010B	DL	10	1.09 g	50 mL	127873	02/21/14 15:45	DCL	TAL HOU
Total/NA	Prep	3050B			1.09 g	50 mL	127810	02/20/14 17:00	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	127873	02/21/14 14:18	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			127707	02/19/14 13:24	AYS	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-2

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0759	08-04-14
Louisiana	NELAP	6	30643	06-30-14
Oklahoma	State Program	6	1309	08-31-14
Texas	NELAP	6	T104704223	10-31-14
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	TX00083	10-31-14

TestAmerica Houston
3310 Rothway Street
Houston, TX 77040

Chain of Custody Record

600-85473 Chain of Custody

Client Information

Client Contact: Christina Higginbotham	Phone: 817-808-8144	Lab PM: Joiner, Dean A	Carrier Tracking No(s):
Company: Golder Associates Inc.		E-Mail: dean.joiner@testamericainc.com	
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:		Job #: 13020866
City: Houston	TAT Requested (days): 5 WD TRRP		
State, Zip: TX, 77073			
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested		
Email: Christina_Higginbotham@golder.com	WO #:		
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831		
Site: EXIDE-FRISCO	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
SW-33/2013-FWFS-5B (1-2)	01/10/14	1600	G	Solid									X					
SW-33/2013-FWFS-5B (2-4)	01/10/14	1602	G	Solid														HOLD
SW-33/2013-FWFS-5B (4-5)	01/10/14	1604	G	Solid									X					
F-5D (0-0.25)	01/10/14	1338	G	Solid									X					
F-5D (1)	01/10/14	1339	G	Solid														HOLD
F-5E (0-0.25)	01/10/14	1342	G	Solid									X					
F-5E (1)	01/10/14	1343	G	Solid														HOLD
F-5B (0-0.25)	01/10/14	1347	G	Solid									X					
F-5B (1)	01/10/14	1348	G	Solid														HOLD
F-5A (0-0.25)	01/10/14	1349	G	Solid									X					
F-5A (1)	01/10/14	1350	G	Solid														HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by: JOSHUA JANZEN	Date/Time: 01/13/14 1500	Company: GOLDER	Received by: McClowen	Date/Time: 1/13/14 1500	Company: TAL		
Relinquished by: McClowen	Date/Time: 1/13/14 1700	Company: TAL	Received by:	Date/Time:	Company		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company		
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:				

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040

Chain of Custody Record

Client Information		Lab PM:	Carrier Tracking No(s):	COC No:
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		600-25571-9015.1
Company: Golder Associates Inc.				Page: Page 2
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			Job #:
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				Preservation Codes:
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			Other:
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB					Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N						
F-5C (0-0.25)	01/10/14	1351	G	Solid									X									
F-5C (1)	01/10/14	1352	G	Solid																		HOLD
SRB-VS-9E (0-0.5)	01/10/14	1408	G	Solid									X									
SRB-VS-11A (0-0.5)	01/10/14	1416	G	Solid									X									
ECO-10A (0-0.5)	01/10/14	1443	G	Solid									X									
ECO-4A (0-0.5)	01/10/14	1510	G	Solid									X									
ECO-4A (0.5-2)	01/10/14	1511	G	Solid																		HOLD
E-11D (0-0.5)	01/10/14	1545	G	Solid									X									
2013-NT-01 (0-0.5)	01/10/14	1558	G	Solid										X								
2013-NT-01 (0.2-2)	01/10/14	1559	G	Solid										X								
E-12A (0-0.5)	01/10/14	1601	G	Solid									X									

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOSHUA JANZEN	01/13/14 1500	GOLDER	MMcGowen	1/13/14 1500	TR
2	MMcGowen	1/13/14 1700	TAL		/	
3		/			/	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

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2/27/2014

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 3
Company: Golder Associates Inc.				Job #: 1302-086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:	Analysis Requested		Preservation Codes:
City: Houston	TAT Requested (days): 5 WD TRRP			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			Other:
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Pb	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	N	N	N	N	N	N	N	N	N			
2013-NT-02 (0-0.5)	01/10/14	1615	G	Solid										X					
2013-NT-02 (0.5-2)	01/10/14	1616	G	Solid										X					
E-13A ~~(0.5~~ (0-0.5)	01/10/14	1622	G	Solid									X						
E-14A (0-0.5)	01/10/14	1630	G	Solid									X						
RINSE BLANK GED	01/10/14	0830	G	Solid										X		X			
MW-27E (0-1)	01/13/14	0842	G	Solid									X						
MW-27E (1-2)	01/13/14	0843	G	Solid															HOLD
MW-27E (2-3)	01/13/14	0844	G	Solid															HOLD
MW-29A (0-0.5)	01/13/14	0852	G	Solid									X						
DUP-10	01/13/14	—	G	Solid									X						
DUP-11	01/13/14	—	G	Solid									\				X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOSHUA JANZEN	01/13/14 1500	GOLDER	MCGUIRE	1/13/14 1500	TA
2	MCGUIRE	1/13/14 1700	TAL		/ /	
3		/ /			/ /	

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

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TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-805-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 4
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8280B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Pb				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N						
2013-FWFS-SA(0-2)	01/13/14	0912	G	Solid									X									
2013-FWFS-SA(0-2)MS	01/13/14	0912	G	Solid									X									
2013-FWFS-SA(0-2)MSD	01/13/14	0912	G	Solid									X									
2013-FWFS-SA(2-4)	01/13/14	0913	G	Solid																		HOLD
2013-BSB-8A(8-10)	01/13/14	0950	G	Solid													X					
2013-BSB-8A(8-10)MS	01/13/14	0950	G	Solid													X					
2013-BSB-8A(8-10)MSD	01/13/14	0950	G	Solid													X					
2013-FWCS-12A(2-2.7)	01/13/14	1105	G	Solid													X					
2013-MW-17B(0-0.5)	01/13/14	1151	G	Solid									X									
SCL-10B(0-0.5)	01/13/14	1204	G	Solid									X									
RINSE BLANK GED	01/13/14	1315	G	Solid									X									

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/13/14 1500	GOLDER	[signature]	1/13/14 1500	TA
[signature]	1/13/14 1700	TAL	Received by:	/	Company
Relinquished by:	Date/Time: /	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

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2/7/2014

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040

Chain of Custody Record

Client Information		Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9915.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 5
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	N	N	N	N	N	N	N	N	N	N	X	
ECO-4B (0-0.5)	01/13/14	1348	G	Solid									X					
ECO-4B (0.5-2)	01/13/14	1349	G	Solid														HOLD
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOSHUA HANSEN	01/13/14 1500	GOLDER		1/13/14 1500	TAL
2		1/13/14 1700	TAL	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

1/27/2014

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-85473-2

Login Number: 85473

List Source: TestAmerica Houston

List Number: 1

Creator: Capps, Dana R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	2.2/3.3
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.	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	Check done at department level as required.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-85473-3
Client Project/Site: Exide Recycling Center

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
3/9/2014 8:57:59 PM
Cathy Upton, Project Management Assistant II
(713)690-4444
cathy.upton@testamericainc.com

Designee for

Dean Joiner, Project Manager II
(713)690-4444
dean.joiner@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: 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.

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-85473-3 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☐ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☑ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton		3/9/2014
Name (printed)	Signature	Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/9/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85473-3
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/9/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85473-3
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/9/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85473-3
Reviewer Name:	Dean A Joiner		

ER #[1]	Description

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
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3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Detection Check Standard

Matrix:	Water
Method:	200.7/6010
Preparation:	200.7P/3010
Date Analyzed:	12/31/2013
Date Prepared:	12/27/2013
Instrument:	Spectro01
TALs Batches:	124030, 123788p
Units:	mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.028176	0.5
Antimony	0.0063	0.01	0.010016	0.05
Arsenic	0.0033	0.01	0.008253	0.01
Barium	0.0022	0.005	0.004098	0.02
Beryllium	0.00134	0.002	0.004019	0.005
Boron	0.0077	0.02	0.019829	0.2
Cadmium	0.00073	0.001	0.001	0.005
Calcium	0.022	0.05	0.060829	1
Chromium	0.0016	0.002	0.003835	0.01
Cobalt	0.00063	0.001	0.000965	0.01
Copper	0.0014	0.002	0.002451	0.01
Iron	0.087	0.1	0.002258	0.4
Lithium	0.0024	0.005	0.006107	0.2
Lead	0.0029	0.005	0.005478	0.01
Selenium	0.0042	0.01	0.009953	0.04
Manganese	0.00084	0.002	0.001988	0.01
Molybdenum	0.0027	0.005	0.005867	0.01
Nickel	0.00179	0.005	0.005669	0.01
Silver	0.0012	0.0025	0.001901	0.01
Sodium	0.02	0.05	0.088115	1
Strontium	0.0005	0.001	0.000897	0.005
Thallium	0.0078	0.02	0.021503	0.03
Tin	0.0028	0.005	0.005708	0.01
Titanium	0.0011	0.002	0.001905	0.01
Vanadium	0.0017	0.002	0.003578	0.01
Zinc	0.0022	0.005	0.004189	0.01

Job ID: 600-85473-3

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-85473-3

Comments
No additional comments.

Receipt
The samples were received on 1/14/2014 10:21 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.2º C and 3.3º C.

Except:

The following sample(s) was activated for SPLP Metals analysis by the client on 03/03/14: 2013-NT-02 (0-0.5) (600-85473-23), MW-33/2013-FWFS-5B (1-2) (600-85473-1). This analysis was not originally requested on the chain-of-custody (COC). See attached email.

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-3

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU

Protocol References:

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

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-85473-1	MW-33/2013-FWFS-5B (1-2)	Solid	01/10/14 16:00	01/14/14 10:21
600-85473-23	2013-NT-02 (0-0.5)	Solid	01/10/14 16:15	01/14/14 10:21

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-3

Client Sample ID: MW-33/2013-FWFS-5B (1-2) — **Lab Sample ID: 600-85473-1**
Date Collected: 01/10/14 16:00 — **Matrix: Solid**
Date Received: 01/14/14 10:21

Method: 6010B - Metals (ICP) - SPLP West

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00290	U	0.0100	0.00290	mg/L		03/05/14 17:09	03/06/14 15:05	1

Client Sample ID: 2013-NT-02 (0-0.5) — **Lab Sample ID: 600-85473-23**
Date Collected: 01/10/14 16:15 — **Matrix: Solid**
Date Received: 01/14/14 10:21

Method: 6010B - Metals (ICP) - SPLP West

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	**0.0376**		0.0100	0.00290	mg/L		03/05/14 17:09	03/06/14 15:03	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-3

Qualifiers

Metals

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

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
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)

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-128791/1-A
Matrix: Solid
Analysis Batch: 128837

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 128791

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00290	U	0.0100	0.00290	mg/L		03/05/14 17:09	03/06/14 13:22	1

Lab Sample ID: LCS 600-128791/2-A
Matrix: Solid
Analysis Batch: 128837

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 128791

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	1.00	0.9672		mg/L		97	80 - 120

Lab Sample ID: LB 600-128749/1-C
Matrix: Solid
Analysis Batch: 128837

Client Sample ID: Method Blank
Prep Type: SPLP West
Prep Batch: 128791

Analyte	LB Result	LB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00290	U	0.0100	0.00290	mg/L		03/05/14 17:09	03/06/14 14:46	1

Lab Sample ID: 600-85473-1 MS
Matrix: Solid
Analysis Batch: 128837

Client Sample ID: MW-33/2013-FWFS-5B (1-2)
Prep Type: SPLP West
Prep Batch: 128791

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.00290	U	1.00	0.9869		mg/L		99	75 - 125

Lab Sample ID: 600-85473-1 MSD
Matrix: Solid
Analysis Batch: 128837

Client Sample ID: MW-33/2013-FWFS-5B (1-2)
Prep Type: SPLP West
Prep Batch: 128791

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	0.00290	U	1.00	0.9628		mg/L		96	75 - 125	2	20

Lab Sample ID: 600-85473-1 DU
Matrix: Solid
Analysis Batch: 128837

Client Sample ID: MW-33/2013-FWFS-5B (1-2)
Prep Type: SPLP West
Prep Batch: 128791

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead	0.00290	U	0.00290	U	mg/L		NC	20

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-3

Method: 6010B - Metals (ICP) - SPLP West

Analyte	MQL	MDL	Units	Method
Lead	0.0100	0.00290	mg/L	6010B

Metals

Leach Batch: 128749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85473-1	MW-33/2013-FWFS-5B (1-2)	SPLP West	Solid	1312	
600-85473-1 DU	MW-33/2013-FWFS-5B (1-2)	SPLP West	Solid	1312	
600-85473-1 MS	MW-33/2013-FWFS-5B (1-2)	SPLP West	Solid	1312	
600-85473-1 MSD	MW-33/2013-FWFS-5B (1-2)	SPLP West	Solid	1312	
600-85473-23	2013-NT-02 (0-0.5)	SPLP West	Solid	1312	
LB 600-128749/1-C	Method Blank	SPLP West	Solid	1312	

Prep Batch: 128791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85473-1	MW-33/2013-FWFS-5B (1-2)	SPLP West	Solid	3010A	128749
600-85473-1 DU	MW-33/2013-FWFS-5B (1-2)	SPLP West	Solid	3010A	128749
600-85473-1 MS	MW-33/2013-FWFS-5B (1-2)	SPLP West	Solid	3010A	128749
600-85473-1 MSD	MW-33/2013-FWFS-5B (1-2)	SPLP West	Solid	3010A	128749
600-85473-23	2013-NT-02 (0-0.5)	SPLP West	Solid	3010A	128749
LB 600-128749/1-C	Method Blank	SPLP West	Solid	3010A	128749
LCS 600-128791/2-A	Lab Control Sample	Total/NA	Solid	3010A	
MB 600-128791/1-A	Method Blank	Total/NA	Solid	3010A	

Analysis Batch: 128837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85473-1	MW-33/2013-FWFS-5B (1-2)	SPLP West	Solid	6010B	128791
600-85473-1 DU	MW-33/2013-FWFS-5B (1-2)	SPLP West	Solid	6010B	128791
600-85473-1 MS	MW-33/2013-FWFS-5B (1-2)	SPLP West	Solid	6010B	128791
600-85473-1 MSD	MW-33/2013-FWFS-5B (1-2)	SPLP West	Solid	6010B	128791
600-85473-23	2013-NT-02 (0-0.5)	SPLP West	Solid	6010B	128791
LB 600-128749/1-C	Method Blank	SPLP West	Solid	6010B	128791
LCS 600-128791/2-A	Lab Control Sample	Total/NA	Solid	6010B	128791
MB 600-128791/1-A	Method Blank	Total/NA	Solid	6010B	128791

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-3

Client Sample ID: MW-33/2013-FWFS-5B (1-2)

Lab Sample ID: 600-85473-1

Date Collected: 01/10/14 16:00

Matrix: Solid

Date Received: 01/14/14 10:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP West	Leach	1312			1.0 g	1.0 mL	128749	03/04/14 18:27	CAD	TAL HOU
SPLP West	Prep	3010A			50 mL	50 mL	128791	03/05/14 17:09	NER	TAL HOU
SPLP West	Analysis	6010B		1	50 mL	50 mL	128837	03/06/14 15:05	DCL	TAL HOU

Client Sample ID: 2013-NT-02 (0-0.5)

Lab Sample ID: 600-85473-23

Date Collected: 01/10/14 16:15

Matrix: Solid

Date Received: 01/14/14 10:21

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP West	Leach	1312			1.0 g	1.0 mL	128749	03/04/14 18:27	CAD	TAL HOU
SPLP West	Prep	3010A			50 mL	50 mL	128791	03/05/14 17:09	NER	TAL HOU
SPLP West	Analysis	6010B		1	50 mL	50 mL	128837	03/06/14 15:03	DCL	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85473-3

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0759	08-04-14
Louisiana	NELAP	6	30643	06-30-14
Oklahoma	State Program	6	1309	08-31-14
Texas	NELAP	6	T104704223	10-31-14
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	TX00083	10-31-14

TestAmerica Houston
3310 Rothway Street
Houston, TX 77040

Chain of Custody Record

600-85473 Chain of Custody

Client Information

Client Contact: Christina Higginbotham	Phone: 817-808-8144	Lab PM: Joiner, Dean A	Carrier Tracking No(s):
Company: Golder Associates Inc.		E-Mail: dean.joiner@testamericainc.com	
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:		Job #: 13020866
City: Houston	TAT Requested (days): 5 WD TRRP		
State, Zip: TX, 77073			
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested		
Email: Christina_Higginbotham@golder.com	WO #:		
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831		
Site: EXIDE-FRISCO	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
SW-33/2013-FWFS-5B (1-2)	01/10/14	1600	G	Solid									X					
SW-33/2013-FWFS-5B (2-4)	01/10/14	1602	G	Solid														HOLD
SW-33/2013-FWFS-5B (4-5)	01/10/14	1604	G	Solid									X					
F-5D (0-0.25)	01/10/14	1338	G	Solid									X					
F-5D (1)	01/10/14	1339	G	Solid														HOLD
F-5E (0-0.25)	01/10/14	1342	G	Solid									X					
F-5E (1)	01/10/14	1343	G	Solid														HOLD
F-5B (0-0.25)	01/10/14	1347	G	Solid									X					
F-5B (1)	01/10/14	1348	G	Solid														HOLD
F-5A (0-0.25)	01/10/14	1349	G	Solid									X					
F-5A (1)	01/10/14	1350	G	Solid														HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: JOSHUA JANZEN	Date/Time: 01/13/14 1500	Company: GOLDER	Received by: McClowen
Relinquished by: McClowen	Date/Time: 1/13/14 1700	Company: TAL	Received by:
Relinquished by:	Date/Time:	Company	Received by:

Received by: McClowen	Date/Time: 1/13/14 1500	Company: TAL	
Received by:	Date/Time:	Company	
Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040

Chain of Custody Record

Client Information		Lab PM:	Carrier Tracking No(s):	COC No:
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		600-25571-9015.1
Company: Golder Associates Inc.				Page: Page 2
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			Job #:
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				Preservation Codes:
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2SO3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - ph 4-5 L - EDA Z - other (specify)
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			Other:
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB					Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	N	N	N	N	N	N	N	N	N	N						
F-5C (0-0.25)	01/10/14	1351	G	Solid									X									
F-5C (1)	01/10/14	1352	G	Solid																		HOLD
SRB-VS-9E (0-0.5)	01/10/14	1408	G	Solid									X									
SRB-VS-11A (0-0.5)	01/10/14	1416	G	Solid									X									
ECO-10A (0-0.5)	01/10/14	1443	G	Solid									X									
ECO-4A (0-0.5)	01/10/14	1510	G	Solid									X									
ECO-4A (0.5-2)	01/10/14	1511	G	Solid																		HOLD
E-11D (0-0.5)	01/10/14	1545	G	Solid									X									
2013-NT-01 (0-0.5)	01/10/14	1558	G	Solid										X								
2013-NT-01 (0.2-2)	01/10/14	1559	G	Solid										X								
E-12A (0-0.5)	01/10/14	1601	G	Solid									X									

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOSHUA JANZEN	01/13/14 1500	GOLDER	MMcGowen	1/13/14 1500	TA
2	MMcGowen	1/13/14 1700	TAL		/	
3		/			/	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

01/29/2014

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 3
Company: Golder Associates Inc.				Job #: 1302-086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Pb	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	N	N	N	N	N	N	N	N	N			
2013-NT-02 (0-0.5)	01/10/14	1615	G	Solid										X					
2013-NT-02 (0.5-2)	01/10/14	1616	G	Solid										X					
E-13A ~~(0.5~~ (0-0.5)	01/10/14	1622	G	Solid									X						
E-14A (0-0.5)	01/10/14	1630	G	Solid									X						
RINSE BLANK GED	01/10/14	0830	G	Solid										X		X			
MW-27E (0-1)	01/13/14	0842	G	Solid									X						
MW-27E (1-2)	01/13/14	0843	G	Solid															HOLD
MW-27E (2-3)	01/13/14	0844	G	Solid															HOLD
MW-29A (0-0.5)	01/13/14	0852	G	Solid									X						
DUP-10	01/13/14	—	G	Solid									X						
DUP-11	01/13/14	—	G	Solid									\				X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/13/14 1500	GOLDER	MCGUIRE	1/13/14 1500	TAL
MCGUIRE	1/13/14 1700	TAL			

Custody Seals Intact:	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
△ Yes △ No		

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-805-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 4
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8280B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Pb				Total Number of containers	Special Instructions/Note:
Preservation Code:							N	N	N	N	N	N	N	N	N	N						
2013-FWFS-SA(0-2)	01/13/14	0912	G	Solid									X									
2013-FWFS-SA(0-2)MS	01/13/14	0912	G	Solid									X									
2013-FWFS-SA(0-2)MSD	01/13/14	0912	G	Solid									X									
2013-FWFS-SA(2-4)	01/13/14	0913	G	Solid																		HOLD
2013-BSB-8A(8-10)	01/13/14	0950	G	Solid													X					
2013-BSB-8A(8-10)MS	01/13/14	0950	G	Solid													X					
2013-BSB-8A(8-10)MSD	01/13/14	0950	G	Solid													X					
2013-FWCS-12A(2-2.7)	01/13/14	1105	G	Solid													X					
2013-MW-17B(0-0.5)	01/13/14	1151	G	Solid									X									
SCL-10B(0-0.5)	01/13/14	1204	G	Solid									X									
RINSE BLANK 0120	01/13/14	1315	G	Solid									X									

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOSHUA JANZEN	01/13/14 1500	GOLDER	[signature]	1/13/14 1500	TA
2	[signature]	1/13/14 1700	TA	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Page 21 of 39
1/29/2014

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040

Chain of Custody Record

Client Information		Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9915.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 5
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB				Total Number of containers	Special Instructions/Note:
Preservation Code:					X	X	N	N	N	N	N	N	N	N	N	N				X	
ECO-4B (0-0.5)	01/13/14	1348	G	Solid									X								
ECO-4B (0.5-2)	01/13/14	1349	G	Solid																	HOLD
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOSHUA HANSEN	01/13/14 1500	GOLDER		1/13/14 1500	TAL
2		1/13/14 1700	TAL	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

1/9/2014

Upton, Cathy

From: Joiner, Dean
Sent: Sunday, March 02, 2014 10:27 PM
To: Upton, Cathy
Subject: FW: Exide - SPLP Request
Importance: High
Follow Up Flag: Follow up
Flag Status: Red

Cathy, Please update. Thanks!

From: Higginbotham, Christina [mailto:Christina_Higginbotham@golder.com]
Sent: Sunday, March 02, 2014 6:21 PM
To: Joiner, Dean
Subject: Exide - SPLP Request
Importance: High

Dean, we would like to request the following samples be run for SPLP. The lab sample IDs are highlighted below. Can you have these results by Friday (5 day)? Please call me in the morning to discuss.

Sample	Depth Interval	Concentration (mg/kg)	Contaminant
2013-MB-5 / 600-85318-7	0.5-5	46.6	Cadmium
2013-NDA-C21 /600-84629-11	0-6	49.9	Cadmium
2013-C2L-06 / 600-85636-21	0-0.5	584	Lead
2013-AD-03 /600-85389-23	0-0.5	734	Lead
2013-NT-02 / 600-85473-23	0-0.5	837	Lead
2013-SDA-3B / 600-85389-21	0-0.5	1000	Lead
SCC-5B / 600-85389-29	0-0.5	1400	Lead
MW-33/2013-FWFS-5B / 600-85473-1	1-2	1420	Lead
2013-CUFT-5B / 600-85389-36	0-0.5	1340	Lead

Christina Higginbotham, P.G. | Remediation Project Manager | **Golder Associates Inc.**
500 Century Plaza Drive, Suite 190, Houston, Texas, USA 77073
T: +1 (281) 821-6868 | **F:** +1 (281) 821-6870 | **C:** +1 (281) 620-7835 | **E:** CHigginbotham@golder.com | **www.golder.com**

Work Safe, Home Safe

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Please consider the environment before printing this email.

From: Joiner, Dean [mailto:dean.joiner@testamericainc.com]
Sent: Friday, February 28, 2014 1:02 AM
To: Collier, Brenda; Higginbotham, Christina; Xi, Jing Song
Subject: Final Invoice Ready For Payment - Files from 600-86460-3 Exide Recycling Center - Water 6020

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: Project Feedback

DEAN A JOINER

TestAmerica Houston
THE LEADER IN ENVIRONMENTAL TESTING

Tel: 713.690.4444
www.testamericainc.com

Reference: [183891]
Attachments: 1

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-85473-3

Login Number: 85473

List Source: TestAmerica Houston

List Number: 1

Creator: Capps, Dana R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	2.2/3.3
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.	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	Check done at department level as required.

Sample Dates:	January 13 & 14, 2014	**Project No.:**	1302086
Laboratory:	Test America (TLAP Certification T104704223)	**Client:**	Exide Technologies Inc.
Work Orders:	Work Orders: 600-85636-1, 600-85636-2, 600-85636-3		
Intended Use	Affected Property Assessment Report (APAR)		
Site:	Exide Former Operating Plant (FOP), 7471 5th Street, Frisco, TX		

1.0 TESTS/ METHODS

Total Metals by SW-846 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP)
Sulfate by SW-846 9056 – Ion Chromatography

2.0 SAMPLES

19 soil samples and 1 field MS/MSD pair. See Table 1 for a complete cross-referenced listing of samples.

Golder completed a review of the above chemical analysis data for conformance with the requirements of the Texas Risk Reduction Program (TRRP) guidance document, Review and Reporting of COC Concentration Data (RGG-366/TRRP-13 Revised May 2010) and for adherence to project objectives. The results of the review are discussed in this data usability summary (DUS).

Golder completed the review using the following laboratory and project submittals:

- Laboratory reportable data as defined in TRRP-13;
- Laboratory review checklists (LRC) with the associated exception reports;
- Laboratory Electronic Data Deliverable (EDD); and
- Project field notes from the sampling event.

The review of the reportable data included the quality control (QC) parameters listed below, as required per TRRP-13, using the applicable analytical method and project requirements:

- Data Completeness
- Chain-of-Custody Procedures
- Sample Condition - Holding Time, Preservation, and Containers
- Field Procedures
- Results Reporting Procedures
- Laboratory and Field QC Blanks

- Laboratory Control Spike and Matrix Spike Recoveries
- Surrogate Recoveries
- Laboratory and Field Duplicate Precision

Additionally, Golder used the LRC to evaluate the following QC parameters:

- Method Quantitation Limits (MQLs)
- Method Detection Limits (MDLs)
- Instrument Tuning, Calibration, and Performance
- Internal Standards

Criteria used for this data usability review are as follows:

- Inorganics: 70-130% spike recovery (and not less than 30% or data is rejected) and +MQL difference or 30% RPD (for laboratory duplicates) as recommended in TRRP-13; and
- Soil Samples: + 3x MQL difference (if either result is less than 5x MQL) or 50% RPD (for field duplicates) as recommended in TRRP-13.

If an item was found outside of the review criteria, the reviewer applied a data qualifier (DQ) and bias code to the results for the affected samples in accordance with TRRP-13. A list of all qualified results and definitions of the qualifier and bias codes are given in Table 2.

GLOSSARY OF TERMS

The following definitions apply for terms related to analyte reporting limits:

MDL (Method Detection Limit) – the minimum concentration of an analyte that the laboratory can measure and report with 99% confidence that the analyte concentration is greater than zero. The MDL is determined by the laboratory for each analyte in a given reagent matrix (water or soil) generally using the procedures specified in 40 CFR Part 136, Appendix B. It is a measure of the concentration an instrument can detect or 'see' in a given reagent matrix. TRRP-13 requires that the laboratory routinely check the MDL for reasonableness.

SDL (Sample Detection Limit) – the MDL adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes than prescribed in the analytical method, and taking into account sample characteristics, sample preparation, and analytical adjustments including dry-weight adjustments. It is a measure of the concentration an instrument can detect or 'see' in a given sample. For TRRP, non-detects are reported using the SDL. This term was originally called the SQL (Sample Quantitation Limit) before the TRRP rule revisions effective March 19, 2007.

Unadjusted MQL (Method Quantitation Limit) – the lowest non-zero concentration standard in the laboratory's initial calibration curve calculated using the normal aliquot sizes and final volumes prescribed in the analytical method. The unadjusted MQL is reported by the laboratory for each analyte in a given matrix (water or soil). It is a measure of the concentration an instrument can accurately measure in a typical sample. Per TRRP, the Unadjusted MQLs should be below the Levels of Required Performance (LORPs) for purposes of assessment as well as demonstration of conformance with critical Protective Concentration Levels (PCLs).

MQL – the unadjusted MQL adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes than prescribed in the analytical method, and takes into account sample characteristics, sample preparation, and analytical adjustments including dry-weight adjustments. It is a measure of the concentration an instrument can accurately measure in a given sample. Analytes with concentrations above the SDL but below the MQL, though present in the sample, may not be accurately measured and are thus flagged as estimated (J).

LABORATORY CERTIFICATION

At the time the laboratory data were generated for this project, the laboratory was NELAC accredited under the Texas Laboratory Accreditation Program (TLAP) for the matrices, methods and parameters of analysis requested on the chain-of-custody forms. A copy of the applicable pages of the laboratory's National Environmental Laboratory Accreditation Program (NELAP) certificate valid during the period in which the laboratory generated the data in this report is included in Appendix 10.5.

USABILITY SUMMARY

1. Usability of Unqualified Non-Detects – Non-detects are reported at the sample detection limit (SDL) as required per TRRP. Additionally, according to the LRC, an MDL study was performed for each analyte and the MDLs were checked for reasonableness for each applicable analyte. The levels of required performance (LORPs) have been established by Golder/PBW as the Residential Assessment Levels (RALs), which are the minimum of the TRRP residential Tier 1 $^{Tot}Soil_{Comb}$ and Tier 1, 2 or 3 $^{GW}Soil_{Ing}$ PCLs for a 30-acre source area. As needed per TRRP, the Unadjusted MQL stated by the laboratory is at or below the LORP for each applicable analyte, and thus the analytical methods are appropriate and the results can be used to demonstrate conformance with the criteria.
2. Usability of Qualified Data – There are no major QC deficiencies, and thus all data is usable as qualified for the intended use. As shown in Table 2, the reviewer qualified some detects as estimated (J) due to minor QC deficiencies. Detects that are biased high can be used; however, the reported concentration may be high. Detects that are estimated may be either low or high. Results with a laboratory J-flag (i.e., at a concentration between the SDL and MQL) should be considered estimates. The actual value is not expected to exceed the sample MQL.

Reviewer: Jing Song Xi 5/19/14

QUALITY CONTROL PARAMETERS AND OUTCOMES

Data Completeness

The laboratory data packages contain all necessary data (i.e., the laboratory reportable data per TRRP-13) and the EDD contain all sample results in acceptable format. Minor revisions were required for work orders 600-85636-1. All revisions are detailed in the laboratory narrative.

Chain-of-Custody

Proper sample custody procedures were used, which confirms that the integrity of the samples was maintained. Additionally, the information on the custody records is complete and agrees with that in the field notes and laboratory reports, except as follows:

- Minor instances of samples submitted not matching information listed on the COC. These inconsistencies have been addressed by the laboratory and do not affect sample results.

Sample Condition

Samples were collected in appropriate containers, properly preserved in the field, and prepared and analyzed within the holding times as required in the analytical methods, which ensures that the samples were not affected by analyte degradation:

- For 600-85636-1, the temperatures of the coolers at receipt were 2.5°C and 2.6°C.

Field Procedures

The samples were collected and placed immediately into sterilized jars provided by the laboratory and then into a cooler with ice for overnight delivery to the laboratory.

One site-specific MS/MSD sample was collected with the 19 investigative samples.

Results Reporting Procedures

The hardcopy analytical results include a Result, MQL (adjusted), and SDL. The EDD includes the MDL, SDL (under the SQL column per previously used terminology) and the MQL, which is not adjusted for sample specific factors.

Results are reported in mg/kg with dry-weight correction for the metals. Non-detects are reported using the SDL as specified per TRRP and detects between the SDL and MQL are reported with a laboratory J-flag. The concentration reported for detects between the SDL and MQL is below the calibration range and thus is considered estimated.

MQLs- The LORPs have been established by Golder/PBW as the Residential Assessment Levels (RALs), which are the minimum of the TRRP residential Tier 1 Tier 1 $^{Tot}Soil_{Comb}$ and Tier 1, 2 or 3 $^{GW}Soil_{Ing}$ PCLs for a 30-acre source area. The Unadjusted MQLs for the laboratory are at or below the LORPs for each applicable analyte.

MDLs- According to the LRC, an MDL study was performed for each analyte, and the MDLs were checked for reasonableness and either adjusted or supported by the analysis of detectability check standards (DCS) for each applicable analyte as required per TRRP-13. Results for the DCS are included in the data packages.

Laboratory Blanks

Results for samples prepared in the same QC batch as a contaminated method blank may be affected by laboratory contamination. No analytes were detected in the laboratory blanks.

Field QC Blanks

No field QC blanks were collected as part of this data package.

Laboratory Control Sample

The laboratory prepared one laboratory control sample (LCS) for each analytical batch and reported recoveries for all of the analytes for each test. The LCS recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on a sample, free of matrix effects.

Matrix Spike Recovery

The laboratory prepared one or more matrix spike (MS) and matrix spike duplicate (MSD) with each analytical batch plus a Post Digestion Spike (PDS) with each metals analytical batch. MS/MSD recoveries are reported for the same analytes as the LCS for MS/MSD prepared using a sample from the site, which includes 1 MS/MSD for Total Metals, as shown in Table 1.

PDS outcomes are given on the LRC for each job package; however PDS data are not reportable data per TRRP-13. According to the LRC, the PDS met method requirements, which indicates good accuracy for the analysis technique on the given sample matrix.

The MS/MSD recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on a sample free of matrix effects, except as follows:

QC Batch	Lab Sample ID	MS/MSD ID	Analyte	Parent Amount (mg/kg)	Spike Amount for MS/MSD (mg/kg)	MS % Recovery	MSD % Recovery	Qual
125409	600-85636-1	2013-STB-4A (2-4)	Antimony	7.37	66.3, 63.5	34	39	JL
125409	600-85636-1	2013-STB-4A (2-4)	Cadmium	92.4	33.2, 31.8	-176	-186	JL
125409	600-85636-1	2013-STB-4A (2-4)	Lead	1540	66.3, 63.5	-1657	-1460	-
125409	600-85636-12	2013-C2L-09 (0-0.5)	Antimony	0.321	60.1, 57.3	36	33	JL

NA – Not available.

In all cases (such as lead in batch 125409) where the spike amount is less than four times the result in the unspiked parent sample, the data are considered inconclusive and the MS/MSD recovery check is waived.

Surrogate Recovery

Since organic analyses were not requested for these data packages, surrogate recoveries were not evaluated.

Laboratory Duplicate Precision

The laboratory prepared one or more Matrix Spike Duplicate (MSD) with each analytical batch for each test. Additionally, the laboratory prepared one Matrix Duplicate (MD) with each metals analytical batch. RPDs are reported for the same analytes as the LCS for MSD/MD prepared using a sample from the site, which includes 1 MSD and MD for Total Metals, as shown in Table 1.

The MSD and MD RPDs are within the TRRP recommended criteria, which indicates good precision for the preparation and analysis technique for the given sample matrix, except as follows:

QC Batch	Lab Sample ID	MS/MSD ID	Analyte	Parent Amount (mg/kg)	MSD RPD	MD RPD	Qual
125409	600-85636-1	2013-STB-4A (2-4)	Antimony	7.37	4	53	J
125409	600-85636-1	2013-STB-4A (2-4)	Cadmium	92.4	4	91	J

Field Duplicate Precision

No field duplicates were obtained for this work order.

Instrument Tuning

According to the LRC, instrument tuning met method requirements for the samples, which indicates the GC/MS instrument was properly set up to identify analytes.

Instrument Calibration

According to the LRC, initial and continuing calibration data met method requirements for all reported results, which indicates the instruments were properly calibrated to measure analyte concentrations.

Instrument Performance

According to the LRC, the serial dilution and ICP interference check samples met method requirements, which indicates that no significant matrix interference exists.

Internal Standards

According to the LRC, area counts and retention times were within method requirements.

TABLE 1					
CROSS REFERENCE OF FIELD SAMPLE IDENTIFICATIONS AND LABORATORY IDENTIFICATIONS					
Lab Sample ID	**Field Sample ID**	**Prep Batch / Analysis Batch**	**Sample Date**	**Matrix**	**Comments**
600-85636-1	2013-STB-4A (2-4)	125409/125465	1/13/2014	Soil	site-specific MS/MSD
600-85636-2	2013-RMSB-5A (5-7)	125409/125465	1/13/2014	Soil	
600-85636-3	2013-RRS-4A-A (3-4)	125409/125465	1/13/2014	Soil	
600-85636-4	2013-RRS-4A-A (4-5)		1/13/2014	Soil	Not reported
600-85636-5	2013-C2L-05 (0-0.5)	125409/125465	1/14/2014	Soil	
600-85636-6	2013-C2L-05 (1-2)		1/14/2014	Soil	Not reported
600-85636-7	2013-C2L-05 (4-5)		1/14/2014	Soil	Not reported
600-85636-8	2013-C2L-10 (0-0.5)	125409/125465	1/14/2014	Soil	
600-85636-9	2013-C2L-10 (1-2)		1/14/2014	Soil	Not reported; site-specific MS/MSD
600-85636-10	Dup-13		1/14/2014	Soil	Not reported; 2013-C2L-10 (1-2)
600-85636-11	2013-C2L-10 (4-5)		1/14/2014	Soil	Not reported
600-85636-12	2013-C2L-09 (0-0.5)	125409/125465	1/14/2014	Soil	
600-85636-13	2013-C2L-09 (1-2)		1/14/2014	Soil	Not reported
600-85636-14	2013-C2L-09 (4-5)		1/14/2014	Soil	Not reported
600-85636-15	2013-C2L-04 (0-0.5)	125409/125465	1/14/2014	Soil	
600-85636-16	2013-C2L-04 (1-2)		1/14/2014	Soil	Not reported
600-85636-17	2013-C2L-04 (4-5)		1/14/2014	Soil	Not reported
600-85636-18	2013-C2L-02 (0-0.5)	125409/125465	1/14/2014	Soil	
600-85636-19	2013-C2L-02 (1-2)		1/14/2014	Soil	Not reported
600-85636-20	2013-C2L-02 (4-5)		1/14/2014	Soil	Not reported
600-85636-21	2013-C2L-06 (0-0.5)	125409/125465 128791/128837	1/14/2014	Soil	
600-85636-22	2013-C2L-06 (1-2)	127810/127873	1/14/2014	Soil	
600-85636-23	2013-C2L-06 (4-5)		1/14/2014	Soil	Not reported
600-85636-24	2013-C2L-07 (0-0.5)	125409/125465	1/14/2014	Soil	
600-85636-25	2013-C2L-07 (1-2)		1/14/2014	Soil	Not reported
600-85636-26	2013-C2L-07 (4-5)		1/14/2014	Soil	Not reported
600-85636-27	2013-C2L-08 (0-0.5)	125409/125465	1/14/2014	Soil	
600-85636-28	2013-C2L-08 (1-2)		1/14/2014	Soil	Not reported
600-85636-29	2013-C2L-08 (4-5)		1/14/2014	Soil	Not reported
600-85636-30	2013-C2L-08 (15-17)	125409/125465 125392/125469	1/14/2014	Soil	
600-85636-31	2013-C2L-08 (17-18)		1/14/2014	Soil	Not reported
600-85636-32	2013-C2L-08 (18-20)	125409/125465 125392/125469	1/14/2014	Soil	
600-85636-33	2013-C2L-01 (0-0.5)	125409/125465	1/14/2014	Soil	
600-85636-34	2013-C2L-01 (1-2)	127810/127873	1/14/2014	Soil	
600-85636-35	2013-C2L-01 (4-5)		1/14/2014	Soil	Not reported
600-85636-36	2013-C2L-01 (10-12)	125409/125465 125392/125469	1/14/2014	Soil	
600-85636-37	2013-C2L-01 (12-13)	125409/125465 125392/125469	1/14/2014	Soil	
600-85636-38	2013-C2L-01 (13-15)	125409/125465 125392/125469	1/14/2014	Soil	
600-85636-39	ECO-7D (0-0.5)	125409/125465	1/14/2014	Soil	
600-85636-40	ECO-7C (0-0.5)	125493/125606	1/14/2014	Soil	
600-85636-41	ECO-7C (2-3)	127810/127873	1/14/2014	Soil	site-specific MS/MSD
600-85636-42	Dup-15	128313/128420	1/14/2014	Soil	ECO-7C (2-3); site-specific MS/MSD

TABLE 2 - QUALIFIED DATA

Lab Sample ID	Field Sample ID	Analyte	Result	Units	Qualifer	Explanation
600-85636-1	2013-STB-4A (2-4)	Cadmium	92.4	mg/kg	JL	Matrix Spike recovery below specifications, >30%, MD RPD >30%
600-85636-3	2013-RRS-4A-A	Cadmium	0.714	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85636-5	2013-C2L-05 (0-0.5)	Cadmium	0.0522	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85636-8	2013-C2L-10 (0-0.5)	Cadmium	0.659	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85636-12	2013-C2L-09 (0-0.5)	Cadmium	0.401	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85636-15	2013-C2L-04 (0-0.5)	Cadmium	0.303	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85636-18	2013-C2L-02 (0-0.5)	Cadmium	0.301	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85636-21	2013-C2L-06 (0-0.5)	Antimony	4.13	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Cadmium	3.68	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85636-24	2013-C2L-07 (0-0.5)	Cadmium	0.355	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85636-27	2013-C2L-08 (0-0.5)	Cadmium	0.39	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85636-30	2013-C2L-08 (15-17)	Antimony	<0.270	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
		Cadmium	<0.0299	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
600-85636-32	2013-C2L-08 (18-20)	Antimony	<0.288	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
		Cadmium	<0.0319	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
600-85636-33	2013-C2L-01 (0-0.5)	Cadmium	0.57	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85636-36	2013-C2L-01 (10-12)	Antimony	<0.290	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
		Cadmium	<0.0322	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
600-85636-37	2013-C2L-01 (12-13)	Antimony	<0.297	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
		Cadmium	<0.0329	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
600-85636-38	2013-C2L-01 (13-15)	Antimony	<0.277	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
		Cadmium	0.0359	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-85636-39	ECO-7D (0-0.5)	Antimony	0.463	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Cadmium	2.3	mg/kg	JL	Matrix Spike recovery below specifications, >30%

Note:

Detected results between the SDL and MQL (i.e., results with a laboratory J-flag) have been included in the above table since the reported concentration is below the calibration range.

J Estimated data; The analyte was detected and identified. The associated numerical value (i.e., the reported sample concentration) is the approximate concentration of the analyte in the sample.

NJ Tentatively identified, estimated data; The analysis indicates the presence of the analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.

NS Not selected; Another result (from a secondary dilution, different analytical method, re-sampling, etc.) is selected for use based on QC outcomes and/or reported concentrations.

R Rejected data; The data is unusable. Serious QC deficiencies make it impossible to verify the absence or presence of this analyte.

U Not detected; The analyte was not detected >5x (10x for common contaminants) the level in an associated blank and thus should be considered not detected above the level of the associated numerical value (i.e., the reported sample concentration).

UJ Estimated data; The analyte was not detected above the reported sample detection limit (SDL). The numerical value of the SDL is estimated and may be inaccurate.

H Bias in sample result is likely to be high

L Bias in sample result is likely to be low

TABLE 3 - FIELD DUPLICATE PRECISION CALCULATIONS

Duplicate and Parent Sample Field Identification	Analyte	Sample Result	Duplicate Result	RPD[a]	Accept or Reject	Qualifier Added
DUP-15 / ECO-7C (2-3)	cadmium	0.0294 U	0.168 J	-	A	-
	lead	12.7	11.9	6.5	A	-

[a] RPD = ((SR - DR)*200)/(SR + DR)

A - Acceptable Data

NA - Not Analyzed

The RPD test (<50%) applies if both results are greater than 5x MQL. Otherwise, the absolute difference test (< 3x MQL) applies.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT



TestAmerica Laboratories, Inc.
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TestAmerica Job ID: 600-85636-1
Client Project/Site: Exide Recycling Center
Revision: 2

For:
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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.

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-85636-1 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☐ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☑ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton		3/5/2014
Name (printed)	Signature	Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/5/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85636-1
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			R07C
		Were MS/MSD RPDs within laboratory QC limits?		X			R07D
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?		X			R08C
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/5/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85636-1
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
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Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/5/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85636-1
Reviewer Name:	Dean A Joiner		

ER #[1]	Description
R07C	Method 6010B: 600-85636-1 MS failed the recovery criteria for the following analyte(s): Antimony, Cadmium, Lead. Matrix interference is suspected. Method 6010B: 600-85636-1 MSD failed the recovery criteria for the following analyte(s): Antimony, Arsenic, Cadmium, Lead. Matrix interference is suspected. Method 6010B: 600-85636-12 MS/MSD failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected.
R07D	Method 6010B: 600-85636-1 MSD failed the RPD criteria for the following analyte(s): Lead. Non-homogeneity of the sample is suspected.
R08C	Method 6010B: 600-85636-1 DU failed the RPD criteria for the following analyte(s): Antimony, Cadmium. Non-homogeneity of the sample is suspected. Method 6010B: 600-85636-12 DU failed the RPD criteria for the following analyte(s): Cadmium. Non-homogeneity of the sample is suspected.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
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4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Detection Check Standard

Matrix:	Soil
Method:	300.0, 9056
Preparation:	Di Leach
Date Analyzed:	11/21/2013, 11/29/2013, 12/02/2013
Date Prepared:	11/21/2013, 11/29/2013, 12/02/2013
Units:	ppm

Analyte	MDL	DCS Spike	Measured Result	MQL
Fluoride	0.078	0.2	0.1553	3
Chloride	0.067	0.2	0.1526	4
Nitrite	0.024	0.05	0.0685	2
Bromide	0.117	0.2	0.2473	6
Nitrate	0.022	0.05	0.0616	2
Sulfate	0.315	0.6	0.4975	5

Detection Check Standard

Matrix:	Soil
Method:	6010B
Preparation:	3050
Date Analyzed:	12/30/2013
Date Prepared:	12/27/2013
Instrument:	Thermo 6500
TALS Batches:	123949, 123775p
Prep/Reagent Factor =	50
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.299654	0.5	0.36	25
Antimony	0.231553	0.45	0.5	2.5
Arsenic	0.217923	0.5	0.53	1
Barium	0.011322	0.03	0.04	1
Beryllium	0.014513	0.02	0.015	0.25
Boron	0.385535	0.6	0.56	20
Cadmium	0.025642	0.05	0.05	0.25
Calcium	0.86399	1.5	2.185	100
Chromium	0.050606	0.1	0.135	0.5
Cobalt	0.067622	0.1	0.09	0.5
Copper	0.173703	0.5	0.64	0.5
Iron	2.534007	4	3.76	20
Lead	0.104832	0.2	0.215	0.5
Selenium	0.258884	0.5	0.465	2
Manganese	0.038111	0.05	0.085	1.5
Molybdenum	0.136448	0.35	0.38	0.5
Nickel	0.116599	0.15	0.2	1
Silver	0.118848	0.2	0.15	0.5
Sodium	0.885548	2.4	3.135	100
Thallium	0.276988	0.7	0.73	1.5
Tin	0.08729	0.15	0.19	1
Titanium	0.014529	0.03	0.01	0.5
Vanadium	0.079068	0.15	0.125	0.5
Zinc	0.108432	0.2	0.305	1.5

Job ID: 600-85636-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-85636-1

Comments
The final report was revised on 03/05/14 to report total metals for samples 21 and 39, replacing the final report generated on 01/27/14.
The report was revised on 05/09/14 to report Cd in sample 1 per client request, replacing the final report generated on 03/05/14.

Receipt
The samples were received on 1/16/2014 10:08 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.5º C and 2.6º C.

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU
9056	Anions, Ion Chromatography	SW846	TAL HOU
Moisture	Percent Moisture	EPA	TAL HOU

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 HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-85636-1	2013-STB-4A (2-4)	Solid	01/13/14 16:07	01/16/14 10:08
600-85636-2	2013-RMSB-5A (5-7)	Solid	01/13/14 16:28	01/16/14 10:08
600-85636-3	2013-RRS-4A-A (3-4)	Solid	01/13/14 16:52	01/16/14 10:08
600-85636-5	2013-C2L-05 (0-0.5)	Solid	01/14/14 08:18	01/16/14 10:08
600-85636-8	2013-C2L-10 (0-0.5)	Solid	01/14/14 09:06	01/16/14 10:08
600-85636-12	2013-C2L-09 (0-0.5)	Solid	01/14/14 09:45	01/16/14 10:08
600-85636-15	2013-C2L-04 (0-0.5)	Solid	01/14/14 10:24	01/16/14 10:08
600-85636-18	2013-C2L-02 (0-0.5)	Solid	01/14/14 11:38	01/16/14 10:08
600-85636-21	2013-C2L-06 (0-0.5)	Solid	01/14/14 12:55	01/16/14 10:08
600-85636-24	2013-C2L-07 (0-0.5)	Solid	01/14/14 13:25	01/16/14 10:08
600-85636-27	2013-C2L-08 (0-0.5)	Solid	01/14/14 14:05	01/16/14 10:08
600-85636-30	2013-C2L-08 (15-17)	Solid	01/14/14 14:16	01/16/14 10:08
600-85636-32	2013-C2L-08 (18-20)	Solid	01/14/14 14:18	01/16/14 10:08
600-85636-33	2013-C2L-01 (0-0.5)	Solid	01/14/14 14:35	01/16/14 10:08
600-85636-36	2013-C2L-01 (10-12)	Solid	01/14/14 14:40	01/16/14 10:08
600-85636-37	2013-C2L-01 (12-13)	Solid	01/14/14 14:41	01/16/14 10:08
600-85636-38	2013-C2L-01 (13-15)	Solid	01/14/14 14:42	01/16/14 10:08
600-85636-39	ECO-7D (0-0.5)	Solid	01/14/14 15:05	01/16/14 10:08
600-85636-40	ECO-7C (0-0.5)	Solid	01/14/14 15:14	01/16/14 10:08

Client Sample ID: 2013-STB-4A (2-4)

Lab Sample ID: 600-85636-1

Date Collected: 01/13/14 16:07
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 73.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	92.4		0.323	0.0332	mg/Kg	☼	01/20/14 16:08	01/21/14 11:53	1
Lead	1540		0.647	0.136	mg/Kg	☼	01/20/14 16:08	01/21/14 11:53	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26		1.0	1.0	%			01/17/14 09:14	1
Percent Solids	74		1.0	1.0	%			01/17/14 09:14	1

Client Sample ID: 2013-RMSB-5A (5-7)

Lab Sample ID: 600-85636-2

Date Collected: 01/13/14 16:28
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 74.7

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	35300		13.1	2.75	mg/Kg	☼	01/20/14 16:08	01/21/14 15:42	20

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25		1.0	1.0	%			01/17/14 09:14	1
Percent Solids	75		1.0	1.0	%			01/17/14 09:14	1

Client Sample ID: 2013-RRS-4A-A (3-4)

Lab Sample ID: 600-85636-3

Date Collected: 01/13/14 16:52
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 70.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.714		0.334	0.0342	mg/Kg	☼	01/20/14 16:08	01/21/14 14:04	1
Lead	39.2		0.667	0.140	mg/Kg	☼	01/20/14 16:08	01/21/14 14:04	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	30		1.0	1.0	%			01/17/14 09:14	1
Percent Solids	70		1.0	1.0	%			01/17/14 09:14	1

Client Sample ID: 2013-C2L-05 (0-0.5)

Lab Sample ID: 600-85636-5

Date Collected: 01/14/14 08:18
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 81.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.23		1.16	0.253	mg/Kg	☼	01/20/14 16:08	01/21/14 14:06	1
Cadmium	0.0522	J	0.290	0.0297	mg/Kg	☼	01/20/14 16:08	01/21/14 14:06	1
Lead	22.9		0.580	0.122	mg/Kg	☼	01/20/14 16:08	01/21/14 14:06	1
Selenium	0.300	U	2.32	0.300	mg/Kg	☼	01/20/14 16:08	01/21/14 14:06	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			01/17/14 09:14	1
Percent Solids	81		1.0	1.0	%			01/17/14 09:14	1

Client Sample ID: 2013-C2L-10 (0-0.5)

Lab Sample ID: 600-85636-8
Date Collected: 01/14/14 09:06
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 82.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10.5		1.16	0.252	mg/Kg	☼	01/20/14 16:08	01/21/14 14:08	1
Cadmium	0.659		0.289	0.0296	mg/Kg	☼	01/20/14 16:08	01/21/14 14:08	1
Lead	66.9		0.578	0.121	mg/Kg	☼	01/20/14 16:08	01/21/14 14:08	1
Selenium	0.299	U	2.31	0.299	mg/Kg	☼	01/20/14 16:08	01/21/14 14:08	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		1.0	1.0	%			01/17/14 09:14	1
Percent Solids	82		1.0	1.0	%			01/17/14 09:14	1

Client Sample ID: 2013-C2L-09 (0-0.5)

Lab Sample ID: 600-85636-12
Date Collected: 01/14/14 09:45
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 82.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10.8		1.15	0.250	mg/Kg	☼	01/20/14 16:08	01/21/14 14:11	1
Cadmium	0.401		0.286	0.0294	mg/Kg	☼	01/20/14 16:08	01/21/14 14:11	1
Lead	18.7		0.573	0.120	mg/Kg	☼	01/20/14 16:08	01/21/14 14:11	1
Selenium	0.297	U	2.29	0.297	mg/Kg	☼	01/20/14 16:08	01/21/14 14:11	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		1.0	1.0	%			01/17/14 09:14	1
Percent Solids	82		1.0	1.0	%			01/17/14 09:14	1

Client Sample ID: 2013-C2L-04 (0-0.5)

Lab Sample ID: 600-85636-15
Date Collected: 01/14/14 10:24
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 82.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	13.5		1.21	0.264	mg/Kg	☼	01/20/14 16:08	01/21/14 14:20	1
Cadmium	0.303		0.303	0.0310	mg/Kg	☼	01/20/14 16:08	01/21/14 14:20	1
Lead	13.8		0.605	0.127	mg/Kg	☼	01/20/14 16:08	01/21/14 14:20	1
Selenium	0.313	U	2.42	0.313	mg/Kg	☼	01/20/14 16:08	01/21/14 14:20	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17		1.0	1.0	%			01/17/14 09:14	1
Percent Solids	83		1.0	1.0	%			01/17/14 09:14	1

Client Sample ID: 2013-C2L-02 (0-0.5)

Lab Sample ID: 600-85636-18
Date Collected: 01/14/14 11:38
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 81.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	13.7		1.18	0.257	mg/Kg	☼	01/20/14 16:08	01/21/14 14:23	1
Cadmium	0.301		0.295	0.0303	mg/Kg	☼	01/20/14 16:08	01/21/14 14:23	1
Lead	18.1		0.590	0.124	mg/Kg	☼	01/20/14 16:08	01/21/14 14:23	1

Client Sample ID: 2013-C2L-02 (0-0.5)

Lab Sample ID: 600-85636-18
Date Collected: 01/14/14 11:38
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 81.5

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.305	U	2.36	0.305	mg/Kg	☼	01/20/14 16:08	01/21/14 14:23	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		1.0	1.0	%			01/17/14 09:14	1
Percent Solids	82		1.0	1.0	%			01/17/14 09:14	1

Client Sample ID: 2013-C2L-06 (0-0.5)

Lab Sample ID: 600-85636-21
Date Collected: 01/14/14 12:55
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 75.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.13		3.13	0.290	mg/Kg	☼	01/20/14 16:08	01/21/14 14:32	1
Arsenic	22.6		1.25	0.273	mg/Kg	☼	01/20/14 16:08	01/21/14 14:32	1
Cadmium	3.68		0.313	0.0321	mg/Kg	☼	01/20/14 16:08	01/21/14 14:32	1
Lead	584		0.625	0.131	mg/Kg	☼	01/20/14 16:08	01/21/14 14:32	1
Selenium	1.79	J	2.50	0.324	mg/Kg	☼	01/20/14 16:08	01/21/14 14:32	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25		1.0	1.0	%			01/17/14 09:14	1
Percent Solids	75		1.0	1.0	%			01/17/14 09:14	1

Client Sample ID: 2013-C2L-07 (0-0.5)

Lab Sample ID: 600-85636-24
Date Collected: 01/14/14 13:25
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 81.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10.3		1.16	0.254	mg/Kg	☼	01/20/14 16:08	01/21/14 14:35	1
Cadmium	0.355		0.291	0.0299	mg/Kg	☼	01/20/14 16:08	01/21/14 14:35	1
Lead	32.5		0.582	0.122	mg/Kg	☼	01/20/14 16:08	01/21/14 14:35	1
Selenium	0.302	U	2.33	0.302	mg/Kg	☼	01/20/14 16:08	01/21/14 14:35	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			01/17/14 09:14	1
Percent Solids	81		1.0	1.0	%			01/17/14 09:14	1

Client Sample ID: 2013-C2L-08 (0-0.5)

Lab Sample ID: 600-85636-27
Date Collected: 01/14/14 14:05
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 75.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	14.2		1.26	0.274	mg/Kg	☼	01/20/14 16:08	01/21/14 14:37	1
Cadmium	0.390		0.314	0.0322	mg/Kg	☼	01/20/14 16:08	01/21/14 14:37	1
Lead	59.7		0.628	0.132	mg/Kg	☼	01/20/14 16:08	01/21/14 14:37	1
Selenium	0.325	U	2.51	0.325	mg/Kg	☼	01/20/14 16:08	01/21/14 14:37	1

Client Sample ID: 2013-C2L-08 (0-0.5)

Lab Sample ID: 600-85636-27

Date Collected: 01/14/14 14:05
Matrix: Solid
Date Received: 01/16/14 10:08

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24		1.0	1.0	%			01/17/14 09:14	1
Percent Solids	76		1.0	1.0	%			01/17/14 09:14	1

Client Sample ID: 2013-C2L-08 (15-17)

Lab Sample ID: 600-85636-30

Date Collected: 01/14/14 14:16
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 78.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.270	U	2.92	0.270	mg/Kg	☼	01/20/14 16:08	01/21/14 14:39	1
Arsenic	18.5		1.17	0.254	mg/Kg	☼	01/20/14 16:08	01/21/14 14:39	1
Cadmium	0.0299	U	0.292	0.0299	mg/Kg	☼	01/20/14 16:08	01/21/14 14:39	1
Lead	26.6		0.583	0.122	mg/Kg	☼	01/20/14 16:08	01/21/14 14:39	1
Selenium	0.302	U	2.33	0.302	mg/Kg	☼	01/20/14 16:08	01/21/14 14:39	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			01/17/14 09:14	1
Percent Solids	79		1.0	1.0	%			01/17/14 09:14	1

General Chemistry - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	128		6.82	0.430	mg/Kg	☼		01/21/14 10:57	1

Client Sample ID: 2013-C2L-08 (18-20)

Lab Sample ID: 600-85636-32

Date Collected: 01/14/14 14:18
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 78.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.288	U	3.11	0.288	mg/Kg	☼	01/20/14 16:08	01/21/14 14:42	1
Arsenic	14.0		1.24	0.271	mg/Kg	☼	01/20/14 16:08	01/21/14 14:42	1
Cadmium	0.0319	U	0.311	0.0319	mg/Kg	☼	01/20/14 16:08	01/21/14 14:42	1
Lead	7.80		0.621	0.130	mg/Kg	☼	01/20/14 16:08	01/21/14 14:42	1
Selenium	1.49	J	2.49	0.322	mg/Kg	☼	01/20/14 16:08	01/21/14 14:42	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			01/17/14 09:14	1
Percent Solids	78		1.0	1.0	%			01/17/14 09:14	1

General Chemistry - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	56.2		6.37	0.402	mg/Kg	☼		01/21/14 11:13	1

Client Sample ID: 2013-C2L-01 (0-0.5)

Lab Sample ID: 600-85636-33
Date Collected: 01/14/14 14:35
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 77.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**17.2**		1.20	0.262	mg/Kg	☼	01/20/14 16:08	01/21/14 14:44	1
Cadmium	**0.570**		0.300	0.0308	mg/Kg	☼	01/20/14 16:08	01/21/14 14:44	1
Lead	**105**		0.600	0.126	mg/Kg	☼	01/20/14 16:08	01/21/14 14:44	1
Selenium	0.311	U	2.40	0.311	mg/Kg	☼	01/20/14 16:08	01/21/14 14:44	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**23**		1.0	1.0	%			01/17/14 09:14	1
Percent Solids	**77**		1.0	1.0	%			01/17/14 09:14	1

Client Sample ID: 2013-C2L-01 (10-12)

Lab Sample ID: 600-85636-36
Date Collected: 01/14/14 14:40
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 79.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.290	U	3.14	0.290	mg/Kg	☼	01/20/14 16:08	01/21/14 14:46	1
Arsenic	**11.5**		1.25	0.273	mg/Kg	☼	01/20/14 16:08	01/21/14 14:46	1
Cadmium	0.0322	U	0.314	0.0322	mg/Kg	☼	01/20/14 16:08	01/21/14 14:46	1
Lead	**12.3**		0.627	0.131	mg/Kg	☼	01/20/14 16:08	01/21/14 14:46	1
Selenium	0.325	U	2.51	0.325	mg/Kg	☼	01/20/14 16:08	01/21/14 14:46	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**20**		1.0	1.0	%			01/17/14 09:14	1
Percent Solids	**80**		1.0	1.0	%			01/17/14 09:14	1

General Chemistry - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**485**		31.1	1.96	mg/Kg	☼		01/21/14 11:28	5

Client Sample ID: 2013-C2L-01 (12-13)

Lab Sample ID: 600-85636-37
Date Collected: 01/14/14 14:41
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 75.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.297	U	3.21	0.297	mg/Kg	☼	01/20/14 16:08	01/21/14 14:48	1
Arsenic	**12.2**		1.28	0.280	mg/Kg	☼	01/20/14 16:08	01/21/14 14:48	1
Cadmium	0.0329	U	0.321	0.0329	mg/Kg	☼	01/20/14 16:08	01/21/14 14:48	1
Lead	**15.6**		0.642	0.135	mg/Kg	☼	01/20/14 16:08	01/21/14 14:48	1
Selenium	**0.809**	**J**	2.57	0.332	mg/Kg	☼	01/20/14 16:08	01/21/14 14:48	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**24**		1.0	1.0	%			01/17/14 09:14	1
Percent Solids	**76**		1.0	1.0	%			01/17/14 09:14	1

General Chemistry - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**711**		33.0	2.08	mg/Kg	☼		01/21/14 11:44	5

Client Sample ID: 2013-C2L-01 (13-15)

Lab Sample ID: 600-85636-38

Date Collected: 01/14/14 14:42
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 79.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.277	U	3.00	0.277	mg/Kg	☼	01/20/14 16:08	01/21/14 14:51	1
Arsenic	5.07		1.20	0.261	mg/Kg	☼	01/20/14 16:08	01/21/14 14:51	1
Cadmium	0.0359	J	0.300	0.0307	mg/Kg	☼	01/20/14 16:08	01/21/14 14:51	1
Lead	13.3		0.599	0.126	mg/Kg	☼	01/20/14 16:08	01/21/14 14:51	1
Selenium	0.911	J	2.40	0.310	mg/Kg	☼	01/20/14 16:08	01/21/14 14:51	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			01/17/14 09:14	1
Percent Solids	79		1.0	1.0	%			01/17/14 09:14	1

General Chemistry - Soluble

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	669		31.6	1.99	mg/Kg	☼		01/21/14 12:00	5

Client Sample ID: ECO-7D (0-0.5)

Lab Sample ID: 600-85636-39

Date Collected: 01/14/14 15:05
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 82.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.463	J	3.01	0.279	mg/Kg	☼	01/20/14 16:08	01/21/14 14:53	1
Arsenic	15.1		1.20	0.262	mg/Kg	☼	01/20/14 16:08	01/21/14 14:53	1
Cadmium	2.30		0.301	0.0309	mg/Kg	☼	01/20/14 16:08	01/21/14 14:53	1
Lead	192		0.602	0.126	mg/Kg	☼	01/20/14 16:08	01/21/14 14:53	1
Selenium	0.512	J	2.41	0.312	mg/Kg	☼	01/20/14 16:08	01/21/14 14:53	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		1.0	1.0	%			01/17/14 09:14	1
Percent Solids	82		1.0	1.0	%			01/17/14 09:14	1

Client Sample ID: ECO-7C (0-0.5)

Lab Sample ID: 600-85636-40

Date Collected: 01/14/14 15:14
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 79.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	3.35		0.310	0.0318	mg/Kg	☼	01/21/14 14:41	01/22/14 14:04	1
Lead	375		0.619	0.130	mg/Kg	☼	01/21/14 14:41	01/22/14 14:04	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			01/17/14 09:14	1
Percent Solids	80		1.0	1.0	%			01/17/14 09:14	1

Qualifiers

Metals

Qualifier	Qualifier Description
F	Duplicate RPD exceeds the control limit
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N	MS, MSD: Spike recovery exceeds upper or lower control limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
N	RPD of the MS and MSD exceeds the control limits
U	Analyte was not detected at or above the SDL.

General Chemistry

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

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
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)

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-125409/1-A
Matrix: Solid
Analysis Batch: 125465

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 125409

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		01/20/14 16:08	01/21/14 11:44	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		01/20/14 16:08	01/21/14 11:44	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		01/20/14 16:08	01/21/14 11:44	1
Lead	0.105	U	0.500	0.105	mg/Kg		01/20/14 16:08	01/21/14 11:44	1
Selenium	0.259	U	2.00	0.259	mg/Kg		01/20/14 16:08	01/21/14 11:44	1

Lab Sample ID: LCSSRM 600-125409/2-A
Matrix: Solid
Analysis Batch: 125465

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125409

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	74.30		mg/Kg		84.2	45.4 - 231.3
Arsenic	99.6	100.4		mg/Kg		100.8	80.8 - 119.5
Cadmium	182	176.6		mg/Kg		97.0	81.9 - 118.1
Lead	115	115.5		mg/Kg		100.4	81.8 - 119.1
Selenium	150	145.8		mg/Kg		97.2	77.3 - 122.7

Lab Sample ID: 600-85636-1 MS
Matrix: Solid
Analysis Batch: 125465

Client Sample ID: 2013-STB-4A (2-4)
Prep Type: Total/NA
Prep Batch: 125409

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	7.37		66.3	30.24	N	mg/Kg	☼	34	75 - 125
Arsenic	30.1		66.3	79.55		mg/Kg	☼	75	75 - 125
Cadmium	92.4		33.2	33.95	N	mg/Kg	☼	-176	75 - 125
Lead	1540		66.3	442.6	4	mg/Kg	☼	-1657	75 - 125
Selenium	0.440		66.3	56.96		mg/Kg	☼	85	75 - 125

Lab Sample ID: 600-85636-1 MSD
Matrix: Solid
Analysis Batch: 125465

Client Sample ID: 2013-STB-4A (2-4)
Prep Type: Total/NA
Prep Batch: 125409

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	7.37		63.5	31.90	N	mg/Kg	☼	39	75 - 125	4	20
Arsenic	30.1		63.5	76.56	N	mg/Kg	☼	73	75 - 125	5	20
Cadmium	92.4		31.8	33.17	N	mg/Kg	☼	-186	75 - 125	4	20
Lead	1540		63.5	613.8	4 N	mg/Kg	☼	-1460	75 - 125	31	20
Selenium	0.440		63.5	55.38		mg/Kg	☼	86	75 - 125	4	20

Lab Sample ID: 600-85636-12 MS
Matrix: Solid
Analysis Batch: 125465

Client Sample ID: 2013-C2L-09 (0-0.5)
Prep Type: Total/NA
Prep Batch: 125409

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.321		60.1	21.94	N	mg/Kg	☼	36	75 - 125

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

Lab Sample ID: 600-85636-12 MS — **Client Sample ID: 2013-C2L-09 (0-0.5)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125465 — **Prep Batch: 125409**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	10.8		60.1	69.43		mg/Kg	☼	98	75 - 125
Cadmium	0.401		30.1	30.19		mg/Kg	☼	99	75 - 125
Lead	18.7		60.1	76.65		mg/Kg	☼	96	75 - 125
Selenium	0.297	U	60.1	53.80		mg/Kg	☼	89	75 - 125

Lab Sample ID: 600-85636-12 MSD — **Client Sample ID: 2013-C2L-09 (0-0.5)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125465 — **Prep Batch: 125409**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.321		57.3	19.15	N	mg/Kg	☼	33	75 - 125	14	20
Arsenic	10.8		57.3	59.74		mg/Kg	☼	85	75 - 125	15	20
Cadmium	0.401		28.6	26.17		mg/Kg	☼	90	75 - 125	14	20
Lead	18.7		57.3	74.06		mg/Kg	☼	97	75 - 125	3	20
Selenium	0.297	U	57.3	46.19		mg/Kg	☼	81	75 - 125	15	20

Lab Sample ID: 600-85636-1 DU — **Client Sample ID: 2013-STB-4A (2-4)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125465 — **Prep Batch: 125409**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	7.37		12.75	F	mg/Kg	☼	53	20
Arsenic	30.1		35.33		mg/Kg	☼	16	20
Cadmium	92.4		34.74	F	mg/Kg	☼	91	20
Lead	1540		1720		mg/Kg	☼	11	20
Selenium	0.440		0.3722	J	mg/Kg	☼	17	20

Lab Sample ID: 600-85636-12 DU — **Client Sample ID: 2013-C2L-09 (0-0.5)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125465 — **Prep Batch: 125409**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.321		0.265	U	mg/Kg	☼	NC	20
Arsenic	10.8		11.89		mg/Kg	☼	10	20
Cadmium	0.401		0.3036		mg/Kg	☼	28	20
Lead	18.7		20.63		mg/Kg	☼	10	20
Selenium	0.297	U	0.297	U	mg/Kg	☼	NC	20

Lab Sample ID: MB 600-125493/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 125606 — **Prep Batch: 125493**

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		01/21/14 14:41	01/22/14 13:48	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		01/21/14 14:41	01/22/14 13:48	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		01/21/14 14:41	01/22/14 13:48	1
Lead	0.105	U	0.500	0.105	mg/Kg		01/21/14 14:41	01/22/14 13:48	1
Selenium	0.259	U	2.00	0.259	mg/Kg		01/21/14 14:41	01/22/14 13:48	1

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

Lab Sample ID: LCSSRM 600-125493/2-A
Matrix: Solid
Analysis Batch: 125606

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 125493

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	64.60		mg/Kg		73.2	45.4 - 231.3
Arsenic	99.6	95.64		mg/Kg		96.0	80.8 - 119.5
Cadmium	182	168.2		mg/Kg		92.4	81.9 - 118.1
Lead	115	111.4		mg/Kg		96.9	81.8 - 119.1
Selenium	150	139.3		mg/Kg		92.9	77.3 - 122.7

Method: 9056 - Anions, Ion Chromatography

Lab Sample ID: MB 600-125392/1-A
Matrix: Solid
Analysis Batch: 125469

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.312	U	4.95	0.312	mg/Kg			01/21/14 09:39	1

Lab Sample ID: LCS 600-125392/2-A
Matrix: Solid
Analysis Batch: 125469

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	198	200.7		mg/Kg		101	90 - 110

Method: Moisture - Percent Moisture

Lab Sample ID: 600-85636-1 DU
Matrix: Solid
Analysis Batch: 125179

Client Sample ID: 2013-STB-4A (2-4)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	26		26		%		0.3	20
Percent Solids	74		74		%		0.1	20

Lab Sample ID: 600-85636-27 DU
Matrix: Solid
Analysis Batch: 125179

Client Sample ID: 2013-C2L-08 (0-0.5)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	24		23		%		5	20
Percent Solids	76		77		%		1	20

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-1

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Antimony	2.50	0.232	mg/Kg	6010B
Arsenic	1.00	0.218	mg/Kg	6010B
Cadmium	0.250	0.0256	mg/Kg	6010B
Lead	0.500	0.105	mg/Kg	6010B
Selenium	2.00	0.259	mg/Kg	6010B

General Chemistry

Analyte	MQL	MDL	Units	Method
Percent Moisture	1.0	1.0	%	Moisture
Percent Solids	1.0	1.0	%	Moisture

General Chemistry - Soluble

Analyte	MQL	MDL	Units	Method
Sulfate	5.00	0.315	mg/Kg	9056

Metals

Prep Batch: 125409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85636-1	2013-STB-4A (2-4)	Total/NA	Solid	3050B	
600-85636-1 DU	2013-STB-4A (2-4)	Total/NA	Solid	3050B	
600-85636-1 MS	2013-STB-4A (2-4)	Total/NA	Solid	3050B	
600-85636-1 MSD	2013-STB-4A (2-4)	Total/NA	Solid	3050B	
600-85636-2 - DL	2013-RMSB-5A (5-7)	Total/NA	Solid	3050B	
600-85636-3	2013-RRS-4A-A (3-4)	Total/NA	Solid	3050B	
600-85636-5	2013-C2L-05 (0-0.5)	Total/NA	Solid	3050B	
600-85636-8	2013-C2L-10 (0-0.5)	Total/NA	Solid	3050B	
600-85636-12	2013-C2L-09 (0-0.5)	Total/NA	Solid	3050B	
600-85636-12 DU	2013-C2L-09 (0-0.5)	Total/NA	Solid	3050B	
600-85636-12 MS	2013-C2L-09 (0-0.5)	Total/NA	Solid	3050B	
600-85636-12 MSD	2013-C2L-09 (0-0.5)	Total/NA	Solid	3050B	
600-85636-15	2013-C2L-04 (0-0.5)	Total/NA	Solid	3050B	
600-85636-18	2013-C2L-02 (0-0.5)	Total/NA	Solid	3050B	
600-85636-21	2013-C2L-06 (0-0.5)	Total/NA	Solid	3050B	
600-85636-24	2013-C2L-07 (0-0.5)	Total/NA	Solid	3050B	
600-85636-27	2013-C2L-08 (0-0.5)	Total/NA	Solid	3050B	
600-85636-30	2013-C2L-08 (15-17)	Total/NA	Solid	3050B	
600-85636-32	2013-C2L-08 (18-20)	Total/NA	Solid	3050B	
600-85636-33	2013-C2L-01 (0-0.5)	Total/NA	Solid	3050B	
600-85636-36	2013-C2L-01 (10-12)	Total/NA	Solid	3050B	
600-85636-37	2013-C2L-01 (12-13)	Total/NA	Solid	3050B	
600-85636-38	2013-C2L-01 (13-15)	Total/NA	Solid	3050B	
600-85636-39	ECO-7D (0-0.5)	Total/NA	Solid	3050B	
LCSSRM 600-125409/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-125409/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 125465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85636-1	2013-STB-4A (2-4)	Total/NA	Solid	6010B	125409
600-85636-1 DU	2013-STB-4A (2-4)	Total/NA	Solid	6010B	125409
600-85636-1 MS	2013-STB-4A (2-4)	Total/NA	Solid	6010B	125409
600-85636-1 MSD	2013-STB-4A (2-4)	Total/NA	Solid	6010B	125409
600-85636-2 - DL	2013-RMSB-5A (5-7)	Total/NA	Solid	6010B	125409
600-85636-3	2013-RRS-4A-A (3-4)	Total/NA	Solid	6010B	125409
600-85636-5	2013-C2L-05 (0-0.5)	Total/NA	Solid	6010B	125409
600-85636-8	2013-C2L-10 (0-0.5)	Total/NA	Solid	6010B	125409
600-85636-12	2013-C2L-09 (0-0.5)	Total/NA	Solid	6010B	125409
600-85636-12 DU	2013-C2L-09 (0-0.5)	Total/NA	Solid	6010B	125409
600-85636-12 MS	2013-C2L-09 (0-0.5)	Total/NA	Solid	6010B	125409
600-85636-12 MSD	2013-C2L-09 (0-0.5)	Total/NA	Solid	6010B	125409
600-85636-15	2013-C2L-04 (0-0.5)	Total/NA	Solid	6010B	125409
600-85636-18	2013-C2L-02 (0-0.5)	Total/NA	Solid	6010B	125409
600-85636-21	2013-C2L-06 (0-0.5)	Total/NA	Solid	6010B	125409
600-85636-24	2013-C2L-07 (0-0.5)	Total/NA	Solid	6010B	125409
600-85636-27	2013-C2L-08 (0-0.5)	Total/NA	Solid	6010B	125409
600-85636-30	2013-C2L-08 (15-17)	Total/NA	Solid	6010B	125409
600-85636-32	2013-C2L-08 (18-20)	Total/NA	Solid	6010B	125409
600-85636-33	2013-C2L-01 (0-0.5)	Total/NA	Solid	6010B	125409
600-85636-36	2013-C2L-01 (10-12)	Total/NA	Solid	6010B	125409
600-85636-37	2013-C2L-01 (12-13)	Total/NA	Solid	6010B	125409

Metals (Continued)

Analysis Batch: 125465 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85636-38	2013-C2L-01 (13-15)	Total/NA	Solid	6010B	125409
600-85636-39	ECO-7D (0-0.5)	Total/NA	Solid	6010B	125409
LCSSRM 600-125409/2-A	Lab Control Sample	Total/NA	Solid	6010B	125409
MB 600-125409/1-A	Method Blank	Total/NA	Solid	6010B	125409

Prep Batch: 125493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85636-40	ECO-7C (0-0.5)	Total/NA	Solid	3050B	
LCSSRM 600-125493/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-125493/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 125606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85636-40	ECO-7C (0-0.5)	Total/NA	Solid	6010B	125493
LCSSRM 600-125493/2-A	Lab Control Sample	Total/NA	Solid	6010B	125493
MB 600-125493/1-A	Method Blank	Total/NA	Solid	6010B	125493

General Chemistry

Analysis Batch: 125179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85636-1	2013-STB-4A (2-4)	Total/NA	Solid	Moisture	
600-85636-1 DU	2013-STB-4A (2-4)	Total/NA	Solid	Moisture	
600-85636-1 MS	2013-STB-4A (2-4)	Total/NA	Solid	Moisture	
600-85636-1 MSD	2013-STB-4A (2-4)	Total/NA	Solid	Moisture	
600-85636-2	2013-RMSB-5A (5-7)	Total/NA	Solid	Moisture	
600-85636-3	2013-RRS-4A-A (3-4)	Total/NA	Solid	Moisture	
600-85636-5	2013-C2L-05 (0-0.5)	Total/NA	Solid	Moisture	
600-85636-8	2013-C2L-10 (0-0.5)	Total/NA	Solid	Moisture	
600-85636-12	2013-C2L-09 (0-0.5)	Total/NA	Solid	Moisture	
600-85636-15	2013-C2L-04 (0-0.5)	Total/NA	Solid	Moisture	
600-85636-18	2013-C2L-02 (0-0.5)	Total/NA	Solid	Moisture	
600-85636-21	2013-C2L-06 (0-0.5)	Total/NA	Solid	Moisture	
600-85636-24	2013-C2L-07 (0-0.5)	Total/NA	Solid	Moisture	
600-85636-27	2013-C2L-08 (0-0.5)	Total/NA	Solid	Moisture	
600-85636-27 DU	2013-C2L-08 (0-0.5)	Total/NA	Solid	Moisture	
600-85636-30	2013-C2L-08 (15-17)	Total/NA	Solid	Moisture	
600-85636-32	2013-C2L-08 (18-20)	Total/NA	Solid	Moisture	
600-85636-33	2013-C2L-01 (0-0.5)	Total/NA	Solid	Moisture	
600-85636-36	2013-C2L-01 (10-12)	Total/NA	Solid	Moisture	
600-85636-37	2013-C2L-01 (12-13)	Total/NA	Solid	Moisture	
600-85636-38	2013-C2L-01 (13-15)	Total/NA	Solid	Moisture	
600-85636-39	ECO-7D (0-0.5)	Total/NA	Solid	Moisture	
600-85636-40	ECO-7C (0-0.5)	Total/NA	Solid	Moisture	

Leach Batch: 125392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85636-30	2013-C2L-08 (15-17)	Soluble	Solid	DI Leach	
600-85636-32	2013-C2L-08 (18-20)	Soluble	Solid	DI Leach	
600-85636-36	2013-C2L-01 (10-12)	Soluble	Solid	DI Leach	

General Chemistry (Continued)

Leach Batch: 125392 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85636-37	2013-C2L-01 (12-13)	Soluble	Solid	DI Leach	
600-85636-38	2013-C2L-01 (13-15)	Soluble	Solid	DI Leach	
LCS 600-125392/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
MB 600-125392/1-A	Method Blank	Soluble	Solid	DI Leach	

Analysis Batch: 125469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85636-30	2013-C2L-08 (15-17)	Soluble	Solid	9056	125392
600-85636-32	2013-C2L-08 (18-20)	Soluble	Solid	9056	125392
600-85636-36	2013-C2L-01 (10-12)	Soluble	Solid	9056	125392
600-85636-37	2013-C2L-01 (12-13)	Soluble	Solid	9056	125392
600-85636-38	2013-C2L-01 (13-15)	Soluble	Solid	9056	125392
LCS 600-125392/2-A	Lab Control Sample	Soluble	Solid	9056	125392
MB 600-125392/1-A	Method Blank	Soluble	Solid	9056	125392

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-1

Client Sample ID: 2013-STB-4A (2-4)

Lab Sample ID: 600-85636-1

Date Collected: 01/13/14 16:07
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 73.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	125409	01/20/14 16:08	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	125465	01/21/14 11:53	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125179	01/17/14 09:14	AYS	TAL HOU

Client Sample ID: 2013-RMSB-5A (5-7)

Lab Sample ID: 600-85636-2

Date Collected: 01/13/14 16:28
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 74.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B	DL		1.02 g	50 mL	125409	01/20/14 16:08	NER	TAL HOU
Total/NA	Analysis	6010B	DL	20	1.02 g	50 mL	125465	01/21/14 15:42	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125179	01/17/14 09:14	AYS	TAL HOU

Client Sample ID: 2013-RRS-4A-A (3-4)

Lab Sample ID: 600-85636-3

Date Collected: 01/13/14 16:52
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 70.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.07 g	50 mL	125409	01/20/14 16:08	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	125465	01/21/14 14:04	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125179	01/17/14 09:14	AYS	TAL HOU

Client Sample ID: 2013-C2L-05 (0-0.5)

Lab Sample ID: 600-85636-5

Date Collected: 01/14/14 08:18
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 81.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	125409	01/20/14 16:08	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	125465	01/21/14 14:06	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125179	01/17/14 09:14	AYS	TAL HOU

Client Sample ID: 2013-C2L-10 (0-0.5)

Lab Sample ID: 600-85636-8

Date Collected: 01/14/14 09:06
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 82.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	125409	01/20/14 16:08	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	125465	01/21/14 14:08	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125179	01/17/14 09:14	AYS	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-1

Client Sample ID: 2013-C2L-09 (0-0.5)

Lab Sample ID: 600-85636-12

Date Collected: 01/14/14 09:45
Date Received: 01/16/14 10:08

Matrix: Solid
Percent Solids: 82.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	125409	01/20/14 16:08	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	125465	01/21/14 14:11	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125179	01/17/14 09:14	AYS	TAL HOU

Client Sample ID: 2013-C2L-04 (0-0.5)

Lab Sample ID: 600-85636-15

Date Collected: 01/14/14 10:24
Date Received: 01/16/14 10:08

Matrix: Solid
Percent Solids: 82.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	50 mL	125409	01/20/14 16:08	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	125465	01/21/14 14:20	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125179	01/17/14 09:14	AYS	TAL HOU

Client Sample ID: 2013-C2L-02 (0-0.5)

Lab Sample ID: 600-85636-18

Date Collected: 01/14/14 11:38
Date Received: 01/16/14 10:08

Matrix: Solid
Percent Solids: 81.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	50 mL	125409	01/20/14 16:08	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	125465	01/21/14 14:23	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125179	01/17/14 09:14	AYS	TAL HOU

Client Sample ID: 2013-C2L-06 (0-0.5)

Lab Sample ID: 600-85636-21

Date Collected: 01/14/14 12:55
Date Received: 01/16/14 10:08

Matrix: Solid
Percent Solids: 75.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	125409	01/20/14 16:08	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	125465	01/21/14 14:32	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125179	01/17/14 09:14	AYS	TAL HOU

Client Sample ID: 2013-C2L-07 (0-0.5)

Lab Sample ID: 600-85636-24

Date Collected: 01/14/14 13:25
Date Received: 01/16/14 10:08

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			1.06 g	50 mL	125409	01/20/14 16:08	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	125465	01/21/14 14:35	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125179	01/17/14 09:14	AYS	TAL HOU

Client Sample ID: 2013-C2L-08 (0-0.5)

Lab Sample ID: 600-85636-27

Date Collected: 01/14/14 14:05
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 75.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	125409	01/20/14 16:08	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	125465	01/21/14 14:37	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125179	01/17/14 09:14	AYS	TAL HOU

Client Sample ID: 2013-C2L-08 (15-17)

Lab Sample ID: 600-85636-30

Date Collected: 01/14/14 14:16
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 78.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	50 mL	125409	01/20/14 16:08	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	125465	01/21/14 14:39	DCL	TAL HOU
Soluble	Leach	DI Leach			4.66 g	50 mL	125392	01/20/14 14:18	DAW	TAL HOU
Soluble	Analysis	9056		1	5 mL	5 mL	125469	01/21/14 10:57	DAW	TAL HOU
Total/NA	Analysis	Moisture		1			125179	01/17/14 09:14	AYS	TAL HOU

Client Sample ID: 2013-C2L-08 (18-20)

Lab Sample ID: 600-85636-32

Date Collected: 01/14/14 14:18
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 78.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	125409	01/20/14 16:08	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	125465	01/21/14 14:42	DCL	TAL HOU
Soluble	Leach	DI Leach			5.02 g	50 mL	125392	01/20/14 14:18	DAW	TAL HOU
Soluble	Analysis	9056		1	5 mL	5 mL	125469	01/21/14 11:13	DAW	TAL HOU
Total/NA	Analysis	Moisture		1			125179	01/17/14 09:14	AYS	TAL HOU

Client Sample ID: 2013-C2L-01 (0-0.5)

Lab Sample ID: 600-85636-33

Date Collected: 01/14/14 14:35
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 77.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.08 g	50 mL	125409	01/20/14 16:08	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	125465	01/21/14 14:44	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125179	01/17/14 09:14	AYS	TAL HOU

Client Sample ID: 2013-C2L-01 (10-12)

Lab Sample ID: 600-85636-36

Date Collected: 01/14/14 14:40
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 79.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	50 mL	125409	01/20/14 16:08	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	125465	01/21/14 14:46	DCL	TAL HOU

Client Sample ID: 2013-C2L-01 (10-12)

Lab Sample ID: 600-85636-36

Date Collected: 01/14/14 14:40
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 79.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.04 g	50 mL	125392	01/20/14 14:18	DAW	TAL HOU
Soluble	Analysis	9056		5	5 mL	5 mL	125469	01/21/14 11:28	DAW	TAL HOU
Total/NA	Analysis	Moisture		1			125179	01/17/14 09:14	AYS	TAL HOU

Client Sample ID: 2013-C2L-01 (12-13)

Lab Sample ID: 600-85636-37

Date Collected: 01/14/14 14:41
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 75.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	125409	01/20/14 16:08	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	125465	01/21/14 14:48	DCL	TAL HOU
Soluble	Leach	DI Leach			5.01 g	50 mL	125392	01/20/14 14:18	DAW	TAL HOU
Soluble	Analysis	9056		5	5 mL	5 mL	125469	01/21/14 11:44	DAW	TAL HOU
Total/NA	Analysis	Moisture		1			125179	01/17/14 09:14	AYS	TAL HOU

Client Sample ID: 2013-C2L-01 (13-15)

Lab Sample ID: 600-85636-38

Date Collected: 01/14/14 14:42
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 79.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	125409	01/20/14 16:08	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	125465	01/21/14 14:51	DCL	TAL HOU
Soluble	Leach	DI Leach			4.98 g	50 mL	125392	01/20/14 14:18	DAW	TAL HOU
Soluble	Analysis	9056		5	5 mL	5 mL	125469	01/21/14 12:00	DAW	TAL HOU
Total/NA	Analysis	Moisture		1			125179	01/17/14 09:14	AYS	TAL HOU

Client Sample ID: ECO-7D (0-0.5)

Lab Sample ID: 600-85636-39

Date Collected: 01/14/14 15:05
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 82.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	50 mL	125409	01/20/14 16:08	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	125465	01/21/14 14:53	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			125179	01/17/14 09:14	AYS	TAL HOU

Client Sample ID: ECO-7C (0-0.5)

Lab Sample ID: 600-85636-40

Date Collected: 01/14/14 15:14
Matrix: Solid
Date Received: 01/16/14 10:08
Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	50 mL	125493	01/21/14 14:41	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	125606	01/22/14 14:04	DCL	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-1

Client Sample ID: ECO-7C (0-0.5)
Date Collected: 01/14/14 15:14
Date Received: 01/16/14 10:08

Lab Sample ID: 600-85636-40
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			125179	01/17/14 09:14	AYS	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-1

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0759	08-04-14
Louisiana	NELAP	6	30643	06-30-14
Oklahoma	State Program	6	1309	08-31-14
Texas	NELAP	6	T104704223	10-31-14
USDA	Federal		P330-08-00217	04-01-14 *
Utah	NELAP	8	TX00083	10-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Houston
3310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

600-85636 Chain of Custody

5/9/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com	
Company: Golder Associates Inc.			Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:		
City: Houston	TAT Requested (days): 5 WD TRRP		
State, Zip: TX, 77073			
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested		
Email: Christina_Higginbotham@golder.com	WO #:		
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831		
Site: EXIDE-FRISCO	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Pb				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N						
2013-STB-4A (2-4)	01/13/14	1607	G	Solid													X					
2013-STB-4A (2-4) MS	01/13/14	1607	G	Solid													X					
2013-STB-4A (2-4) MSD	01/13/14	1607	G	Solid													X					
2013-RMSB-5A (5-7)	01/13/14	1628	G	Solid													X					
2013-RRS-4A-A (3-4)	01/13/14	1652	G	Solid									X									
2013-RRS-4A-A (4-5)	01/13/14	1653	G	Solid																		HOLD
2013-C2L-05 (0-0.5)	01/14/14	0818	G	Solid										X								
2013-C2L-05 (1-2)	01/14/14	0819	G	Solid										(X)	HOLD							HOLD
2013-C2L-05 (4-5)	01/14/14	0820	G	Solid																		HOLD
2013-C2L-10 (0-0.5)	01/14/14	0906	G	Solid										X								
2013-C2L-10 (1-2)	01/14/14	0907	G	Solid																		HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOSHUA JAMES	01/15/14 1430	GOLDER		1/15/14 1430	TAL
2		1/15/14 1700	TAL		1/16/14 1008	TAL
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-908-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 2
Company: Golder Associates Inc.		**Analysis Requested**		Job #: 13020086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			**Preservation Codes:**
City: Houston	TAT Requested (days): 5 WD TRRP			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2SO3 G - Amchlor S - H2SO4 H - Ascorbic Acid T - TSP Dodecahydrate I - Ice U - Acetone J - DI Water V - MCAA K - EDTA W - ph 4-5 L - EDA Z - other (specify)
State, Zip: TX, 77073				Other:
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
2013-C2L-10 (1-2) MS	01/14/14	0907	G	Solid														HOLD
2013-C2L-10 (1-2) MSD	01/14/14	0907	G	Solid														HOLD
DUP-13	01/14/14	—	G	Solid										X	HOLD			HOLD
2013-C2L-10 (4-5)	01/14/14	0908	G	Solid														HOLD
2013-C2L-09 (0-0.5)	01/14/14	0945	G	Solid										X				
2013-C2L-09 (1-2)	01/14/14	0946	G	Solid														HOLD
2013-C2L-09 (4-5)	01/14/14	0947	G	Solid														HOLD
2013-C2L-04 (0-0.5)	01/14/14	1024	G	Solid										X				
2013-C2L-04 (1-2)	01/14/14	1025	G	Solid														HOLD
2013-C2L-04 (4-5)	01/14/14	1026	G	Solid														HOLD
2013-C2L-02 (0-0.5)	01/14/14	1138	G	Solid										X				

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/15/14 1430	GOLDER	[signature]	1/15/14 1430	TAL
[signature]	1/15/14 1700	TAL	[signature]	1/16/14 1005	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

5/9/2014

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

5/9/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 3
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE - FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Preservation Code	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
						N	N	N	N	N	N	N	N	N	N	N	N		
2013-C2L-02 (1-2)	01/14/14	1139	G	Solid															HOLD
2013-C2L-02 (4-5)		1140	G	Solid															HOLD
2013-C2L-06 (0-0.5)		1255	G	Solid											X				
2013-C2L-06 (1-2)		1256	G	Solid															HOLD
2013-C2L-06 (4-5)		1257	G	Solid															HOLD
2013-C2L-07 (0-0.5)		1328	G	Solid											X				
2013-C2L-07 (1-2)		1329	G	Solid															HOLD
2013-C2L-07 (4-5)		1330	G	Solid															HOLD
2013-C2L-08 (0-0.5)		1405	G	Solid											X				
2013-C2L-08 (1-2)		1406	G	Solid															HOLD
2013-C2L-08 (4-5)	V	1407	G	Solid															HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOSHUA JANZEN	~~01/14/14~~ 01/15/14 1430	GOLDER	[signature]	1/15/14 1430	TAL
2	[signature]	1/15/14 1700	TAL	[signature]	1/16/14 1008	TAL
3						

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

5/9/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 4
Company: Golder Associates Inc.				Job #: 13020866
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Se	6010B - As, Cd, Pb	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N				
2013-C2L-08 (15-17)	01/14/14	1416	G	Solid								X					X			
2013-C2L-08 (17-18)		1417	G	Solid																HOLD
2013-C2L-08 (18-20)		1418	G	Solid								X					X			
2013-C2L-01 (0-0.5)		1435	G	Solid										X						
2013-C2L-01 (1-2)		1436	G	Solid																HOLD
2013-C2L-01 (4-5)		1437	G	Solid																HOLD
2013-C2L-01 (10-12)		1440	G	Solid								X					X			
2013-C2L-01 (12-13)		1441	G	Solid								X					X			
2013-C2L-01 (13-15)		1442	G	Solid								X					X			
ECO-7D (0-0.5)		1505	G	Solid														X		
ECO-7C (0-0.5)	V	1514	G	Solid									X							

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	JOSHUA JANZEN	01/15/14 1430	GOLDER	Mike Cowen	1/15/14 1431	TAL
2	Mike Cowen	1/15/14 1700	TAL		1/16/14 1006	
3						

Custody Seals Intact: △ Yes △ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 5
Company: Golder Associates Inc.		Analysis Requested		Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			Preservation Codes:
City: Houston	TAT Requested (days): 5 WD TRRP			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			Other:
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE-FRISCO	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
ECO-TC (2-3)	01/14/14	1515	G	Solid														HOLD
ECO-TC (2-3) MS	↓	1515	G	Solid														HOLD
ECO-TC (2-3) MSD		1515	G	Solid														HOLD
DUP-15	↓	—	G	Solid									X	HOLD				HOLD
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOSHUA JANZEN	01/15/14 1430	GOLDER		1/15/14 1430	TAL
2		1/15/14 1700	TAL		1/16/14 1015	TAL
3						

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

5/9/2014

Upton, Cathy

From: Upton, Cathy
Sent: Tuesday, March 04, 2014 3:13 PM
To: Upton, Cathy
Subject: FW: Additional Metals in Soil

Dean,

We would like to report all five metals for the samples listed below. Do you think we could get revised reports for these by Wednesday?

Location ID	Sample ID	lab_sample_id	Date Sampled	Antimony	Arsenic	Cadı
2013-SL-C15	2013-SL-C15 (0-6)	600-84633-7	2013-12-19	NA	NA	2.10
MW-42	MW-42 (0.5-2)	600-85318-20	2014-01-08	NA	13.9	1.82
MW-27B	MW-27B (0-2)	600-85318-24	2014-01-09	NA	NA	9.85
D-11A	D11A (0-0.5)	600-85318-30	2014-01-09	NA	**27.2**	1.77
2013-BSA-2A	2013-BSA-2A(0-2)	600-85318-36	2014-01-09	NA	**34.9**	16.5
ECO-2A	ECO-2A (0-0.5)	600-85389-18	2014-01-09	NA	NA	3.29
ECO-8A	ECO-8A (0-0.5)	600-85389-20	2014-01-09	NA	NA	5.65
2013-AD-3	2013-AD-03 (0-0.5)	600-85389-23	2014-01-09	NA	NA	1.51
SCC-5B	SCC-5B (0-0.5)	600-85389-29	2014-01-10	NA	NA	2.48
2013-CUFT-10B	2013-CUFT-10B (0-0.5)	600-85389-63	2014-01-10	NA	NA	2.19
SRB-VS-11A	SRB-VS-11A (0-0.5)	600-85473-15	2014-01-10	NA	NA	1.44
2013-FWFS-5A	2013-FWFS-5A (0-2)	600-85473-34	2014-01-13	NA	NA	0.52
2013-MW-17B	2013-MW-17B (0-0.5)	600-85473-38	2014-01-13	NA	NA	5.19
SCC-10B	SCC-10B (0-0.5)	600-85473-39	2014-01-13	NA	NA	1.85
2013-C2L-06	2013-C2L-06 (0-0.5)	600-85636-21	2014-01-14	NA	**22.6**	3.68
ECO-7D	ECO-7D (0-0.5)	600-85636-39	2014-01-14	NA	15.1	2.30

Thanks,
Anne

Anne Faeth-Boyd, R.G., P.E. | Senior Project Engineer | **Golder Associates Inc.**
820 South Main Street, Suite 100, St. Charles, Missouri, USA 63301
T: +1 (636) 724-9191 | **F:** +1 (636) 724-9323 | **C:** +1 314 503-5179 | **E:** Anne_Faeth-Boyd@golder.com |
www.golder.com

Work Safe, Home Safe

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Please consider the environment before printing this email.

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-85636-1

Login Number: 85636

List Source: TestAmerica Houston

List Number: 1

Creator: Capps, Dana R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	2.5/2.6
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.	False	Received extra samples not listed on COC.
Samples are received within Holding Time.	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	Check done at department level as required.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-85636-2
Client Project/Site: Exide Recycling Center
Revision: 1

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
4/3/2014 4:54:27 PM
Cathy Upton, Project Management Assistant II
(713)690-4444
cathy.upton@testamericainc.com

Designee for

Dean Joiner, Project Manager II
(713)690-4444
dean.joiner@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: 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.

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-85636-2 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☐ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☐ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton		4/3/2014
Name (printed)	Signature	Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/3/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85636-2
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?			X		
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?			X		
		Were LCSs analyzed at the required frequency?			X		
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?			X		
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?			X		
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			R07C
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/3/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85636-2
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
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Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/3/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85636-2
Reviewer Name:	Dean A Joiner		

ER #[1]	Description
R07C	Method 6010B: 600-85636-41 MS failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected. Method 6010B: 600-85636-41 MSD failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected. Method 6010B: 600-85636-42 MS failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected. Method 6010B: 600-85636-42 MSD failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Detection Check Standard

Matrix:	Soil
Method:	6010B
Preparation:	3050
Date Analyzed:	12/30/2013
Date Prepared:	12/27/2013
Instrument:	Thermo 6500
TALS Batches:	123949, 123775p
Prep/Reagent Factor =	50
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.299654	0.5	0.36	25
Antimony	0.231553	0.45	0.5	2.5
Arsenic	0.217923	0.5	0.53	1
Barium	0.011322	0.03	0.04	1
Beryllium	0.014513	0.02	0.015	0.25
Boron	0.385535	0.6	0.56	20
Cadmium	0.025642	0.05	0.05	0.25
Calcium	0.86399	1.5	2.185	100
Chromium	0.050606	0.1	0.135	0.5
Cobalt	0.067622	0.1	0.09	0.5
Copper	0.173703	0.5	0.64	0.5
Iron	2.534007	4	3.76	20
Lead	0.104832	0.2	0.215	0.5
Selenium	0.258884	0.5	0.465	2
Manganese	0.038111	0.05	0.085	1.5
Molybdenum	0.136448	0.35	0.38	0.5
Nickel	0.116599	0.15	0.2	1
Silver	0.118848	0.2	0.15	0.5
Sodium	0.885548	2.4	3.135	100
Thallium	0.276988	0.7	0.73	1.5
Tin	0.08729	0.15	0.19	1
Titanium	0.014529	0.03	0.01	0.5
Vanadium	0.079068	0.15	0.125	0.5
Zinc	0.108432	0.2	0.305	1.5

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-2

Job ID: 600-85636-2

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-85636-2

Comments
This separate revised report was generated per the client request to report all 5 metals for sample 600-85636-22. See attached email.

Receipt
The samples were received on 1/16/2014 10:08 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.5º C and 2.6º C.

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-2

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU
Moisture	Percent Moisture	EPA	TAL HOU

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 HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-85636-22	2013-C2L-06 (1-2)	Solid	01/14/14 12:56	01/16/14 10:08

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-2

Client Sample ID: 2013-C2L-06 (1-2)
Date Collected: 01/14/14 12:56
Date Received: 01/16/14 10:08

Lab Sample ID: 600-85636-22
Matrix: Solid
Percent Solids: 85.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.257	U	2.77	0.257	mg/Kg	☼	02/20/14 17:00	02/21/14 14:27	1
Arsenic	**12.1**		1.11	0.242	mg/Kg	☼	02/20/14 17:00	02/21/14 14:27	1
Cadmium	**0.144**	**J**	0.277	0.0285	mg/Kg	☼	02/20/14 17:00	02/21/14 14:27	1
Lead	**23.4**		0.555	0.116	mg/Kg	☼	02/20/14 17:00	02/21/14 14:27	1
Selenium	0.287	U	2.22	0.287	mg/Kg	☼	02/20/14 17:00	02/21/14 14:27	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15**	**H**	1.0	1.0	%			02/19/14 13:24	1
Percent Solids	**85**	**H**	1.0	1.0	%			02/19/14 13:24	1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

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
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)

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-127810/1-A
Matrix: Solid
Analysis Batch: 127873

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 127810

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		02/20/14 17:00	02/21/14 13:27	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		02/20/14 17:00	02/21/14 13:27	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		02/20/14 17:00	02/21/14 13:27	1
Lead	0.105	U	0.500	0.105	mg/Kg		02/20/14 17:00	02/21/14 13:27	1
Selenium	0.259	U	2.00	0.259	mg/Kg		02/20/14 17:00	02/21/14 13:27	1

Lab Sample ID: LCSSRM 600-127810/2-A
Matrix: Solid
Analysis Batch: 127873

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 127810

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony			88.2	59.82		mg/Kg		67.8	45.4 - 231.3		
Arsenic			99.6	99.77		mg/Kg		100.2	80.8 - 119.5		
Cadmium			182	188.2		mg/Kg		103.4	81.9 - 118.1		
Lead			115	116.7		mg/Kg		101.5	81.8 - 119.1		
Selenium			150	152.7		mg/Kg		101.8	77.3 - 122.7		

Lab Sample ID: 600-85636-41 MS
Matrix: Solid
Analysis Batch: 127873

Client Sample ID: ECO-7C (2-3)
Prep Type: Total/NA
Prep Batch: 127810

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.266		57.5	13.13	N1	mg/Kg	☼	23	75 - 125
Arsenic	9.41		57.5	67.34		mg/Kg	☼	101	75 - 125
Cadmium	0.0294	U	28.8	30.11		mg/Kg	☼	105	75 - 125
Lead	12.7		57.5	75.97		mg/Kg	☼	110	75 - 125
Selenium	0.872		57.5	57.04		mg/Kg	☼	98	75 - 125

Lab Sample ID: 600-85636-41 MSD
Matrix: Solid
Analysis Batch: 127873

Client Sample ID: ECO-7C (2-3)
Prep Type: Total/NA
Prep Batch: 127810

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.266		55.0	13.47	N1	mg/Kg	☼	24	75 - 125	3	20
Arsenic	9.41		55.0	64.67		mg/Kg	☼	100	75 - 125	4	20
Cadmium	0.0294	U	27.5	29.20		mg/Kg	☼	106	75 - 125	3	20
Lead	12.7		55.0	73.53		mg/Kg	☼	110	75 - 125	3	20
Selenium	0.872		55.0	55.20		mg/Kg	☼	99	75 - 125	3	20

Lab Sample ID: 600-85636-41 DU
Matrix: Solid
Analysis Batch: 127873

Client Sample ID: ECO-7C (2-3)
Prep Type: Total/NA
Prep Batch: 127810

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Antimony	0.266			0.251	U	mg/Kg	☼			NC	20

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

Lab Sample ID: 600-85636-41 DU
Matrix: Solid
Analysis Batch: 127873

Client Sample ID: ECO-7C (2-3)
Prep Type: Total/NA
Prep Batch: 127810

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Arsenic	9.41			9.233		mg/Kg	☼			2	20
Cadmium	0.0294	U		0.0278	U	mg/Kg	☼			NC	20
Lead	12.7			12.65		mg/Kg	☼			0.6	20
Selenium	0.872			0.9205	J	mg/Kg	☼			5	20

Lab Sample ID: MB 600-128313/1-A
Matrix: Solid
Analysis Batch: 128420

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 128313

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		02/27/14 13:52	02/28/14 11:03	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		02/27/14 13:52	02/28/14 11:03	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		02/27/14 13:52	02/28/14 11:03	1
Lead	0.105	U	0.500	0.105	mg/Kg		02/27/14 13:52	02/28/14 11:03	1
Selenium	0.259	U	2.00	0.259	mg/Kg		02/27/14 13:52	02/28/14 11:03	1

Lab Sample ID: LCSSRM 600-128313/2-A
Matrix: Solid
Analysis Batch: 128420

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 128313

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony			88.2	81.89		mg/Kg		92.8	45.4 - 231.3		
Arsenic			99.6	99.33		mg/Kg		99.7	80.8 - 119.5		
Cadmium			182	178.3		mg/Kg		98.0	81.9 - 118.1		
Lead			115	114.9		mg/Kg		99.9	81.8 - 119.1		
Selenium			150	147.9		mg/Kg		98.6	77.3 - 122.7		

Lab Sample ID: 600-85636-42 MS
Matrix: Solid
Analysis Batch: 128420

Client Sample ID: DUP-15
Prep Type: Total/NA
Prep Batch: 128313

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.268		57.8	18.47	N1	mg/Kg	☼	32	75 - 125
Arsenic	10.0		57.8	59.76		mg/Kg	☼	86	75 - 125
Cadmium	0.168	J	28.9	25.42		mg/Kg	☼	87	75 - 125
Lead	11.9		57.8	65.43		mg/Kg	☼	93	75 - 125
Selenium	1.12		57.8	50.06		mg/Kg	☼	85	75 - 125

Lab Sample ID: 600-85636-42 MSD
Matrix: Solid
Analysis Batch: 128420

Client Sample ID: DUP-15
Prep Type: Total/NA
Prep Batch: 128313

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.268		54.6	18.30	N1	mg/Kg	☼	34	75 - 125	1	20
Arsenic	10.0		54.6	59.41		mg/Kg	☼	90	75 - 125	1	20

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

Lab Sample ID: 600-85636-42 MSD — **Client Sample ID: DUP-15**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 128420 — **Prep Batch: 128313**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	0.168	J	27.3	24.34		mg/Kg	☼	89	75 - 125	4	20
Lead	11.9		54.6	63.72		mg/Kg	☼	95	75 - 125	3	20
Selenium	1.12		54.6	47.89		mg/Kg	☼	86	75 - 125	4	20

Lab Sample ID: 600-85636-42 DU — **Client Sample ID: DUP-15**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 128420 — **Prep Batch: 128313**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.268		0.265	U	mg/Kg	☼	NC	20
Arsenic	10.0		10.31		mg/Kg	☼	3	20
Cadmium	0.168	J	0.1833	J	mg/Kg	☼	9	20
Lead	11.9		12.01		mg/Kg	☼	1	20
Selenium	1.12		1.100	J	mg/Kg	☼	2	20

Method: Moisture - Percent Moisture

Lab Sample ID: 600-85636-42 DU — **Client Sample ID: DUP-15**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 127707

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	14	H	14		%		1	20
Percent Solids	86	H	86		%		0.2	20

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-2

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Antimony	2.50	0.232	mg/Kg	6010B
Arsenic	1.00	0.218	mg/Kg	6010B
Cadmium	0.250	0.0256	mg/Kg	6010B
Lead	0.500	0.105	mg/Kg	6010B
Selenium	2.00	0.259	mg/Kg	6010B

General Chemistry

Analyte	MQL	MDL	Units	Method
Percent Moisture	1.0	1.0	%	Moisture
Percent Solids	1.0	1.0	%	Moisture

QC Association Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-2

Metals

Prep Batch: 127810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85636-22	2013-C2L-06 (1-2)	Total/NA	Solid	3050B	

Analysis Batch: 127873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85636-22	2013-C2L-06 (1-2)	Total/NA	Solid	6010B	127810

General Chemistry

Analysis Batch: 127707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85636-22	2013-C2L-06 (1-2)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-2

Client Sample ID: 2013-C2L-06 (1-2)
Date Collected: 01/14/14 12:56
Date Received: 01/16/14 10:08

Lab Sample ID: 600-85636-22
Matrix: Solid
Percent Solids: 85.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	127810	02/20/14 17:00	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	127873	02/21/14 14:27	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			127707	02/19/14 13:24	AYS	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-2

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0759	08-04-14
Louisiana	NELAP	6	30643	06-30-14
Oklahoma	State Program	6	1309	08-31-14
Texas	NELAP	6	T104704223	10-31-14
USDA	Federal		P330-08-00217	04-01-14 *
Utah	NELAP	8	TX00083	10-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica Houston
3310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

600-85636 Chain of Custody

4/3/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com	
Company: Golder Associates Inc.			Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:		
City: Houston	TAT Requested (days): 5 WD TRRP		
State, Zip: TX, 77073			
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested		
Email: Christina_Higginbotham@golder.com	WO #:		
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831		
Site: EXIDE-FRISCO	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Pb				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N						
2013-STB-4A (2-4)	01/13/14	1607	G	Solid													X					
2013-STB-4A (2-4) MS	01/13/14	1607	G	Solid													X					
2013-STB-4A (2-4) MSD	01/13/14	1607	G	Solid													X					
2013-RMSB-5A (5-7)	01/13/14	1628	G	Solid													X					
2013-RRS-4A-A (3-4)	01/13/14	1652	G	Solid									X									
2013-RRS-4A-A (4-5)	01/13/14	1653	G	Solid																		HOLD
2013-C2L-05 (0-0.5)	01/14/14	0818	G	Solid										X								
2013-C2L-05 (1-2)	01/14/14	0819	G	Solid										(X)	HOLD							HOLD
2013-C2L-05 (4-5)	01/14/14	0820	G	Solid																		HOLD
2013-C2L-10 (0-0.5)	01/14/14	0906	G	Solid										X								
2013-C2L-10 (1-2)	01/14/14	0907	G	Solid																		HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JAMES	01/15/14 1430	GOLDER		1/15/14 1430	TAL
	1/15/14 1700	TAL		1/16/14 1008	TAL

Custody Seals Intact: △ Yes △ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

4/3/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-908-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 2
Company: Golder Associates Inc.				Job #: 13020086

Address: 500 Century Plaza Drive Suite 190	Due Date Requested:
City: Houston	TAT Requested (days): 5 WD TRRP
State, Zip: TX, 77073	
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested
Email: Christina_Higginbotham@golder.com	WO #:
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831
Site: EXIDE-FRISCO	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
2013-C2L-10 (1-2) MS	01/14/14	0907	G	Solid														HOLD
2013-C2L-10 (1-2) MSD	01/14/14	0907	G	Solid														HOLD
DUP-13	01/14/14	—	G	Solid										X	HOLD			HOLD
2013-C2L-10 (4-5)	01/14/14	0908	G	Solid														HOLD
2013-C2L-09 (0-0.5)	01/14/14	0945	G	Solid										X				
2013-C2L-09 (1-2)	01/14/14	0946	G	Solid														HOLD
2013-C2L-09 (4-5)	01/14/14	0947	G	Solid														HOLD
2013-C2L-04 (0-0.5)	01/14/14	1024	G	Solid										X				
2013-C2L-04 (1-2)	01/14/14	1025	G	Solid														HOLD
2013-C2L-04 (4-5)	01/14/14	1026	G	Solid														HOLD
2013-C2L-02 (0-0.5)	01/14/14	1138	G	Solid										X				

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/15/14 1430	GOLDER	[signature]	1/15/14 1430	TAL
[signature]	1/15/14 1700	TAL	[signature]	1/16 1104 1005	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

4/3/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 3
Company: Golder Associates Inc.				Job #: 13020086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE - FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
2013-C2L-02 (1-2)	01/14/14	1139	G	Solid														HOLD
2013-C2L-02 (4-5)		1140	G	Solid														HOLD
2013-C2L-06 (0-0.5)		1255	G	Solid										X				
2013-C2L-06 (1-2)		1256	G	Solid														HOLD
2013-C2L-06 (4-5)		1257	G	Solid														HOLD
2013-C2L-07 (0-0.5)		1328	G	Solid										X				
2013-C2L-07 (1-2)		1329	G	Solid														HOLD
2013-C2L-07 (4-5)		1330	G	Solid														HOLD
2013-C2L-08 (0-0.5)		1405	G	Solid										X				
2013-C2L-08 (1-2)		1406	G	Solid														HOLD
2013-C2L-08 (4-5)	V	1407	G	Solid														HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	~~01/14/14~~ 01/15/14 1430	GOLDER	[signature]	1/15/14 1430	TAL
[signature]	1/15/14 1700	TAL	[signature]	1/16/14 1008	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

4/3/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 4
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5 WD TRRP			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE - FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Se	6010B - As, Cd, Pb		Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	N	N	N	N	N	N	N	N					
2013-C2L-08 (15-17)	01/14/14	1416	G	Solid								X					X				
2013-C2L-08 (17-18)		1417	G	Solid																	HOLD
2013-C2L-08 (18-20)		1418	G	Solid								X					X				
2013-C2L-01 (0-0.5)		1435	G	Solid										X							
2013-C2L-01 (1-2)		1436	G	Solid																	HOLD
2013-C2L-01 (4-5)		1437	G	Solid																	HOLD
2013-C2L-01 (10-12)		1440	G	Solid								X					X				
2013-C2L-01 (12-13)		1441	G	Solid								X					X				
2013-C2L-01 (13-15)		1442	G	Solid								X					X				
ECO-7D (0-0.5)		1505	G	Solid														X			
ECO-7C (0-0.5)	V	1514	G	Solid									X								

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	JOSHUA JANZEN	01/15/14 1430	GOLDER	Mike Cowen	1/15/14 1431	TAL
2	Mike Cowen	1/15/14 1700	TAL		1/16/14 1006	
3						

Custody Seals Intact: △ Yes △ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

4/3/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 5
Company: Golder Associates Inc.				Job #: 1302086

Address: 500 Century Plaza Drive Suite 190	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Houston	TAT Requested (days): 5 WD TRRP		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: TX, 77073			
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested		
Email: Christina_Higginbotham@golder.com	WO #:		Other:
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831		
Site: EXIDE-FRISCO	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N		
ECO-TC (2-3)	01/14/14	1515	G	Solid														HOLD
ECO-TC (2-3) MS	↓	1515	G	Solid														HOLD
ECO-TC (2-3) MSD		1515	G	Solid														HOLD
DUP-15	↓	—	G	Solid									X	HOLD				HOLD
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														
			G	Solid														

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	01/15/14 1430	GOLDER	[signature]	1/15/14 1430	TAL
[signature]	1/15/14 1700	TAL	[signature]	1/16/14 1015	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Upton, Cathy

From: Faeth-Boyd, Anne [Anne_Faeth-Boyd@golder.com]
Sent: Thursday, March 27, 2014 3:52 PM
To: Upton, Cathy
Cc: Joiner, Dean; Higginbotham, Christina; Forthaus, Brett; Thomas, Jim
Subject: Additional Metals Reporting
Follow Up Flag: Follow up
Flag Status: Blue

Cathy,

Could you please send revised reports to include all five metals (lead, cadmium, arsenic, antimony, selenium) for the following samples:

2013-AD-03 (0.5-2)	600-85389-24	2014-01-09
2013-C2L-06 (1-2)	600-85636-22	2014-01-14
2013-CUFT-5B (0-0.5)	600-85389-36	2014-01-10
2013-NT-02 (0-0.5)	600-85473-23	2014-01-10
2013-SDA-4B (0-0.5)	600-85389-28	2014-01-10
E-11C (0-0.5)	600-85318-29	2014-01-09
ECO-10A (0-0.5)	600-85473-16	2014-01-10
ECO-1A (0-0.5)	600-85389-16	2014-01-09
ECO-2A (0-0.5)	600-85389-18	2014-01-09
ECO-4B (0-0.5)	600-85473-41	2014-01-13
SRB-VS-9E (0-0.5)	600-85473-14	2014-01-10

Thanks,
Anne

Anne Faeth-Boyd, R.G., P.E. | Senior Project Engineer | **Golder Associates Inc.**
820 South Main Street, Suite 100, St. Charles, Missouri, USA 63301
T: +1 (636) 724-9191 | **F:** +1 (636) 724-9323 | **C:** +1 314 503-5179 | **E:** Anne_Faeth-Boyd@golder.com | **www.golder.com**

Work Safe, Home Safe

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Please consider the environment before printing this email.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-85636-3
Client Project/Site: Exide Recycling Center

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
3/9/2014 9:02:45 PM
Cathy Upton, Project Management Assistant II
(713)690-4444
cathy.upton@testamericainc.com

Designee for

Dean Joiner, Project Manager II
(713)690-4444
dean.joiner@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: 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.

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-85636-3 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☐ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☐ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton		3/9/2014
Name (printed)	Signature	Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/9/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85636-3
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		Were % moisture (or solids) reported for all soil and sediment samples?			X		
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?			X		
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?			X		
		Were analytical duplicates analyzed at the appropriate frequency?			X		
		Were RPDs or relative standard deviations within the laboratory QC limits?			X		
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/9/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85636-3
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	3/9/2014
Project Name:	Exide Recycling Center	Laboratory Job Number:	600-85636-3
Reviewer Name:	Dean A Joiner		

ER #[1]	Description

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Detection Check Standard

Matrix:	Water
Method:	200.7/6010
Preparation:	200.7P/3010
Date Analyzed:	12/31/2013
Date Prepared:	12/27/2013
Instrument:	Spectro01
TALs Batches:	124030, 123788p
Units:	mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.028176	0.5
Antimony	0.0063	0.01	0.010016	0.05
Arsenic	0.0033	0.01	0.008253	0.01
Barium	0.0022	0.005	0.004098	0.02
Beryllium	0.00134	0.002	0.004019	0.005
Boron	0.0077	0.02	0.019829	0.2
Cadmium	0.00073	0.001	0.001	0.005
Calcium	0.022	0.05	0.060829	1
Chromium	0.0016	0.002	0.003835	0.01
Cobalt	0.00063	0.001	0.000965	0.01
Copper	0.0014	0.002	0.002451	0.01
Iron	0.087	0.1	0.002258	0.4
Lithium	0.0024	0.005	0.006107	0.2
Lead	0.0029	0.005	0.005478	0.01
Selenium	0.0042	0.01	0.009953	0.04
Manganese	0.00084	0.002	0.001988	0.01
Molybdenum	0.0027	0.005	0.005867	0.01
Nickel	0.00179	0.005	0.005669	0.01
Silver	0.0012	0.0025	0.001901	0.01
Sodium	0.02	0.05	0.088115	1
Strontium	0.0005	0.001	0.000897	0.005
Thallium	0.0078	0.02	0.021503	0.03
Tin	0.0028	0.005	0.005708	0.01
Titanium	0.0011	0.002	0.001905	0.01
Vanadium	0.0017	0.002	0.003578	0.01
Zinc	0.0022	0.005	0.004189	0.01

Job ID: 600-85636-3

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-85636-3

Comments
No additional comments.

Receipt
The samples were received on 1/16/2014 10:08 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.5º C and 2.6º C.

Except:

The following sample(s) was activated for SPLP Metals analysis by the client on 03/03/14: 2013-C2L-06 (0-0.5) (600-85636-21). This analysis was not originally requested on the chain-of-custody (COC). See attached email.

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-3

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU

Protocol References:

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

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-85636-21	2013-C2L-06 (0-0.5)	Solid	01/14/14 12:55	01/16/14 10:08

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-3

Client Sample ID: 2013-C2L-06 (0-0.5)
Date Collected: 01/14/14 12:55
Date Received: 01/16/14 10:08

Lab Sample ID: 600-85636-21
Matrix: Solid

Method: 6010B - Metals (ICP) - SPLP West

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.0201		0.0100	0.00290	mg/L		03/05/14 17:17	03/06/14 15:21	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-3

Qualifiers

Metals

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

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
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)

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-3

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-128791/1-A
Matrix: Solid
Analysis Batch: 128837

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 128791

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00290	U	0.0100	0.00290	mg/L		03/05/14 17:09	03/06/14 13:22	1

Lab Sample ID: LCS 600-128791/2-A
Matrix: Solid
Analysis Batch: 128837

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 128791

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	1.00	0.9672		mg/L		97	80 - 120

Lab Sample ID: LB 600-128749/1-C
Matrix: Solid
Analysis Batch: 128837

Client Sample ID: Method Blank
Prep Type: SPLP West
Prep Batch: 128791

Analyte	LB Result	LB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.00290	U	0.0100	0.00290	mg/L		03/05/14 17:09	03/06/14 14:46	1

Lab Sample ID: 600-85636-21 MS
Matrix: Solid
Analysis Batch: 128837

Client Sample ID: 2013-C2L-06 (0-0.5)
Prep Type: SPLP West
Prep Batch: 128791

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	0.0201		1.00	1.000		mg/L		98	75 - 125

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-3

Method: 6010B - Metals (ICP) - SPLP West

Analyte	MQL	MDL	Units	Method
Lead	0.0100	0.00290	mg/L	6010B

QC Association Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-3

Metals

Leach Batch: 128749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85636-21	2013-C2L-06 (0-0.5)	SPLP West	Solid	1312	
600-85636-21 MS	2013-C2L-06 (0-0.5)	SPLP West	Solid	1312	
LB 600-128749/1-C	Method Blank	SPLP West	Solid	1312	

Prep Batch: 128791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85636-21	2013-C2L-06 (0-0.5)	SPLP West	Solid	3010A	128749
600-85636-21 MS	2013-C2L-06 (0-0.5)	SPLP West	Solid	3010A	128749
LB 600-128749/1-C	Method Blank	SPLP West	Solid	3010A	128749
LCS 600-128791/2-A	Lab Control Sample	Total/NA	Solid	3010A	
MB 600-128791/1-A	Method Blank	Total/NA	Solid	3010A	

Analysis Batch: 128837

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-85636-21	2013-C2L-06 (0-0.5)	SPLP West	Solid	6010B	128791
600-85636-21 MS	2013-C2L-06 (0-0.5)	SPLP West	Solid	6010B	128791
LB 600-128749/1-C	Method Blank	SPLP West	Solid	6010B	128791
LCS 600-128791/2-A	Lab Control Sample	Total/NA	Solid	6010B	128791
MB 600-128791/1-A	Method Blank	Total/NA	Solid	6010B	128791

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-3

Client Sample ID: 2013-C2L-06 (0-0.5)
Date Collected: 01/14/14 12:55
Date Received: 01/16/14 10:08

Lab Sample ID: 600-85636-21
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
SPLP West	Leach	1312			1.0 g	1.0 mL	128749	03/04/14 18:27	CAD	TAL HOU
SPLP West	Prep	3010A			50 mL	50 mL	128791	03/05/14 17:17	NER	TAL HOU
SPLP West	Analysis	6010B		1	50 mL	50 mL	128837	03/06/14 15:21	DCL	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center

TestAmerica Job ID: 600-85636-3

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0759	08-04-14
Louisiana	NELAP	6	30643	06-30-14
Oklahoma	State Program	6	1309	08-31-14
Texas	NELAP	6	T104704223	10-31-14
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	TX00083	10-31-14

TestAmerica Houston
3310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

600-85636 Chain of Custody

3/9/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com	
Company: Golder Associates Inc.			Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:		
City: Houston	TAT Requested (days): 5 WD TRRP		
State, Zip: TX, 77073			
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested		
Email: Christina_Higginbotham@golder.com	WO #:		
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831		
Site: EXIDE-FRISCO	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Pb				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N						
2013-STB-4A (2-4)	01/13/14	1607	G	Solid													X					
2013-STB-4A (2-4) MS	01/13/14	1607	G	Solid													X					
2013-STB-4A (2-4) MSD	01/13/14	1607	G	Solid													X					
2013-RMSB-5A (5-7)	01/13/14	1628	G	Solid													X					
2013-RRS-4A-A (3-4)	01/13/14	1652	G	Solid									X									
2013-RRS-4A-A (4-5)	01/13/14	1653	G	Solid																		HOLD
2013-C2L-05 (0-0.5)	01/14/14	0818	G	Solid										X								
2013-C2L-05 (1-2)	01/14/14	0819	G	Solid										(X)	HOLD							HOLD
2013-C2L-05 (4-5)	01/14/14	0820	G	Solid																		HOLD
2013-C2L-10 (0-0.5)	01/14/14	0906	G	Solid										X								
2013-C2L-10 (1-2)	01/14/14	0907	G	Solid																		HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JAMES	01/15/14 1430	GOLDER		1/15/14 1430	TAL
	1/15/14 1700	TAL		1/16/14 1008	TAL

Custody Seals Intact: △ Yes △ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-908-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 2
Company: Golder Associates Inc.		**Analysis Requested**		Job #: 13020086

Address: 500 Century Plaza Drive Suite 190	Due Date Requested:	
City: Houston	TAT Requested (days): 5 WD TRRP	
State, Zip: TX, 77073		
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested	
Email: Christina_Higginbotham@golder.com	WO #:	
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831	
Site: EXIDE-FRISCO	SSOW#:	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N					
2013-C2L-10 (1-2) MS	01/14/14	0907	G	Solid																	HOLD
2013-C2L-10 (1-2) MSD	01/14/14	0907	G	Solid																	HOLD
DUP-13	01/14/14	—	G	Solid										X	HOLD						HOLD
2013-C2L-10 (4-5)	01/14/14	0908	G	Solid																	HOLD
2013-C2L-09 (0-0.5)	01/14/14	0945	G	Solid										X							
2013-C2L-09 (1-2)	01/14/14	0946	G	Solid																	HOLD
2013-C2L-09 (4-5)	01/14/14	0947	G	Solid																	HOLD
2013-C2L-04 (0-0.5)	01/14/14	1024	G	Solid										X							
2013-C2L-04 (1-2)	01/14/14	1025	G	Solid																	HOLD
2013-C2L-04 (4-5)	01/14/14	1026	G	Solid																	HOLD
2013-C2L-02 (0-0.5)	01/14/14	1138	G	Solid										X							

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	JOSHUA JANZEN	01/15/14 1430	GOLDER	[signature]	1/15/14 1430	TAL
2	[signature]	1/15/14 1700	TAL	[signature]	1/16/14 1005	TAL
3						

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

3/9/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 3
Company: Golder Associates Inc.				Job #: 13020086

Address: 500 Century Plaza Drive Suite 190	Due Date Requested:
City: Houston	TAT Requested (days): 5 WD TRRP
State, Zip: TX, 77073	
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested
Email: Christina_Higginbotham@golder.com	WO #:
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831
Site: EXIDE - FRISCO	SSOW#:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB				Total Number of containers	Special Instructions/Note:
			Preservation Code:		N	N	N	N	N	N	N	N	N	N	N	N					
2013-C2L-02 (1-2)	01/14/14	1139	G	Solid																	HOLD
2013-C2L-02 (4-5)		1140	G	Solid																	HOLD
2013-C2L-06 (0-0.5)		1255	G	Solid										X							
2013-C2L-06 (1-2)		1256	G	Solid																	HOLD
2013-C2L-06 (4-5)		1257	G	Solid																	HOLD
2013-C2L-07 (0-0.5)		1328	G	Solid										X							
2013-C2L-07 (1-2)		1329	G	Solid																	HOLD
2013-C2L-07 (4-5)		1330	G	Solid																	HOLD
2013-C2L-08 (0-0.5)		1405	G	Solid										X							
2013-C2L-08 (1-2)		1406	G	Solid																	HOLD
2013-C2L-08 (4-5)	V	1407	G	Solid																	HOLD

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
JOSHUA JANZEN	~~01/14/14~~ 01/15/14 1430	GOLDER		1/15/14 1430	TAL
	1/15/14 1700			1/16/14 1008	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

3/9/2014

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Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 4
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
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State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831			
Site: EXIDE - FRISCO	SSOW#:			

Analysis Requested

Preservation Codes:

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B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
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L - EDA	Z - other (specify)

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Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB	6010B - Se	6010B - As, Cd, Pb	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N				
2013-C2L-08 (15-17)	01/14/14	1416	G	Solid								X					X			
2013-C2L-08 (17-18)		1417	G	Solid																HOLD
2013-C2L-08 (18-20)		1418	G	Solid								X					X			
2013-C2L-01 (0-0.5)		1435	G	Solid										X						
2013-C2L-01 (1-2)		1436	G	Solid																HOLD
2013-C2L-01 (4-5)		1437	G	Solid																HOLD
2013-C2L-01 (10-12)		1440	G	Solid								X					X			
2013-C2L-01 (12-13)		1441	G	Solid								X					X			
2013-C2L-01 (13-15)		1442	G	Solid								X					X			
ECO-7D (0-0.5)		1505	G	Solid														X		
ECO-7C (0-0.5)	↓	1514	G	Solid									X							

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	JOSHUA JANZEN	01/15/14 1430	GOLDER	Mike Cowen	1/15/14 1430	TAL
2	Mike Cowen	1/15/14 1700	TAL		1/16/14 1006	
3						

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

3/9/2014

Client Information	Sampler: CHRIS TREVINO	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-25571-9015.1
Client Contact: Christina Higginbotham	Phone: 817-808-8144	E-Mail: dean.joiner@testamericainc.com		Page: Page 5
Company: Golder Associates Inc.		**Analysis Requested**		Job #: 1302086

Address: 500 Century Plaza Drive Suite 190	Due Date Requested:	
City: Houston	TAT Requested (days): 5 WD TRRP	
State, Zip: TX, 77073		
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested	
Email: Christina_Higginbotham@golder.com	WO #:	
Project Name: Exide Recycling Center, Frisco TX Project	Project #: 60004831	
Site: EXIDE-FRISCO	SSOW#:	

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A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260B - Target Compound List	8270C_LL - (MOD) Target Compound List	8270C_LL - (MOD) PAH List	TX_1005 - Local Method	TX_1006 - Local Method (Hold for TPH 1005 results)	9056_28D - Sulfate	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	Moisture	8082 PCB				Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N	N	N					
ECO-TC (2-3)	01/14/14	1515	G	Solid																	HOLD
ECO-TC (2-3) MS	↓	1515	G	Solid																	HOLD
ECO-TC (2-3) MSD	↓	1515	G	Solid																	HOLD
DUP-15	↓	—	G	Solid									X	HOLD							HOLD
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	
			G	Solid																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	JOSHUA JANZEN	01/15/14 1430	GOLDER		1/15/14 1430	TAL
2		1/15/14 1700	TAL		1/16/14 1015	TAL
3		Date/Time:	Company		Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Upton, Cathy

From: Joiner, Dean
Sent: Sunday, March 02, 2014 10:27 PM
To: Upton, Cathy
Subject: FW: Exide - SPLP Request
Importance: High
Follow Up Flag: Follow up
Flag Status: Red

Cathy, Please update. Thanks!

From: Higginbotham, Christina [mailto:Christina_Higginbotham@golder.com]
Sent: Sunday, March 02, 2014 6:21 PM
To: Joiner, Dean
Subject: Exide - SPLP Request
Importance: High

Dean, we would like to request the following samples be run for SPLP. The lab sample IDs are highlighted below. Can you have these results by Friday (5 day)? Please call me in the morning to discuss.

Sample	Depth Interval	Concentration (mg/kg)	Contaminant
2013-MB-5 / 600-85318-7	0.5-5	46.6	Cadmium
2013-NDA-C21 /600-84629-11	0-6	49.9	Cadmium
2013-C2L-06 / 600-85636-21	0-0.5	584	Lead
2013-AD-03 /600-85389-23	0-0.5	734	Lead
2013-NT-02 / 600-85473-23	0-0.5	837	Lead
2013-SDA-3B / 600-85389-21	0-0.5	1000	Lead
SCC-5B / 600-85389-29	0-0.5	1400	Lead
MW-33/2013-FWFS-5B / 600-85473-1	1-2	1420	Lead
2013-CUFT-5B / 600-85389-36	0-0.5	1340	Lead

Christina Higginbotham, P.G. | Remediation Project Manager | **Golder Associates Inc.**
500 Century Plaza Drive, Suite 190, Houston, Texas, USA 77073
T: +1 (281) 821-6868 | **F:** +1 (281) 821-6870 | **C:** +1 (281) 620-7835 | **E:** CHigginbotham@golder.com | **www.golder.com**

Work Safe, Home Safe

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delete all copies. Electronic media is susceptible to unauthorized modification, deterioration, and incompatibility. Accordingly, the electronic media version of any work product may not be relied upon.

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Please consider the environment before printing this email.

From: Joiner, Dean [mailto:dean.joiner@testamericainc.com]
Sent: Friday, February 28, 2014 1:02 AM
To: Collier, Brenda; Higginbotham, Christina; Xi, Jing Song
Subject: Final Invoice Ready For Payment - Files from 600-86460-3 Exide Recycling Center - Water 6020

Please let us know if we met your expectations by rating the service you received from TestAmerica on this project by visiting our website at: Project Feedback

DEAN A JOINER

TestAmerica Houston
THE LEADER IN ENVIRONMENTAL TESTING

Tel: 713.690.4444
www.testamericainc.com

Reference: [183891]
Attachments: 1

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-85636-3

Login Number: 85636

List Source: TestAmerica Houston

List Number: 1

Creator: Capps, Dana R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	2.5/2.6
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.	False	Received extra samples not listed on COC.
Samples are received within Holding Time.	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	Check done at department level as required.

Sample Dates:	March 31, 2014	**Project No.:**	1302086
Laboratory:	Test America (TLAP Certification T104704223)	**Client:**	Exide Technologies Inc.
Work Orders:	Work Orders: 600-89701-1, 600-89701-3, 600-89701-4		
Intended Use	Affected Property Assessment Report (APAR)		
Site:	Exide Former Operating Plant (FOP), 7471 5th Street, Frisco, TX		

1.0 TESTS/ METHODS

Total Metals by SW-846 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP)

2.0 SAMPLES

56 soil samples, one rinsate blank, three field duplicates, and three field MS/MSD pairs. Of these, 26 soil samples, two duplicates and two field MS/MSD pairs were archived by the laboratory and results were not reported. See Table 1 for a complete cross-referenced listing of samples.

Golder completed a review of the above chemical analysis data for conformance with the requirements of the Texas Risk Reduction Program (TRRP) guidance document, Review and Reporting of COC Concentration Data (RGG-366/TRRP-13 Revised May 2010) and for adherence to project objectives. The results of the review are discussed in this data usability summary (DUS).

Golder completed the review using the following laboratory and project submittals:

- Laboratory reportable data as defined in TRRP-13;
- Laboratory review checklists (LRC) with the associated exception reports;
- Laboratory Electronic Data Deliverable (EDD); and
- Project field notes from the sampling event.

The review of the reportable data included the quality control (QC) parameters listed below, as required per TRRP-13, using the applicable analytical method and project requirements:

- Data Completeness
- Chain-of-Custody Procedures
- Sample Condition - Holding Time, Preservation, and Containers
- Field Procedures
- Results Reporting Procedures
- Laboratory and Field QC Blanks

- Laboratory Control Spike and Matrix Spike Recoveries
- Surrogate Recoveries
- Laboratory and Field Duplicate Precision

Additionally, Golder used the LRC to evaluate the following QC parameters:

- Method Quantitation Limits (MQLs)
- Method Detection Limits (MDLs)
- Instrument Tuning, Calibration, and Performance
- Internal Standards

Criteria used for this data usability review are as follows:

- Inorganics: 70-130% spike recovery (and not less than 30% or data is rejected) and ±MQL difference or 30% RPD (for laboratory duplicates) as recommended in TRRP-13; and
- Soil Samples: ±3x MQL difference (if either result is less than 5x MQL) or 50% RPD (for field duplicates) as recommended in TRRP-13.

If an item was found outside of the review criteria, the reviewer applied a data qualifier (DQ) and bias code to the results for the affected samples in accordance with TRRP-13. A list of all qualified results and definitions of the qualifier and bias codes are given in Table 2.

GLOSSARY OF TERMS

The following definitions apply for terms related to analyte reporting limits:

MDL (Method Detection Limit) – the minimum concentration of an analyte that the laboratory can measure and report with 99% confidence that the analyte concentration is greater than zero. The MDL is determined by the laboratory for each analyte in a given reagent matrix (water or soil) generally using the procedures specified in 40 CFR Part 136, Appendix B. It is a measure of the concentration an instrument can detect or 'see' in a given reagent matrix. TRRP-13 requires that the laboratory routinely check the MDL for reasonableness.

SDL (Sample Detection Limit) – the MDL adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes than prescribed in the analytical method, and taking into account sample characteristics, sample preparation, and analytical adjustments including dry-weight adjustments. It is a measure of the concentration an instrument can detect or 'see' in a given sample. For TRRP, non-detects are reported using the SDL. This term was originally called the SQL (Sample Quantitation Limit) before the TRRP rule revisions effective March 19, 2007.

Unadjusted MQL (Method Quantitation Limit) – the lowest non-zero concentration standard in the laboratory's initial calibration curve calculated using the normal aliquot sizes and final volumes prescribed in the analytical method. The unadjusted MQL is reported by the laboratory for each analyte in a given matrix (water or soil). It is a measure of the concentration an instrument can accurately measure in a typical sample. Per TRRP, the Unadjusted MQLs should be below the Levels of Required Performance (LORPs) for purposes of assessment as well as demonstration of conformance with critical Protective Concentration Levels (PCLs).

MQL – the unadjusted MQL adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes than prescribed in the analytical method, and takes into account sample characteristics, sample preparation, and analytical adjustments including dry-weight adjustments. It is a measure of the concentration an instrument can accurately measure in a given sample. Analytes with concentrations above the SDL but below the MQL, though present in the sample, may not be accurately measured and are thus flagged as estimated (J).

LABORATORY CERTIFICATION

At the time the laboratory data were generated for this project, the laboratory was NELAC accredited under the Texas Laboratory Accreditation Program (TLAP) for the matrices, methods and parameters of analysis requested on the chain-of-custody forms. A copy of the applicable pages of the laboratory's National Environmental Laboratory Accreditation Program (NELAP) certificate valid during the period in which the laboratory generated the data in this report is included in Appendix 10.5.

USABILITY SUMMARY

1. Usability of Unqualified Non-Detects – Non-detects are reported at the sample detection limit (SDL) as required per TRRP. Additionally, according to the LRC, an MDL study was performed for each analyte and the MDLs were checked for reasonableness for each applicable analyte. The levels of required performance (LORPs) have been established by Golder/PBW as the Residential Assessment Levels (RALs), which are the minimum of the TRRP residential Tier 1 $^{Tot}Soil_{Comb}$ and Tier 1, 2 or 3 $^{GW}Soil_{Ing}$ PCLs for a 30-acre source area. As needed per TRRP, the Unadjusted MQL stated by the laboratory is at or below the LORP for each applicable analyte, and thus the analytical methods are appropriate and the results can be used to demonstrate conformance with the criteria.
2. Usability of Qualified Data – There are no major QC deficiencies, and thus all data is usable as qualified for the intended use. As shown in Table 2, the reviewer qualified some detects as estimated (J) due to minor QC deficiencies. Detects that are biased high can be used; however, the reported concentration may be high. Detects that are estimated may be either low or high. Results with a laboratory J-flag (i.e., at a concentration between the SDL and MQL) should be considered estimates. The actual value is not expected to exceed the sample MQL.

Reviewer: Jing Song Xi 4/28/14

QUALITY CONTROL PARAMETERS AND OUTCOMES

Data Completeness

The laboratory data packages contain all necessary data (i.e., the laboratory reportable data per TRRP-13) and the EDD contain all sample results in acceptable format. Minor revisions were required for work orders 600-89701-1. All revisions are detailed in the laboratory narrative.

Chain-of-Custody

Proper sample custody procedures were used, which confirms that the integrity of the samples was maintained. Additionally, the information on the custody records is complete and agrees with that in the field notes and laboratory reports.

Sample Condition

Samples were collected in appropriate containers, properly preserved in the field, and prepared and analyzed within the holding times as required in the analytical methods, which ensures that the samples were not affected by analyte degradation:

- For 600-89701-1, the temperatures of the coolers at receipt were 1.8°C and 1.9°C.

Field Procedures

The samples were collected and placed immediately into sterilized jars provided by the laboratory and then into a cooler with ice for overnight delivery to the laboratory.

Three site-specific MS/MSD samples were collected with the 56 investigative samples.

Results Reporting Procedures

The hardcopy analytical results include a Result, MQL (adjusted), and SDL. The EDD includes the MDL, SDL (under the SQL column per previously used terminology) and the MQL, which is not adjusted for sample specific factors.

Results are reported in mg/kg with dry-weight correction for the metals. Non-detects are reported using the SDL as specified per TRRP and detects between the SDL and MQL are reported with a laboratory J-flag. The concentration reported for detects between the SDL and MQL is below the calibration range and thus is considered estimated.

MQLs- The LORPs have been established by Golder/PBW as the Residential Assessment Levels (RALs), which are the minimum of the TRRP residential Tier 1 Tier 1 $^{Tot}Soil_{Comb}$ and Tier 1, 2 or 3 $^{GW}Soil_{Ing}$ PCLs

for a 30-acre source area. The unadjusted MQLs for the laboratory are at or below the LORPs for each applicable analyte.

MDLs- According to the LRC, an MDL study was performed for each analyte, and the MDLs were checked for reasonableness and either adjusted or supported by the analysis of detectability check standards (DCS) for each applicable analyte as required per TRRP-13. Results for the DCS are included in the data packages.

Laboratory Blanks

Results for samples prepared in the same QC batch as a contaminated method blank may be affected by laboratory contamination. No analytes were detected in the laboratory blanks, except as follows:

- For job 600-89701-3, lead was detected in the method blank for prep batch 132543 Associated samples in the same preparation batch (-02, -08, -11) had concentrations greater than five times the method blank detection of 0.6 mg/kg or lead was not reported; therefore, results are unaffected.
- For job 600-89701-3, lead was also detected in the method blank for prep batch 132626 Associated samples in the same preparation batch (-20, -26, -50, -53, -58, -61, -64) had concentrations greater than five times the method blank detection of 1.15 mg/kg; therefore, results are unaffected.

Field QC Blanks

One field rinsate blank was collected on March 31, 2014 as part of this data package. There were not detections in the field rinsate blank, which indicates adequate decontamination procedures were utilized during the field effort.

Laboratory Control Sample

The laboratory prepared one laboratory control sample (LCS) for each analytical batch and reported recoveries for all of the analytes for each test. The LCS recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on a sample, free of matrix effects.

Matrix Spike Recovery

The laboratory prepared one or more matrix spike (MS) and matrix spike duplicate (MSD) with each analytical batch plus a Post Digestion Spike (PDS) with each metals analytical batch. MS/MSD recoveries are reported for the same analytes as the LCS for MS/MSD prepared using a sample from the site, which includes one MS/MSD analyzed for Total Metals, as shown in Table 1.

PDS outcomes are given on the LRC for each job package; however PDS data are not reportable data per TRRP-13. According to the LRC, the PDS met method requirements, which indicates good accuracy for the analysis technique on the given sample matrix.

The MS/MSD recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on a sample free of matrix effects, except as follows:

QC Batch	Lab Sample ID	MS/MSD ID	Analyte	Parent Amount (mg/kg)	Spike Amount for MS/MSD (mg/kg)	MS % Recovery	MSD % Recovery	Qual
131415	600-89701-4	2014-C2L-06B (0-0.5)	Antimony	0.237 U	48.8, 50.7	43	44	JL
131415	600-89701-55	SRB-VS-11B (0.5-2)	Antimony	3.10	55.6, 54.1	26	30	JL
131430	600-89701-56	SRB-VS-11B (0.5-2) MS	Antimony	0.286 U	66.0, 62.9	36	31	JL
131430	600-89701-56	SRB-VS-11B (0.5-2) MS	Lead	177	66.0, 62.9	641	-30	-
132552	600-89701-58	SRB-VS-11B (2-4)	Antimony	0.245 U	53.9, 54.4	18	19	R
132552	600-89701-58	SRB-VS-11B (2-4)	Arsenic	40.0	53.9, 54.4	133	97	JH

NA – Not available.

In sample 600-89701-56, the spike amount is less than the amount in the unspiked parent sample; thus, the data are considered inconclusive and the MS/MSD recovery check was waived. For non-detect samples in the associated batch (samples -53 and -58) where antimony recovery for the MS/MSD is well below 30%, results were not accepted as usable.

Surrogate Recovery

Since organic analyses were not requested for these data packages, surrogate recoveries were not evaluated.

Laboratory Duplicate Precision

The laboratory prepared one or more Matrix Spike Duplicate (MSD) with each analytical batch for each test. Additionally, the laboratory prepared one Matrix Duplicate (MD) with each metals analytical batch. RPDs are reported for the same analytes as the LCS for MSD/MD prepared using a sample from the site, which includes one MSD and MD for Total Metals.

The MSD and MD RPDs are within the TRRP recommended criteria, which indicates good precision for the preparation and analysis technique for the given sample matrix, except as follows:

QC Batch	Lab Sample ID	MS/MSD ID	Analyte	Parent Amount (mg/kg)	MSD RPD	MD RPD	Qual
131415	600-89701-4	2014-C2L-06B	Arsenic	6.16	4	37	J

		(0-0.5)					
131415	600-89701-4	2014-C2L-06B (0-0.5)	Cadmium	0.261	5	80	J
131415	600-89701-4	2014-C2L-06B (0-0.5)	Lead	47.1	13	72	J
131415	600-89701-4	2014-C2L-06B (0-0.5)	Selenium	0.297 J	4	48	J
131415	600-89701-56	SRB-VS-11B (0.5-2)	Antimony	3.10	9	152	J
131415	600-89701-56	SRB-VS-11B (0.5-2)	Lead	74.2	1	33	J
131430	600-89701-56	SRB-VS-11B (0.5-2) MS	Lead	177	117	57	J

Field Duplicate Precision

Three field duplicates were collected for this work order, one of which was analyzed while the remaining duplicates were placed on hold. Results are summarized in Table 3. The RPDs (or the absolute difference between results for concentrations <5x MQL and for non-detects) are within the TRRP criteria, which indicates good precision for the sampling, preparation, and analysis technique on the given sample matrix, except for the following:

- Cadmium and Lead RPDs were outside specified range for the pair DUP-3 / SRB-VS-11B (0.5-2). The pair has been appropriately qualified as “J”. The data user is advised to use the higher concentration of the pair.

Instrument Tuning

According to the LRC, instrument tuning met method requirements for the samples, which indicates the GC/MS instrument was properly set up to identify analytes.

Instrument Calibration

According to the LRC, initial and continuing calibration data met method requirements for all reported results, which indicates the instruments were properly calibrated to measure analyte concentrations.

Instrument Performance

According to the LRC, the serial dilution and ICP interference check samples met method requirements, which indicates that no significant matrix interference exists.

Internal Standards

According to the LRC, area counts and retention times were within method requirements.

TABLE 1

CROSS REFERENCE OF FIELD SAMPLE IDENTIFICATIONS AND LABORATORY IDENTIFICATIONS

Lab Sample ID	Field Sample ID	Prep Batch / Analysis Batch	Sample Date	Matrix	Comments
600-89701-1	2014-C2L-06A (0-0.5)	131415/131391	3/31/2014	Soil	
600-89701-2	2014-C2L-06A (0.5-2)	132543/132533	3/31/2014	Soil	
600-89701-3	2014-C2L-06A (2-4)		3/31/2014	Soil	Not reported
600-89701-4	2014-C2L-06B (0-0.5)	131415/131391	3/31/2014	Soil	
600-89701-5	2014-C2L-06B (0.5-2)		3/31/2014	Soil	Not reported
600-89701-6	2014-C2L-06B (2-4)		3/31/2014	Soil	Not reported
600-89701-7	2014-C2L-06C (0-0.5)	131415/131391	3/31/2014	Soil	
600-89701-8	2014-C2L-06C (0.5-2)	132543/132533	3/31/2014	Soil	
600-89701-9	2014-C2L-06C (2-4)		3/31/2014	Soil	Not reported
600-89701-10	D-11B (0-0.5)	131415/131391	3/31/2014	Soil	
600-89701-11	D-11B (0.5-2)	132543/132533	3/31/2014	Soil	
600-89701-12	D-11B (2-4)		3/31/2014	Soil	Not reported
600-89701-13	E-11C-A (0.5-2)	131415/131391	3/31/2014	Soil	
600-89701-14	E-11C-A (2-4)		3/31/2014	Soil	Not reported
600-89701-15	E-11C-A (4-6)		3/31/2014	Soil	Not reported
600-89701-16	E-11E (0-0.5)	131415/131391	3/31/2014	Soil	
600-89701-17	E-11E (0.5-2)		3/31/2014	Soil	Not reported
600-89701-18	E-11E (2-4)		3/31/2014	Soil	Not reported
600-89701-19	2014-NT-3 (0-0.5)	131415/131391	3/31/2014	Soil	
600-89701-20	2014-NT-3 (0.5-2)	132552/132626	3/31/2014	Soil	
600-89701-21	2014-NT-3 (2-4)		3/31/2014	Soil	Not reported
600-89701-22	2014-NT-4 (0-0.5)	131415/131391	3/31/2014	Soil	
600-89701-23	2014-NT-4 (0.5-2)		3/31/2014	Soil	Not reported
600-89701-24	2014-NT-4 (2-4)		3/31/2014	Soil	Not reported
600-89701-25	2014-SL-5 (0-0.5)	131415/131391	3/31/2014	Soil	
600-89701-26	2014-SL-5 (0.5-2)	132552/132626	3/31/2014	Soil	
600-89701-27	2014-SL-5 (2-4)		3/31/2014	Soil	Not reported
600-89701-28	2014-SL-5 (2-4) MS		3/31/2014	Soil	site-specific MS/MSD; Not reported
600-89701-29	2014-SL-5 (2-4) MSD		3/31/2014	Soil	site-specific MS/MSD; Not reported
600-89701-30	DUP-1		3/31/2014	Soil	Duplicate of 2014-SL-5 (2-4); Not reported
600-89701-31	2014-SL-6 (0-0.5)	131415/131391	3/31/2014	Soil	
600-89701-32	2014-SL-6 (0.5-2)		3/31/2014	Soil	Not reported
600-89701-33	2014-SL-6 (2-4)		3/31/2014	Soil	Not reported
600-89701-34	2014-SL-7 (0-0.5)	131415/131391	3/31/2014	Soil	
600-89701-35	2014-SL-7 (0.5-2)		3/31/2014	Soil	Not reported
600-89701-36	2014-SL-7 (2-4)		3/31/2014	Soil	Not reported
600-89701-37	2014-FFTA-05 (0-0.5)	131415/131391	3/31/2014	Soil	
600-89701-38	2014-FFTA-05 (0.5-2)		3/31/2014	Soil	Not reported
600-89701-39	2014-FFTA-05 (2-4)		3/31/2014	Soil	Not reported
600-89701-40	2014-FFTA-04 (0-0.5)	131415/131391	3/31/2014	Soil	
600-89701-41	2014-FFTA-04 (0.5-2)		3/31/2014	Soil	Not reported
600-89701-42	2014-FFTA-04 (2-4)		3/31/2014	Soil	Not reported
600-89701-43	2014-FFTA-04 (2-4) MS		3/31/2014	Soil	site-specific MS/MSD; Not reported
600-89701-44	2014-FFTA-04 (2-4) MSD		3/31/2014	Soil	site-specific MS/MSD; Not reported
600-89701-45	DUP-2		3/31/2014	Soil	Duplicate of 2014-FFTA-04 (2-4); Not reported
600-89701-46	2014-SDA-6 (0-0.5)	131415/131391	3/31/2014	Soil	
600-89701-47	2014-SDA-6 (0.5-2)		3/31/2014	Soil	Not reported
600-89701-48	2014-SDA-6 (2-4)		3/31/2014	Soil	Not reported
600-89701-49	2014-TS-3 (0-0.5)	131415/131391	3/31/2014	Soil	
600-89701-50	2014-TS-3 (0.5-2)	132552/132626	3/31/2014	Soil	
600-89701-51	2014-TS-3 (2-4)		3/31/2014	Soil	Not reported
600-89701-52	2014-SDA-7 (0-0.5)	131415/131391	3/31/2014	Soil	
600-89701-53	2014-SDA-7 (0.5-2)	132552/132626	3/31/2014	Soil	
600-89701-54	2014-SDA-7 (2-4)		3/31/2014	Soil	Not reported
600-89701-55	SRB-VS-11B (0.5-2)	131415/131391	3/31/2014	Soil	
600-89701-56	SRB-VS-11B (0.5-2) MS	131430/131531	3/31/2014	Soil	site-specific MS/MSD
600-89701-57	SRB-VS-11B (0.5-2) MSD	131430/131531	3/31/2014	Soil	site-specific MS/MSD
600-89701-58	SRB-VS-11B (2-4)	132552/132626	3/31/2014	Soil	
600-89701-59	DUP-3	131430/131531	3/31/2014	Soil	Duplicate of SRB-VS-11B (0.5-2)
600-89701-60	B3RA (0-0.5)	131430/131531	3/31/2014	Soil	
600-89701-61	B3RA (0.5-2)	132552/132626	3/31/2014	Soil	
600-89701-62	B3RA (2-4)		3/31/2014	Soil	Not reported
600-89701-63	ECO-8B (0-0.5)	131430/131531	3/31/2014	Soil	
600-89701-64	ECO-8B (0.5-2)	132552/132626	3/31/2014	Soil	
600-89701-65	ECO-8B (2-4)		3/31/2014	Soil	Not reported
600-89701-67	Rinse Blank-Geo	131463/131619	3/31/2014	Water	Rinsate Blank

TABLE 2 - QUALIFIED DATA

Lab Sample ID	Field Sample ID	Analyte	Result	Units	Qualifer	Explanation
		Antimony	2.18 J	mg/kg	JL	estimated between SDL and MQL; Matrix Spike recovery below specifications, >30%
		Arsenic	15.1	mg/kg	J	MD RPD >30%
		Cadmium	6.75	mg/kg	J	MD RPD >30%
		Lead	1150	mg/kg	J	MD RPD >30%
600-89701-1	2014-C2L-06A (0-0.5)	Selenium	2.22 J	mg/kg	J	estimated between SDL and MQL; MD RPD >30%
		Antimony	0.237 U	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
		Arsenic	6.16	mg/kg	J	MD RPD >30%
		Cadmium	0.261	mg/kg	J	MD RPD >30%
		Lead	47.1	mg/kg	J	MD RPD >30%
600-89701-4	2014-C2L-06B (0-0.5)	Selenium	0.297 J	mg/kg	J	estimated between SDL and MQL; MD RPD >30%
		Antimony	7.99	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Arsenic	28	mg/kg	J	MD RPD >30%
		Cadmium	16.5	mg/kg	J	MD RPD >30%
		Lead	2970	mg/kg	J	MD RPD >30%
600-89701-7	2014-C2L-06C (0-0.5)	Selenium	7.09	mg/kg	J	MD RPD >30%
600-89701-10	D-11B (0-0.5)	Arsenic	21	mg/kg	J	MD RPD >30%
600-89701-13	E-11C-A (0.5-2)	Arsenic	13.8	mg/kg	J	MD RPD >30%
		Antimony	0.281 U	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
		Arsenic	8.75	mg/kg	J	MD RPD >30%
		Cadmium	0.959	mg/kg	J	MD RPD >30%
		Lead	126	mg/kg	J	MD RPD >30%
600-89701-16	E-11E (0-0.5)	Selenium	0.314 U	mg/kg	UJ	MD RPD >30%
		Antimony	0.267 U	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
		Arsenic	12.3	mg/kg	J	MD RPD >30%
		Cadmium	1.92	mg/kg	J	MD RPD >30%
		Lead	353	mg/kg	J	MD RPD >30%
600-89701-19	2014-NT-3 (0-0.5)	Selenium	0.298 U	mg/kg	UJ	MD RPD >30%
		Antimony	0.262 U	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
		Arsenic	10.9	mg/kg	J	MD RPD >30%
		Cadmium	0.402	mg/kg	J	MD RPD >30%
		Lead	42.8	mg/kg	J	MD RPD >30%
600-89701-22	2014-NT-4 (0-0.5)	Selenium	0.293 U	mg/kg	UJ	MD RPD >30%
		Antimony	0.285 U	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
		Arsenic	14.6	mg/kg	J	MD RPD >30%
		Cadmium	1.79	mg/kg	J	MD RPD >30%
		Lead	346	mg/kg	J	MD RPD >30%
600-89701-25	2014-SL-5 (0-0.5)	Selenium	0.671 J	mg/kg	J	estimated between SDL and MQL; MD RPD >30%
		Antimony	0.260 U	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
		Arsenic	9.9	mg/kg	J	MD RPD >30%
		Cadmium	0.736	mg/kg	J	MD RPD >30%
		Lead	99.5	mg/kg	J	MD RPD >30%
600-89701-31	2014-SL-6 (0-0.5)	Selenium	0.291 U	mg/kg	UJ	MD RPD >30%
		Antimony	0.250 U	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
		Arsenic	9.45	mg/kg	J	MD RPD >30%
		Cadmium	1.28	mg/kg	J	MD RPD >30%
		Lead	85.2	mg/kg	J	MD RPD >30%
600-89701-34	2014-SL-7 (0-0.5)	Selenium	0.279 U	mg/kg	UJ	MD RPD >30%
		Antimony	0.294 U	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
		Arsenic	9.64	mg/kg	J	MD RPD >30%
		Cadmium	0.909	mg/kg	J	MD RPD >30%
		Lead	152	mg/kg	J	MD RPD >30%
600-89701-37	2014-FFTA-05 (0-0.5)	Selenium	0.329 U	mg/kg	UJ	MD RPD >30%
		Antimony	0.297 U	mg/kg	UJL	Matrix Spike recovery below specifications, >30%

TABLE 2 - QUALIFIED DATA

Lab Sample ID	Field Sample ID	Analyte	Result	Units	Qualifer	Explanation
		Arsenic	6.13	mg/kg	J	MD RPD >30%
		Cadmium	0.34	mg/kg	J	MD RPD >30%
		Lead	15.3	mg/kg	J	MD RPD >30%
600-89701-40	2014-FFTA-04 (0-0.5)	Selenium	0.332 U	mg/kg	UJ	MD RPD >30%
		Antimony	0.229 U	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
		Arsenic	3.88	mg/kg	J	MD RPD >30%
		Cadmium	0.917	mg/kg	J	MD RPD >30%
		Lead	153	mg/kg	J	MD RPD >30%
600-89701-46	2014-SDA-6 (0-0.5)	Selenium	0.257 U	mg/kg	UJ	MD RPD >30%
		Antimony	1.95 J	mg/kg	JL	estimated between SDL and MQL; Matrix Spike recovery below specifications, >30%
		Arsenic	8.4	mg/kg	J	MD RPD >30%
		Cadmium	4.9	mg/kg	J	MD RPD >30%
		Lead	1420	mg/kg	J	MD RPD >30%
600-89701-49	2014-TS-3 (0-0.5)	Selenium	0.419 J	mg/kg	J	estimated between SDL and MQL; MD RPD >30%
		Antimony	102	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Arsenic	96.6	mg/kg	J	MD RPD >30%
		Cadmium	1.36	mg/kg	J	MD RPD >30%
		Lead	6150	mg/kg	J	MD RPD >30%
600-89701-52	2014-SDA-7 (0-0.5)	Selenium	0.453 J	mg/kg	J	estimated between SDL and MQL; MD RPD >30%
		Antimony	0.275 U	mg/kg	R	Matrix Spike recovery below specifications, <30%
600-89701-53	2014-SDA-7 (0.5-2)	Arsenic	14	mg/kg	JH	Matrix Spike recovery above specifications
		Antimony	3.1	mg/kg	JL	Matrix Spike recovery below specifications, >30%
		Arsenic	11.3	mg/kg	J	MD RPD >30%
		Cadmium	0.777	mg/kg	J	MD RPD >30%; poor field duplicate precision
		Lead	74.2	mg/kg	J	MD RPD >30%; poor field duplicate precision
600-89701-55	SRB-VS-11B (0.5-2)	Selenium	0.402 J	mg/kg	J	estimated between SDL and MQL; MD RPD >30%
600-89701-58	SRB-VS-11B (2-4)	Antimony	0.245 U	mg/kg	R	Matrix Spike recovery below specifications, <30%
		Antimony	0.296 U	mg/kg	UJL	Matrix Spike recovery below specifications, >30%
		Cadmium	1.41	mg/kg	J	Poor field duplicate precision
		Selenium	0.442 J	mg/kg	J	estimated between SDL and MQL
600-89701-59	DUP-3	Lead	215	mg/kg	J	Poor field duplicate precision
		Antimony	1.81 J	mg/kg	JL	estimated between SDL and MQL; Matrix Spike recovery below specifications, >30%
600-89701-60	B3RA (0-0.5)	Selenium	0.530 J	mg/kg	J	estimated between SDL and MQL
600-89701-61	B3RA (0.5-2)	Arsenic	11.4	mg/kg	JH	Matrix Spike recovery above specifications
		Antimony	4.65	mg/kg	JL	Matrix Spike recovery below specifications, >30%
600-89701-63	ECO-8B (0-0.5)	Selenium	0.809 J	mg/kg	J	estimated between SDL and MQL
		Antimony	2.70 J	mg/kg	JL	estimated between SDL and MQL; Matrix Spike recovery below specifications, <30%
600-89701-64	ECO-8B (0.5-2)	Arsenic	15.5	mg/kg	JH	Matrix Spike recovery above specifications

Note:

Detected results between the SDL and MQL (i.e., results with a laboratory J-flag) have been included in the above table since the reported concentration is below the calibration range.

J Estimated data; The analyte was detected and identified. The associated numerical value (i.e., the reported sample concentration) is the approximate concentration of the analyte in the sample.

NJ Tentatively identified, estimated data; The analysis indicates the presence of the analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.

NS Not selected; Another result (from a secondary dilution, different analytical method, re-sampling, etc.) is selected for use based on QC outcomes and/or reported concentrations.

R Rejected data; The data is unusable. Serious QC deficiencies make it impossible to verify the absence or presence of this analyte.

U Not detected; The analyte was not detected >5x (10x for common contaminants) the level in an associated blank and thus should be considered not detected above the level of the associated numerical value (i.e., the reported sample concentration).

UJ Estimated data; The analyte was not detected above the reported sample detection limit (SDL). The numerical value of the SDL is estimated and may be inaccurate.

H Bias in sample result is likely to be high

L Bias in sample result is likely to be low

TABLE 3 - FIELD DUPLICATE PRECISION CALCULATIONS

Duplicate and Parent Sample Field Identification	Analyte	Sample Result	Duplicate Result	RPD[a]	Accept or Reject	Qualifier Added
DUP-3 / SRB-VS-11B (0.5-2)	Antimony	3.1	0.296 U	-	A	-
	Arsenic	11.3	12.2	7.7	A	-
	Cadmium	0.777	1.41	57.9	A	J
	Lead	74.2	215	97.4	A	J

[a] RPD = ((SR - DR)*200)/(SR + DR)

A - Acceptable Data

NA - Not Analyzed

The RPD test (<50%) applies if both results are greater than 5x MQL. Otherwise, the absolute difference test (< 3x MQL) applies.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-89701-1
Client Project/Site: Exide Recycling Center, Frisco TX
Revision: 1

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
5/19/2014 2:30:28 PM
Cathy Upton, Project Management Assistant II
(713)690-4444
cathy.upton@testamericainc.com

Designee for

Dean Joiner, Project Manager II
(713)690-4444
dean.joiner@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.

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-89701-1 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☐ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☑ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton		4/10/2014
Name (printed)	Signature	Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/10/2014
Project Name:	Exide Recycling Center, Frisco TX	Laboratory Job Number:	600-89701-1
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			R07C
		Were MS/MSD RPDs within laboratory QC limits?		X			R07D
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?		X			R08C
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				R10B
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/10/2014
Project Name:	Exide Recycling Center, Frisco TX	Laboratory Job Number:	600-89701-1
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
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4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/10/2014
Project Name:	Exide Recycling Center, Frisco TX	Laboratory Job Number:	600-89701-1
Reviewer Name:	Dean A Joiner		

ER #[1]	Description
R07C	Method 6010B: 600-89701-4 MS failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected. Method 6010B: 600-89701-4 MSD failed the recovery criteria for the following analyte(s): Antimony, Lead. Matrix interference is suspected. Method 6010B: 600-89701-55 MS failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected. Method 6010B: 600-89701-55 MSD failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected. Method 6010B: 600-89701-56 MS failed the recovery criteria for the following analyte(s): Antimony, Lead. Matrix interference is suspected. Method 6010B: 600-89701-56 MSD failed the recovery criteria for the following analyte(s): Antimony, Lead. Matrix interference is suspected.
R07D/ R08C	Method 6010B: 600-89701-4 DU failed the RPD criteria for the following analyte(s): Arsenic, Cadmium, Lead, Selenium. Non-homogeneity is suspected. Method 6010B: 600-89701-55 DU failed the RPD criteria for the following analyte(s): Antimony, Lead. Non-homogeneity is suspected.. Method 6010B: 600-89701-56 DU failed the RPD criteria for the following analyte(s): Cadmium, Lead. Non-homogeneity is suspected. Method 6010B: 600-89701-56 MSD failed the RPD criteria for the following analyte(s): Lead. Non-homogeneity is suspected.
R10B	Method(s) 6010B: The following sample(s) was diluted to bring the concentration of lead within the calibration range: 2014-C2L-06C (0-0.5) (600-89701-7), 2014-SDA-7 (0-0.5) (600-89701-52). Elevated reporting limits (RLs) are provided.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
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5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Detection Check Standard

Matrix:	Soil
Method:	6010B
Preparation:	3050
Date Analyzed:	3/28/2014
Date Prepared:	3/27/2014
Instrument:	Thermo 6500
TALS Batches:	130577p, 130672
Prep/Reagent Factor =	50
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.299654	0.5	0.36	25
Antimony	0.231553	0.45	0.31	2.5
Arsenic	0.217923	0.5	0.57	1
Barium	0.011322	0.03	0.03	1
Beryllium	0.014513	0.02	0.02	0.25
Boron	0.385535	0.6	0.49	20
Cadmium	0.025642	0.05	0.045	0.25
Calcium	0.86399	1.5	2.07	100
Chromium	0.050606	0.1	0.11	0.5
Cobalt	0.067622	0.1	0.105	0.5
Copper	0.173703	0.5	0.535	0.5
Iron	2.534007	4	4.035	20
Lead	0.104832	0.2	0.18	0.5
Selenium	0.258884	0.5	0.505	2
Manganese	0.038111	0.05	0.05	1.5
Molybdenum	0.136448	0.35	0.325	0.5
Nickel	0.116599	0.15	0.145	1
Silver	0.118848	0.2	0.22	0.5
Sodium	0.885548	2.4	2.13	100
Thallium	0.276988	0.7	0.615	1.5
Tin	0.08729	0.15	0.13	1
Titanium	0.014529	0.03	0.035	0.5
Vanadium	0.079068	0.15	0.165	0.5
Zinc	0.108432	0.2	0.285	1.5

Detection Check Standard

Matrix:	Water
Method:	200.7/6010
Preparation:	200.7P/3010
Date Analyzed:	3/28/2014
Date Prepared:	3/27/2014
Instrument:	Thermo6500
TALs Batches:	130582p, 130672
Units:	mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.0029	0.5
Antimony	0.0063	0.01	0.012	0.05
Arsenic	0.0033	0.01	0.0083	0.01
Barium	0.0022	0.005	0.0051	0.02
Beryllium	0.00134	0.002	0.0039	0.005
Boron	0.0077	0.02	0.0201	0.2
Cadmium	0.00073	0.001	0.001	0.005
Calcium	0.022	0.05	0.042	1
Chromium	0.0016	0.002	0.0035	0.01
Cobalt	0.00063	0.001	0.001	0.01
Copper	0.0014	0.002	0.0021	0.01
Iron	0.087	0.1	0.1009	0.4
Lithium	0.0024	0.005	0.0045	0.2
Lead	0.0029	0.005	0.004	0.01
Selenium	0.0042	0.01	0.01	0.04
Manganese	0.00084	0.002	0.0021	0.01
Molybdenum	0.0027	0.005	0.005	0.01
Nickel	0.00179	0.005	0.0047	0.01
Silver	0.0012	0.0025	0.0024	0.01
Silicon	0.00779	0.02	0.016	0.2
Sodium	0.02	0.05	0.0469	1
Strontium	0.0005	0.001	0.001	0.005
Thallium	0.0078	0.02	0.0205	0.03
Tin	0.0028	0.005	0.0046	0.01
Titanium	0.0011	0.002	0.0019	0.01
Vanadium	0.0017	0.002	0.0046	0.01
Zinc	0.0022	0.005	0.0049	0.01

Job ID: 600-89701-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-89701-1

Comments
The report was revised on 05/19/14 to report all metals for sample 13, replacing the final report generated on 04/10/14. See attached email.

Receipt
The samples were received on 4/1/2014 10:46 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.8º C and 1.9º C.

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU
Moisture	Percent Moisture	EPA	TAL HOU

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 HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-89701-1	2014-C2L-06A (0-0.5)	Solid	03/31/14 08:47	04/01/14 10:46
600-89701-4	2014-C2L-06B (0-0.5)	Solid	03/31/14 09:09	04/01/14 10:46
600-89701-7	2014-C2L-06C (0-0.5)	Solid	03/31/14 09:30	04/01/14 10:46
600-89701-10	D-11B (0-0.5)	Solid	03/31/14 09:50	04/01/14 10:46
600-89701-13	E-11C-A (0.5-2)	Solid	03/31/14 10:09	04/01/14 10:46
600-89701-16	E-11E- (0-0.5)	Solid	03/31/14 10:31	04/01/14 10:46
600-89701-19	2014-NT-3 (0-0.5)	Solid	03/31/14 10:48	04/01/14 10:46
600-89701-22	2014-NT-4 (0-0.5)	Solid	03/31/14 11:04	04/01/14 10:46
600-89701-25	2014-SL-5 (0-0.5)	Solid	03/31/14 11:22	04/01/14 10:46
600-89701-31	2014-SL-6 (0-0.5)	Solid	03/31/14 11:49	04/01/14 10:46
600-89701-34	2014-SL-7 (0-0.5)	Solid	03/31/14 12:10	04/01/14 10:46
600-89701-37	2014-FFTA-05 (0-0.5)	Solid	03/31/14 13:45	04/01/14 10:46
600-89701-40	2014-FFTA-04 (0-0.5)	Solid	03/31/14 14:10	04/01/14 10:46
600-89701-46	2014-SDA-6 (0-0.5)	Solid	03/31/14 14:51	04/01/14 10:46
600-89701-49	2014-TS-3 (0-0.5)	Solid	03/31/14 14:24	04/01/14 10:46
600-89701-52	2014-SDA-7 (0-0.5)	Solid	03/31/14 15:35	04/01/14 10:46
600-89701-55	SRB-VS-11B (0.5-2)	Solid	03/31/14 15:46	04/01/14 10:46
600-89701-56	SRB-VS-11B (0.5-2) MS	Solid	03/31/14 15:46	04/01/14 10:46
600-89701-57	SRB-VS-11B (0.5-2) MSD	Solid	03/31/14 15:46	04/01/14 10:46
600-89701-59	DUP-3	Solid	03/31/14 00:00	04/01/14 10:46
600-89701-60	B3RA (0-0.5)	Solid	03/31/14 16:14	04/01/14 10:46
600-89701-63	ECO-8B (0-0.5)	Solid	03/31/14 16:39	04/01/14 10:46
600-89701-67	Rinse Blank - Geo	Water	03/31/14 17:05	04/01/14 10:46

Client Sample ID: 2014-C2L-06A (0-0.5)

Lab Sample ID: 600-89701-1

Date Collected: 03/31/14 08:47
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 85.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.18	J	2.91	0.270	mg/Kg	☼	04/07/14 14:53	04/07/14 19:34	1
Arsenic	15.1		1.16	0.254	mg/Kg	☼	04/07/14 14:53	04/07/14 19:34	1
Cadmium	6.75		0.291	0.0299	mg/Kg	☼	04/07/14 14:53	04/07/14 19:34	1
Lead	1150		0.582	0.122	mg/Kg	☼	04/07/14 14:53	04/07/14 19:34	1
Selenium	2.22	J	2.33	0.301	mg/Kg	☼	04/07/14 14:53	04/07/14 19:34	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	85		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: 2014-C2L-06B (0-0.5)

Lab Sample ID: 600-89701-4

Date Collected: 03/31/14 09:09
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 96.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.237	U	2.56	0.237	mg/Kg	☼	04/07/14 14:53	04/07/14 19:37	1
Arsenic	6.16		1.02	0.223	mg/Kg	☼	04/07/14 14:53	04/07/14 19:37	1
Cadmium	0.261		0.256	0.0263	mg/Kg	☼	04/07/14 14:53	04/07/14 19:37	1
Lead	47.1		0.512	0.107	mg/Kg	☼	04/07/14 14:53	04/07/14 19:37	1
Selenium	0.297	J	2.05	0.265	mg/Kg	☼	04/07/14 14:53	04/07/14 19:37	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	3.3		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	97		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: 2014-C2L-06C (0-0.5)

Lab Sample ID: 600-89701-7

Date Collected: 03/31/14 09:30
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 87.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	7.99		2.73	0.252	mg/Kg	☼	04/07/14 14:53	04/07/14 19:53	1
Arsenic	28.0		1.09	0.238	mg/Kg	☼	04/07/14 14:53	04/07/14 19:53	1
Cadmium	16.5		0.273	0.0280	mg/Kg	☼	04/07/14 14:53	04/07/14 19:53	1
Selenium	7.09		2.18	0.282	mg/Kg	☼	04/07/14 14:53	04/07/14 19:53	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	2970		5.45	1.14	mg/Kg	☼	04/07/14 14:53	04/08/14 10:16	10

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	13		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	87		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: D-11B (0-0.5)

Lab Sample ID: 600-89701-10
Date Collected: 03/31/14 09:50
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 80.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**21.0**		1.17	0.254	mg/Kg	☼	04/07/14 14:53	04/07/14 19:55	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**19**		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	**81**		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: E-11C-A (0.5-2)

Lab Sample ID: 600-89701-13
Date Collected: 03/31/14 10:09
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 78.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.291	U	3.14	0.291	mg/Kg	☼	04/07/14 14:53	04/07/14 19:58	1
Arsenic	**13.8**		1.26	0.274	mg/Kg	☼	04/07/14 14:53	04/07/14 19:58	1
Cadmium	**0.515**		0.314	0.0322	mg/Kg	☼	04/07/14 14:53	04/07/14 19:58	1
Lead	**88.5**		0.628	0.132	mg/Kg	☼	04/07/14 14:53	04/07/14 19:58	1
Selenium	0.325	U	2.51	0.325	mg/Kg	☼	04/07/14 14:53	04/07/14 19:58	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**22**		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	**78**		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: E-11E- (0-0.5)

Lab Sample ID: 600-89701-16
Date Collected: 03/31/14 10:31
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 78.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.281	U	3.04	0.281	mg/Kg	☼	04/07/14 14:53	04/07/14 20:00	1
Arsenic	**8.75**		1.21	0.265	mg/Kg	☼	04/07/14 14:53	04/07/14 20:00	1
Cadmium	**0.959**		0.304	0.0311	mg/Kg	☼	04/07/14 14:53	04/07/14 20:00	1
Lead	**126**		0.607	0.127	mg/Kg	☼	04/07/14 14:53	04/07/14 20:00	1
Selenium	0.314	U	2.43	0.314	mg/Kg	☼	04/07/14 14:53	04/07/14 20:00	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**22**		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	**78**		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: 2014-NT-3 (0-0.5)

Lab Sample ID: 600-89701-19
Date Collected: 03/31/14 10:48
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 82.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.267	U	2.88	0.267	mg/Kg	☼	04/07/14 14:53	04/07/14 20:03	1
Arsenic	**12.3**		1.15	0.251	mg/Kg	☼	04/07/14 14:53	04/07/14 20:03	1
Cadmium	**1.92**		0.288	0.0295	mg/Kg	☼	04/07/14 14:53	04/07/14 20:03	1
Lead	**353**		0.576	0.121	mg/Kg	☼	04/07/14 14:53	04/07/14 20:03	1

Client Sample ID: 2014-NT-3 (0-0.5)

Lab Sample ID: 600-89701-19
Date Collected: 03/31/14 10:48
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 82.7

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.298	U	2.30	0.298	mg/Kg	☼	04/07/14 14:53	04/07/14 20:03	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17**		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	**83**		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: 2014-NT-4 (0-0.5)

Lab Sample ID: 600-89701-22
Date Collected: 03/31/14 11:04
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 81.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.262	U	2.83	0.262	mg/Kg	☼	04/07/14 14:53	04/07/14 20:05	1
Arsenic	**10.9**		1.13	0.247	mg/Kg	☼	04/07/14 14:53	04/07/14 20:05	1
Cadmium	**0.402**		0.283	0.0290	mg/Kg	☼	04/07/14 14:53	04/07/14 20:05	1
Lead	**42.8**		0.566	0.119	mg/Kg	☼	04/07/14 14:53	04/07/14 20:05	1
Selenium	0.293	U	2.27	0.293	mg/Kg	☼	04/07/14 14:53	04/07/14 20:05	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18**		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	**82**		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: 2014-SL-5 (0-0.5)

Lab Sample ID: 600-89701-25
Date Collected: 03/31/14 11:22
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 81.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.285	U	3.08	0.285	mg/Kg	☼	04/07/14 14:53	04/07/14 20:08	1
Arsenic	**14.6**		1.23	0.268	mg/Kg	☼	04/07/14 14:53	04/07/14 20:08	1
Cadmium	**1.79**		0.308	0.0316	mg/Kg	☼	04/07/14 14:53	04/07/14 20:08	1
Lead	**346**		0.616	0.129	mg/Kg	☼	04/07/14 14:53	04/07/14 20:08	1
Selenium	**0.671**	**J**	2.46	0.319	mg/Kg	☼	04/07/14 14:53	04/07/14 20:08	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**19**		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	**81**		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: 2014-SL-6 (0-0.5)

Lab Sample ID: 600-89701-31
Date Collected: 03/31/14 11:49
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 84.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.260	U	2.81	0.260	mg/Kg	☼	04/07/14 14:53	04/07/14 20:10	1
Arsenic	**9.90**		1.12	0.245	mg/Kg	☼	04/07/14 14:53	04/07/14 20:10	1
Cadmium	**0.736**		0.281	0.0288	mg/Kg	☼	04/07/14 14:53	04/07/14 20:10	1
Lead	**99.5**		0.562	0.118	mg/Kg	☼	04/07/14 14:53	04/07/14 20:10	1

Client Sample ID: 2014-SL-6 (0-0.5)

Lab Sample ID: 600-89701-31
Date Collected: 03/31/14 11:49
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 84.7

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.291	U	2.25	0.291	mg/Kg	☼	04/07/14 14:53	04/07/14 20:10	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15**		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	**85**		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: 2014-SL-7 (0-0.5)

Lab Sample ID: 600-89701-34
Date Collected: 03/31/14 12:10
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 85.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.250	U	2.70	0.250	mg/Kg	☼	04/07/14 14:53	04/07/14 20:13	1
Arsenic	**9.45**		1.08	0.235	mg/Kg	☼	04/07/14 14:53	04/07/14 20:13	1
Cadmium	**1.28**		0.270	0.0277	mg/Kg	☼	04/07/14 14:53	04/07/14 20:13	1
Lead	**85.2**		0.539	0.113	mg/Kg	☼	04/07/14 14:53	04/07/14 20:13	1
Selenium	0.279	U	2.16	0.279	mg/Kg	☼	04/07/14 14:53	04/07/14 20:13	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**15**		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	**85**		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: 2014-FFTA-05 (0-0.5)

Lab Sample ID: 600-89701-37
Date Collected: 03/31/14 13:45
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 78.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.294	U	3.18	0.294	mg/Kg	☼	04/07/14 14:53	04/07/14 20:15	1
Arsenic	**9.64**		1.27	0.277	mg/Kg	☼	04/07/14 14:53	04/07/14 20:15	1
Cadmium	**0.909**		0.318	0.0326	mg/Kg	☼	04/07/14 14:53	04/07/14 20:15	1
Lead	**152**		0.636	0.133	mg/Kg	☼	04/07/14 14:53	04/07/14 20:15	1
Selenium	0.329	U	2.54	0.329	mg/Kg	☼	04/07/14 14:53	04/07/14 20:15	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**21**		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	**79**		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: 2014-FFTA-04 (0-0.5)

Lab Sample ID: 600-89701-40
Date Collected: 03/31/14 14:10
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 75.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.297	U	3.21	0.297	mg/Kg	☼	04/07/14 14:53	04/07/14 20:24	1
Arsenic	**6.13**		1.28	0.280	mg/Kg	☼	04/07/14 14:53	04/07/14 20:24	1
Cadmium	**0.340**		0.321	0.0329	mg/Kg	☼	04/07/14 14:53	04/07/14 20:24	1
Lead	**15.3**		0.642	0.135	mg/Kg	☼	04/07/14 14:53	04/07/14 20:24	1

Client Sample ID: 2014-FFTA-04 (0-0.5)

Lab Sample ID: 600-89701-40
Date Collected: 03/31/14 14:10
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 75.7

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.332	U	2.57	0.332	mg/Kg	☼	04/07/14 14:53	04/07/14 20:24	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**24**		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	**76**		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: 2014-SDA-6 (0-0.5)

Lab Sample ID: 600-89701-46
Date Collected: 03/31/14 14:51
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 92.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.229	U	2.48	0.229	mg/Kg	☼	04/07/14 14:53	04/07/14 20:27	1
Arsenic	**3.88**		0.991	0.216	mg/Kg	☼	04/07/14 14:53	04/07/14 20:27	1
Cadmium	**0.917**		0.248	0.0254	mg/Kg	☼	04/07/14 14:53	04/07/14 20:27	1
Lead	**153**		0.495	0.104	mg/Kg	☼	04/07/14 14:53	04/07/14 20:27	1
Selenium	0.257	U	1.98	0.257	mg/Kg	☼	04/07/14 14:53	04/07/14 20:27	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**7.4**		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	**93**		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: 2014-TS-3 (0-0.5)

Lab Sample ID: 600-89701-49
Date Collected: 03/31/14 14:24
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 86.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.95**	**J**	2.65	0.245	mg/Kg	☼	04/07/14 14:53	04/07/14 20:29	1
Arsenic	**8.40**		1.06	0.231	mg/Kg	☼	04/07/14 14:53	04/07/14 20:29	1
Cadmium	**4.90**		0.265	0.0272	mg/Kg	☼	04/07/14 14:53	04/07/14 20:29	1
Lead	**1420**		0.530	0.111	mg/Kg	☼	04/07/14 14:53	04/07/14 20:29	1
Selenium	**0.419**	**J**	2.12	0.274	mg/Kg	☼	04/07/14 14:53	04/07/14 20:29	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13**		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	**87**		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: 2014-SDA-7 (0-0.5)

Lab Sample ID: 600-89701-52
Date Collected: 03/31/14 15:35
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 84.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**102**		2.87	0.266	mg/Kg	☼	04/07/14 14:53	04/07/14 20:32	1
Arsenic	**96.6**		1.15	0.250	mg/Kg	☼	04/07/14 14:53	04/07/14 20:32	1
Cadmium	**1.36**		0.287	0.0294	mg/Kg	☼	04/07/14 14:53	04/07/14 20:32	1
Selenium	**0.453**	**J**	2.30	0.297	mg/Kg	☼	04/07/14 14:53	04/07/14 20:32	1

Client Sample ID: 2014-SDA-7 (0-0.5)

Lab Sample ID: 600-89701-52
Date Collected: 03/31/14 15:35
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 84.6

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6150		5.74	1.20	mg/Kg	☼	04/07/14 14:53	04/08/14 10:18	10

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	85		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: SRB-VS-11B (0.5-2)

Lab Sample ID: 600-89701-55
Date Collected: 03/31/14 15:46
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 85.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	3.10		2.75	0.255	mg/Kg	☼	04/07/14 14:53	04/07/14 20:34	1
Arsenic	11.3		1.10	0.240	mg/Kg	☼	04/07/14 14:53	04/07/14 20:34	1
Cadmium	0.777		0.275	0.0282	mg/Kg	☼	04/07/14 14:53	04/07/14 20:34	1
Lead	74.2		0.551	0.115	mg/Kg	☼	04/07/14 14:53	04/07/14 20:34	1
Selenium	0.402	J	2.20	0.285	mg/Kg	☼	04/07/14 14:53	04/07/14 20:34	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	86		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: SRB-VS-11B (0.5-2) MS

Lab Sample ID: 600-89701-56
Date Collected: 03/31/14 15:46
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 75.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.286	U	3.09	0.286	mg/Kg	☼	04/07/14 17:32	04/08/14 14:11	1
Arsenic	12.8		1.23	0.269	mg/Kg	☼	04/07/14 17:32	04/08/14 14:11	1
Cadmium	1.07		0.309	0.0316	mg/Kg	☼	04/07/14 17:32	04/08/14 14:11	1
Lead	177		0.617	0.129	mg/Kg	☼	04/07/14 17:32	04/08/14 14:11	1
Selenium	0.432	J	2.47	0.320	mg/Kg	☼	04/07/14 17:32	04/08/14 14:11	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	76		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: SRB-VS-11B (0.5-2) MSD

Lab Sample ID: 600-89701-57
Date Collected: 03/31/14 15:46
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 83.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.271	U	2.92	0.271	mg/Kg	☼	04/07/14 17:32	04/08/14 14:21	1
Arsenic	13.1		1.17	0.255	mg/Kg	☼	04/07/14 17:32	04/08/14 14:21	1
Cadmium	1.19		0.292	0.0300	mg/Kg	☼	04/07/14 17:32	04/08/14 14:21	1
Lead	152		0.585	0.123	mg/Kg	☼	04/07/14 17:32	04/08/14 14:21	1

Client Sample ID: SRB-VS-11B (0.5-2) MSD

Lab Sample ID: 600-89701-57
Date Collected: 03/31/14 15:46
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 83.8

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.550	J	2.34	0.303	mg/Kg	☼	04/07/14 17:32	04/08/14 14:21	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	84		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: DUP-3

Lab Sample ID: 600-89701-59
Date Collected: 03/31/14 00:00
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 78.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.296	U	3.20	0.296	mg/Kg	☼	04/07/14 17:32	04/08/14 14:23	1
Arsenic	12.2		1.28	0.279	mg/Kg	☼	04/07/14 17:32	04/08/14 14:23	1
Cadmium	1.41		0.320	0.0328	mg/Kg	☼	04/07/14 17:32	04/08/14 14:23	1
Lead	215		0.640	0.134	mg/Kg	☼	04/07/14 17:32	04/08/14 14:23	1
Selenium	0.442	J	2.56	0.331	mg/Kg	☼	04/07/14 17:32	04/08/14 14:23	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	78		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: B3RA (0-0.5)

Lab Sample ID: 600-89701-60
Date Collected: 03/31/14 16:14
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 79.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.81	J	3.12	0.289	mg/Kg	☼	04/07/14 17:32	04/08/14 14:33	1
Arsenic	17.4		1.25	0.272	mg/Kg	☼	04/07/14 17:32	04/08/14 14:33	1
Cadmium	4.47		0.312	0.0320	mg/Kg	☼	04/07/14 17:32	04/08/14 14:33	1
Lead	861		0.623	0.131	mg/Kg	☼	04/07/14 17:32	04/08/14 14:33	1
Selenium	0.530	J	2.49	0.323	mg/Kg	☼	04/07/14 17:32	04/08/14 14:33	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	79		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: ECO-8B (0-0.5)

Lab Sample ID: 600-89701-63
Date Collected: 03/31/14 16:39
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 81.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	4.65		2.89	0.267	mg/Kg	☼	04/07/14 17:32	04/08/14 14:35	1
Arsenic	16.4		1.16	0.252	mg/Kg	☼	04/07/14 17:32	04/08/14 14:35	1
Cadmium	12.4		0.289	0.0296	mg/Kg	☼	04/07/14 17:32	04/08/14 14:35	1
Lead	1900		0.578	0.121	mg/Kg	☼	04/07/14 17:32	04/08/14 14:35	1

Client Sample ID: ECO-8B (0-0.5)

Lab Sample ID: 600-89701-63

Date Collected: 03/31/14 16:39

Matrix: Solid

Date Received: 04/01/14 10:46

Percent Solids: 81.7

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.809	J	2.31	0.299	mg/Kg	☼	04/07/14 17:32	04/08/14 14:35	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		1.0	1.0	%			04/02/14 13:58	1
Percent Solids	82		1.0	1.0	%			04/02/14 13:58	1

Client Sample ID: Rinse Blank - Geo

Lab Sample ID: 600-89701-67

Date Collected: 03/31/14 17:05

Matrix: Water

Date Received: 04/01/14 10:46

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00630	U	0.0500	0.00630	mg/L		04/08/14 11:29	04/09/14 14:24	1
Arsenic	0.00328	U	0.0100	0.00328	mg/L		04/08/14 11:29	04/09/14 14:24	1
Cadmium	0.000350	U	0.00500	0.000350	mg/L		04/08/14 11:29	04/09/14 14:24	1
Lead	0.00290	U	0.0100	0.00290	mg/L		04/08/14 11:29	04/09/14 14:24	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		04/08/14 11:29	04/09/14 14:24	1

Qualifiers

Metals

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.
F	Duplicate RPD exceeds the control limit
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
N2	RPD of the MS and MSD exceeds the control limits

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
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)

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-131415/1-A
Matrix: Solid
Analysis Batch: 131391

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 131415

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		04/07/14 14:53	04/07/14 19:23	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/07/14 14:53	04/07/14 19:23	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		04/07/14 14:53	04/07/14 19:23	1
Lead	0.105	U	0.500	0.105	mg/Kg		04/07/14 14:53	04/07/14 19:23	1
Selenium	0.259	U	2.00	0.259	mg/Kg		04/07/14 14:53	04/07/14 19:23	1

Lab Sample ID: LCSSRM 600-131415/2-A
Matrix: Solid
Analysis Batch: 131391

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 131415

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	68.54		mg/Kg		77.7	45.4 - 231.3
Arsenic	99.6	102.2		mg/Kg		102.6	80.8 - 119.5
Cadmium	182	194.8		mg/Kg		107.0	81.9 - 118.1
Lead	115	121.1		mg/Kg		105.3	81.8 - 119.1
Selenium	150	149.7		mg/Kg		99.8	77.3 - 122.7

Lab Sample ID: 600-89701-4 MS
Matrix: Solid
Analysis Batch: 131391

Client Sample ID: 2014-C2L-06B (0-0.5)
Prep Type: Total/NA
Prep Batch: 131415

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.237	U	48.8	21.12	N1	mg/Kg	☼	43	75 - 125
Arsenic	6.16		48.8	57.07		mg/Kg	☼	104	75 - 125
Cadmium	0.261		24.4	25.72		mg/Kg	☼	104	75 - 125
Lead	47.1		48.8	96.67		mg/Kg	☼	102	75 - 125
Selenium	0.297	J	48.8	46.20		mg/Kg	☼	94	75 - 125

Lab Sample ID: 600-89701-4 MSD
Matrix: Solid
Analysis Batch: 131391

Client Sample ID: 2014-C2L-06B (0-0.5)
Prep Type: Total/NA
Prep Batch: 131415

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.237	U	50.7	22.10	N1	mg/Kg	☼	44	75 - 125	5	20
Arsenic	6.16		50.7	59.30		mg/Kg	☼	105	75 - 125	4	20
Cadmium	0.261		25.3	26.91		mg/Kg	☼	105	75 - 125	5	20
Lead	47.1		50.7	84.75	N1	mg/Kg	☼	74	75 - 125	13	20
Selenium	0.297	J	50.7	48.24		mg/Kg	☼	95	75 - 125	4	20

Lab Sample ID: 600-89701-55 MS
Matrix: Solid
Analysis Batch: 131391

Client Sample ID: SRB-VS-11B (0.5-2)
Prep Type: Total/NA
Prep Batch: 131415

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	3.10		55.6	17.67	N1	mg/Kg	☼	26	75 - 125

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

Lab Sample ID: 600-89701-55 MS
Matrix: Solid
Analysis Batch: 131391

Client Sample ID: SRB-VS-11B (0.5-2)
Prep Type: Total/NA
Prep Batch: 131415

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	11.3		55.6	67.17		mg/Kg	☼	101	75 - 125
Cadmium	0.777		27.8	30.13		mg/Kg	☼	106	75 - 125
Lead	74.2		55.6	140.3		mg/Kg	☼	119	75 - 125
Selenium	0.402	J	55.6	51.05		mg/Kg	☼	91	75 - 125

Lab Sample ID: 600-89701-55 MSD
Matrix: Solid
Analysis Batch: 131391

Client Sample ID: SRB-VS-11B (0.5-2)
Prep Type: Total/NA
Prep Batch: 131415

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	3.10		54.1	19.37	N1	mg/Kg	☼	30	75 - 125	9	20
Arsenic	11.3		54.1	63.41		mg/Kg	☼	96	75 - 125	6	20
Cadmium	0.777		27.0	28.43		mg/Kg	☼	102	75 - 125	6	20
Lead	74.2		54.1	139.5		mg/Kg	☼	121	75 - 125	1	20
Selenium	0.402	J	54.1	47.89		mg/Kg	☼	88	75 - 125	6	20

Lab Sample ID: 600-89701-4 DU
Matrix: Solid
Analysis Batch: 131391

Client Sample ID: 2014-C2L-06B (0-0.5)
Prep Type: Total/NA
Prep Batch: 131415

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.237	U	0.235	U	mg/Kg	☼	NC	20
Arsenic	6.16		8.911	F	mg/Kg	☼	37	20
Cadmium	0.261		0.6082	F	mg/Kg	☼	80	20
Lead	47.1		100.2	F	mg/Kg	☼	72	20
Selenium	0.297	J	0.4866	J	mg/Kg	☼	48	20

Lab Sample ID: 600-89701-55 DU
Matrix: Solid
Analysis Batch: 131391

Client Sample ID: SRB-VS-11B (0.5-2)
Prep Type: Total/NA
Prep Batch: 131415

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	3.10		0.4210	J	mg/Kg	☼	152	20
Arsenic	11.3		12.00		mg/Kg	☼	6	20
Cadmium	0.777		0.9206		mg/Kg	☼	17	20
Lead	74.2		103.7	F	mg/Kg	☼	33	20
Selenium	0.402	J	0.4603	J	mg/Kg	☼	14	20

Lab Sample ID: MB 600-131430/1-A
Matrix: Solid
Analysis Batch: 131531

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 131430

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		04/07/14 17:32	04/08/14 13:28	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/07/14 17:32	04/08/14 13:28	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		04/07/14 17:32	04/08/14 13:28	1
Lead	0.105	U	0.500	0.105	mg/Kg		04/07/14 17:32	04/08/14 13:28	1
Selenium	0.259	U	2.00	0.259	mg/Kg		04/07/14 17:32	04/08/14 13:28	1

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

Lab Sample ID: LCSSRM 600-131430/2-A
Matrix: Solid
Analysis Batch: 131531

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 131430

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony			88.2	74.56		mg/Kg		84.5	45.4 - 231.3		
Arsenic			99.6	103.5		mg/Kg		103.9	80.8 - 119.5		
Cadmium			182	189.9		mg/Kg		104.3	81.9 - 118.1		
Lead			115	123.5		mg/Kg		107.4	81.8 - 119.1		
Selenium			150	150.6		mg/Kg		100.4	77.3 - 122.7		

Lab Sample ID: 600-89701-56 MS
Matrix: Solid
Analysis Batch: 131531

Client Sample ID: SRB-VS-11B (0.5-2) MS
Prep Type: Total/NA
Prep Batch: 131430

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony	0.286	U	66.0	23.84	N1	mg/Kg	☼	36	75 - 125		
Arsenic	12.8		66.0	78.84		mg/Kg	☼	100	75 - 125		
Cadmium	1.07		33.0	35.08		mg/Kg	☼	103	75 - 125		
Lead	177		66.0	600.1	N1	mg/Kg	☼	641	75 - 125		
Selenium	0.432	J	66.0	60.94		mg/Kg	☼	92	75 - 125		

Lab Sample ID: 600-89701-56 MSD
Matrix: Solid
Analysis Batch: 131531

Client Sample ID: SRB-VS-11B (0.5-2) MS
Prep Type: Total/NA
Prep Batch: 131430

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.286	U	62.9	19.45	N1	mg/Kg	☼	31	75 - 125	20	20
Arsenic	12.8		62.9	73.20		mg/Kg	☼	96	75 - 125	7	20
Cadmium	1.07		31.4	32.21		mg/Kg	☼	99	75 - 125	9	20
Lead	177		62.9	157.6	N1 N2	mg/Kg	☼	-30	75 - 125	117	20
Selenium	0.432	J	62.9	56.12		mg/Kg	☼	89	75 - 125	8	20

Lab Sample ID: 600-89701-56 DU
Matrix: Solid
Analysis Batch: 131531

Client Sample ID: SRB-VS-11B (0.5-2) MS
Prep Type: Total/NA
Prep Batch: 131430

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.286	U	0.297	U	mg/Kg	☼	NC	20
Arsenic	12.8		11.87		mg/Kg	☼	7	20
Cadmium	1.07		0.7949		mg/Kg	☼	29	20
Lead	177		97.76	F	mg/Kg	☼	57	20
Selenium	0.432	J	0.4808	J	mg/Kg	☼	11	20

Lab Sample ID: MB 600-131463/1-A
Matrix: Water
Analysis Batch: 131619

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 131463

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00630	U	0.0500	0.00630	mg/L		04/08/14 10:31	04/09/14 13:53	1

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

Lab Sample ID: MB 600-131463/1-A
Matrix: Water
Analysis Batch: 131619

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 131463

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00328	U	0.0100	0.00328	mg/L		04/08/14 10:31	04/09/14 13:53	1
Cadmium	0.000350	U	0.00500	0.000350	mg/L		04/08/14 10:31	04/09/14 13:53	1
Lead	0.00290	U	0.0100	0.00290	mg/L		04/08/14 10:31	04/09/14 13:53	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		04/08/14 10:31	04/09/14 13:53	1

Lab Sample ID: LCS 600-131463/2-A
Matrix: Water
Analysis Batch: 131619

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 131463

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.00	0.9988		mg/L		100	80 - 120
Arsenic	1.00	1.030		mg/L		103	80 - 120
Cadmium	0.500	0.5141		mg/L		103	80 - 120
Lead	1.00	1.050		mg/L		105	80 - 120
Selenium	1.00	1.022		mg/L		102	80 - 120

Method: Moisture - Percent Moisture

Lab Sample ID: 600-89701-1 DU
Matrix: Solid
Analysis Batch: 131016

Client Sample ID: 2014-C2L-06A (0-0.5)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	15		15		%		3	20
Percent Solids	85		85		%		0.5	20

Lab Sample ID: 600-89701-34 DU
Matrix: Solid
Analysis Batch: 131016

Client Sample ID: 2014-SL-7 (0-0.5)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	15		14		%		6	20
Percent Solids	85		86		%		1	20

Lab Sample ID: 600-89701-60 DU
Matrix: Solid
Analysis Batch: 131016

Client Sample ID: B3RA (0-0.5)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	21		20		%		4	20
Percent Solids	79		80		%		1	20

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-1

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Antimony	2.50	0.232	mg/Kg	6010B
Antimony	0.0500	0.00630	mg/L	6010B
Arsenic	1.00	0.218	mg/Kg	6010B
Arsenic	0.0100	0.00328	mg/L	6010B
Cadmium	0.250	0.0256	mg/Kg	6010B
Cadmium	0.00500	0.000350	mg/L	6010B
Lead	0.500	0.105	mg/Kg	6010B
Lead	0.0100	0.00290	mg/L	6010B
Selenium	2.00	0.259	mg/Kg	6010B
Selenium	0.0400	0.00417	mg/L	6010B

General Chemistry

Analyte	MQL	MDL	Units	Method
Percent Moisture	1.0	1.0	%	Moisture
Percent Solids	1.0	1.0	%	Moisture

Metals

Analysis Batch: 131391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-1	2014-C2L-06A (0-0.5)	Total/NA	Solid	6010B	131415
600-89701-4	2014-C2L-06B (0-0.5)	Total/NA	Solid	6010B	131415
600-89701-4 DU	2014-C2L-06B (0-0.5)	Total/NA	Solid	6010B	131415
600-89701-4 MS	2014-C2L-06B (0-0.5)	Total/NA	Solid	6010B	131415
600-89701-4 MSD	2014-C2L-06B (0-0.5)	Total/NA	Solid	6010B	131415
600-89701-7	2014-C2L-06C (0-0.5)	Total/NA	Solid	6010B	131415
600-89701-10	D-11B (0-0.5)	Total/NA	Solid	6010B	131415
600-89701-13	E-11C-A (0.5-2)	Total/NA	Solid	6010B	131415
600-89701-16	E-11E- (0-0.5)	Total/NA	Solid	6010B	131415
600-89701-19	2014-NT-3 (0-0.5)	Total/NA	Solid	6010B	131415
600-89701-22	2014-NT-4 (0-0.5)	Total/NA	Solid	6010B	131415
600-89701-25	2014-SL-5 (0-0.5)	Total/NA	Solid	6010B	131415
600-89701-31	2014-SL-6 (0-0.5)	Total/NA	Solid	6010B	131415
600-89701-34	2014-SL-7 (0-0.5)	Total/NA	Solid	6010B	131415
600-89701-37	2014-FFTA-05 (0-0.5)	Total/NA	Solid	6010B	131415
600-89701-40	2014-FFTA-04 (0-0.5)	Total/NA	Solid	6010B	131415
600-89701-46	2014-SDA-6 (0-0.5)	Total/NA	Solid	6010B	131415
600-89701-49	2014-TS-3 (0-0.5)	Total/NA	Solid	6010B	131415
600-89701-52	2014-SDA-7 (0-0.5)	Total/NA	Solid	6010B	131415
600-89701-55	SRB-VS-11B (0.5-2)	Total/NA	Solid	6010B	131415
600-89701-55 DU	SRB-VS-11B (0.5-2)	Total/NA	Solid	6010B	131415
600-89701-55 MS	SRB-VS-11B (0.5-2)	Total/NA	Solid	6010B	131415
600-89701-55 MSD	SRB-VS-11B (0.5-2)	Total/NA	Solid	6010B	131415
LCSSRM 600-131415/2-A	Lab Control Sample	Total/NA	Solid	6010B	131415
MB 600-131415/1-A	Method Blank	Total/NA	Solid	6010B	131415

Prep Batch: 131415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-1	2014-C2L-06A (0-0.5)	Total/NA	Solid	3050B	
600-89701-4	2014-C2L-06B (0-0.5)	Total/NA	Solid	3050B	
600-89701-4 DU	2014-C2L-06B (0-0.5)	Total/NA	Solid	3050B	
600-89701-4 MS	2014-C2L-06B (0-0.5)	Total/NA	Solid	3050B	
600-89701-4 MSD	2014-C2L-06B (0-0.5)	Total/NA	Solid	3050B	
600-89701-7 - DL	2014-C2L-06C (0-0.5)	Total/NA	Solid	3050B	
600-89701-7	2014-C2L-06C (0-0.5)	Total/NA	Solid	3050B	
600-89701-10	D-11B (0-0.5)	Total/NA	Solid	3050B	
600-89701-13	E-11C-A (0.5-2)	Total/NA	Solid	3050B	
600-89701-16	E-11E- (0-0.5)	Total/NA	Solid	3050B	
600-89701-19	2014-NT-3 (0-0.5)	Total/NA	Solid	3050B	
600-89701-22	2014-NT-4 (0-0.5)	Total/NA	Solid	3050B	
600-89701-25	2014-SL-5 (0-0.5)	Total/NA	Solid	3050B	
600-89701-31	2014-SL-6 (0-0.5)	Total/NA	Solid	3050B	
600-89701-34	2014-SL-7 (0-0.5)	Total/NA	Solid	3050B	
600-89701-37	2014-FFTA-05 (0-0.5)	Total/NA	Solid	3050B	
600-89701-40	2014-FFTA-04 (0-0.5)	Total/NA	Solid	3050B	
600-89701-46	2014-SDA-6 (0-0.5)	Total/NA	Solid	3050B	
600-89701-49	2014-TS-3 (0-0.5)	Total/NA	Solid	3050B	
600-89701-52 - DL	2014-SDA-7 (0-0.5)	Total/NA	Solid	3050B	
600-89701-52	2014-SDA-7 (0-0.5)	Total/NA	Solid	3050B	
600-89701-55	SRB-VS-11B (0.5-2)	Total/NA	Solid	3050B	
600-89701-55 DU	SRB-VS-11B (0.5-2)	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 131415 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-55 MS	SRB-VS-11B (0.5-2)	Total/NA	Solid	3050B	
600-89701-55 MSD	SRB-VS-11B (0.5-2)	Total/NA	Solid	3050B	
LCSSRM 600-131415/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-131415/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 131430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-56	SRB-VS-11B (0.5-2) MS	Total/NA	Solid	3050B	
600-89701-56 DU	SRB-VS-11B (0.5-2) MS	Total/NA	Solid	3050B	
600-89701-56 MS	SRB-VS-11B (0.5-2) MS	Total/NA	Solid	3050B	
600-89701-56 MSD	SRB-VS-11B (0.5-2) MS	Total/NA	Solid	3050B	
600-89701-57	SRB-VS-11B (0.5-2) MSD	Total/NA	Solid	3050B	
600-89701-59	DUP-3	Total/NA	Solid	3050B	
600-89701-60	B3RA (0-0.5)	Total/NA	Solid	3050B	
600-89701-63	ECO-8B (0-0.5)	Total/NA	Solid	3050B	
LCSSRM 600-131430/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-131430/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 131463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-67	Rinse Blank - Geo	Total/NA	Water	3010A	
LCS 600-131463/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-131463/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 131466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-7 - DL	2014-C2L-06C (0-0.5)	Total/NA	Solid	6010B	131415
600-89701-52 - DL	2014-SDA-7 (0-0.5)	Total/NA	Solid	6010B	131415

Analysis Batch: 131531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-56	SRB-VS-11B (0.5-2) MS	Total/NA	Solid	6010B	131430
600-89701-56 DU	SRB-VS-11B (0.5-2) MS	Total/NA	Solid	6010B	131430
600-89701-56 MS	SRB-VS-11B (0.5-2) MS	Total/NA	Solid	6010B	131430
600-89701-56 MSD	SRB-VS-11B (0.5-2) MS	Total/NA	Solid	6010B	131430
600-89701-57	SRB-VS-11B (0.5-2) MSD	Total/NA	Solid	6010B	131430
600-89701-59	DUP-3	Total/NA	Solid	6010B	131430
600-89701-60	B3RA (0-0.5)	Total/NA	Solid	6010B	131430
600-89701-63	ECO-8B (0-0.5)	Total/NA	Solid	6010B	131430
LCSSRM 600-131430/2-A	Lab Control Sample	Total/NA	Solid	6010B	131430
MB 600-131430/1-A	Method Blank	Total/NA	Solid	6010B	131430

Analysis Batch: 131619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-67	Rinse Blank - Geo	Total/NA	Water	6010B	131463
LCS 600-131463/2-A	Lab Control Sample	Total/NA	Water	6010B	131463
MB 600-131463/1-A	Method Blank	Total/NA	Water	6010B	131463

QC Association Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-1

General Chemistry

Analysis Batch: 131016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-1	2014-C2L-06A (0-0.5)	Total/NA	Solid	Moisture	
600-89701-1 DU	2014-C2L-06A (0-0.5)	Total/NA	Solid	Moisture	
600-89701-4	2014-C2L-06B (0-0.5)	Total/NA	Solid	Moisture	
600-89701-7	2014-C2L-06C (0-0.5)	Total/NA	Solid	Moisture	
600-89701-10	D-11B (0-0.5)	Total/NA	Solid	Moisture	
600-89701-13	E-11C-A (0.5-2)	Total/NA	Solid	Moisture	
600-89701-16	E-11E- (0-0.5)	Total/NA	Solid	Moisture	
600-89701-19	2014-NT-3 (0-0.5)	Total/NA	Solid	Moisture	
600-89701-22	2014-NT-4 (0-0.5)	Total/NA	Solid	Moisture	
600-89701-25	2014-SL-5 (0-0.5)	Total/NA	Solid	Moisture	
600-89701-31	2014-SL-6 (0-0.5)	Total/NA	Solid	Moisture	
600-89701-34	2014-SL-7 (0-0.5)	Total/NA	Solid	Moisture	
600-89701-34 DU	2014-SL-7 (0-0.5)	Total/NA	Solid	Moisture	
600-89701-37	2014-FFTA-05 (0-0.5)	Total/NA	Solid	Moisture	
600-89701-40	2014-FFTA-04 (0-0.5)	Total/NA	Solid	Moisture	
600-89701-46	2014-SDA-6 (0-0.5)	Total/NA	Solid	Moisture	
600-89701-49	2014-TS-3 (0-0.5)	Total/NA	Solid	Moisture	
600-89701-52	2014-SDA-7 (0-0.5)	Total/NA	Solid	Moisture	
600-89701-55	SRB-VS-11B (0.5-2)	Total/NA	Solid	Moisture	
600-89701-56	SRB-VS-11B (0.5-2) MS	Total/NA	Solid	Moisture	
600-89701-57	SRB-VS-11B (0.5-2) MSD	Total/NA	Solid	Moisture	
600-89701-59	DUP-3	Total/NA	Solid	Moisture	
600-89701-60	B3RA (0-0.5)	Total/NA	Solid	Moisture	
600-89701-60 DU	B3RA (0-0.5)	Total/NA	Solid	Moisture	
600-89701-63	ECO-8B (0-0.5)	Total/NA	Solid	Moisture	
600-89705-D-5 MS	Matrix Spike	Total/NA	Solid	Moisture	
600-89705-D-5 MSD	Matrix Spike Duplicate	Total/NA	Solid	Moisture	

Client Sample ID: 2014-C2L-06A (0-0.5)

Lab Sample ID: 600-89701-1

Date Collected: 03/31/14 08:47
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 85.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	50 mL	131415	04/07/14 14:53	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	131391	04/07/14 19:34	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Client Sample ID: 2014-C2L-06B (0-0.5)

Lab Sample ID: 600-89701-4

Date Collected: 03/31/14 09:09
Matrix: Solid
Date Received: 04/01/14 10:46
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	3050B			1.01 g	50 mL	131415	04/07/14 14:53	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	131391	04/07/14 19:37	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Client Sample ID: 2014-C2L-06C (0-0.5)

Lab Sample ID: 600-89701-7

Date Collected: 03/31/14 09:30
Matrix: Solid
Date Received: 04/01/14 10:46
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	3050B			1.05 g	50 mL	131415	04/07/14 14:53	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	131391	04/07/14 19:53	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.05 g	50 mL	131415	04/07/14 14:53	NER	TAL HOU
Total/NA	Analysis	6010B	DL	10	1.05 g	50 mL	131466	04/08/14 10:16	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Client Sample ID: D-11B (0-0.5)

Lab Sample ID: 600-89701-10

Date Collected: 03/31/14 09:50
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 80.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	131415	04/07/14 14:53	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	131391	04/07/14 19:55	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Client Sample ID: E-11C-A (0.5-2)

Lab Sample ID: 600-89701-13

Date Collected: 03/31/14 10:09
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 78.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	50 mL	131415	04/07/14 14:53	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	131391	04/07/14 19:58	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-1

Client Sample ID: E-11E- (0-0.5)

Lab Sample ID: 600-89701-16

Date Collected: 03/31/14 10:31
Date Received: 04/01/14 10:46

Matrix: Solid
Percent Solids: 78.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	131415	04/07/14 14:53	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	131391	04/07/14 20:00	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Client Sample ID: 2014-NT-3 (0-0.5)

Lab Sample ID: 600-89701-19

Date Collected: 03/31/14 10:48
Date Received: 04/01/14 10:46

Matrix: Solid
Percent Solids: 82.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	131415	04/07/14 14:53	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	131391	04/07/14 20:03	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Client Sample ID: 2014-NT-4 (0-0.5)

Lab Sample ID: 600-89701-22

Date Collected: 03/31/14 11:04
Date Received: 04/01/14 10:46

Matrix: Solid
Percent Solids: 81.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.08 g	50 mL	131415	04/07/14 14:53	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	131391	04/07/14 20:05	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Client Sample ID: 2014-SL-5 (0-0.5)

Lab Sample ID: 600-89701-25

Date Collected: 03/31/14 11:22
Date Received: 04/01/14 10:46

Matrix: Solid
Percent Solids: 81.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	50 mL	131415	04/07/14 14:53	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	131391	04/07/14 20:08	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Client Sample ID: 2014-SL-6 (0-0.5)

Lab Sample ID: 600-89701-31

Date Collected: 03/31/14 11:49
Date Received: 04/01/14 10:46

Matrix: Solid
Percent Solids: 84.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	131415	04/07/14 14:53	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	131391	04/07/14 20:10	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-1

Client Sample ID: 2014-SL-7 (0-0.5)

Lab Sample ID: 600-89701-34

Date Collected: 03/31/14 12:10
Date Received: 04/01/14 10:46

Matrix: Solid
Percent Solids: 85.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	50 mL	131415	04/07/14 14:53	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	131391	04/07/14 20:13	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Client Sample ID: 2014-FFTA-05 (0-0.5)

Lab Sample ID: 600-89701-37

Date Collected: 03/31/14 13:45
Date Received: 04/01/14 10:46

Matrix: Solid
Percent Solids: 78.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	50 mL	131415	04/07/14 14:53	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	131391	04/07/14 20:15	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Client Sample ID: 2014-FFTA-04 (0-0.5)

Lab Sample ID: 600-89701-40

Date Collected: 03/31/14 14:10
Date Received: 04/01/14 10:46

Matrix: Solid
Percent Solids: 75.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	131415	04/07/14 14:53	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	131391	04/07/14 20:24	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Client Sample ID: 2014-SDA-6 (0-0.5)

Lab Sample ID: 600-89701-46

Date Collected: 03/31/14 14:51
Date Received: 04/01/14 10:46

Matrix: Solid
Percent Solids: 92.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	50 mL	131415	04/07/14 14:53	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	131391	04/07/14 20:27	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Client Sample ID: 2014-TS-3 (0-0.5)

Lab Sample ID: 600-89701-49

Date Collected: 03/31/14 14:24
Date Received: 04/01/14 10:46

Matrix: Solid
Percent Solids: 86.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	50 mL	131415	04/07/14 14:53	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	131391	04/07/14 20:29	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Client Sample ID: 2014-SDA-7 (0-0.5)

Lab Sample ID: 600-89701-52

Date Collected: 03/31/14 15:35
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 84.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	131415	04/07/14 14:53	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	131391	04/07/14 20:32	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.03 g	50 mL	131415	04/07/14 14:53	NER	TAL HOU
Total/NA	Analysis	6010B	DL	10	1.03 g	50 mL	131466	04/08/14 10:18	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Client Sample ID: SRB-VS-11B (0.5-2)

Lab Sample ID: 600-89701-55

Date Collected: 03/31/14 15:46
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 85.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	131415	04/07/14 14:53	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	131391	04/07/14 20:34	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Client Sample ID: SRB-VS-11B (0.5-2) MS

Lab Sample ID: 600-89701-56

Date Collected: 03/31/14 15:46
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 75.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.07 g	50 mL	131430	04/07/14 17:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	131531	04/08/14 14:11	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Client Sample ID: SRB-VS-11B (0.5-2) MSD

Lab Sample ID: 600-89701-57

Date Collected: 03/31/14 15:46
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 83.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	50 mL	131430	04/07/14 17:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	131531	04/08/14 14:21	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Client Sample ID: DUP-3

Lab Sample ID: 600-89701-59

Date Collected: 03/31/14 00:00
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 78.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	50 mL	131430	04/07/14 17:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	131531	04/08/14 14:23	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-1

Client Sample ID: B3RA (0-0.5)

Date Collected: 03/31/14 16:14
Date Received: 04/01/14 10:46

Lab Sample ID: 600-89701-60

Matrix: Solid
Percent Solids: 79.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	50 mL	131430	04/07/14 17:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	131531	04/08/14 14:33	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Client Sample ID: ECO-8B (0-0.5)

Date Collected: 03/31/14 16:39
Date Received: 04/01/14 10:46

Lab Sample ID: 600-89701-63

Matrix: Solid
Percent Solids: 81.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	131430	04/07/14 17:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	131531	04/08/14 14:35	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131016	04/02/14 13:58	AYS	TAL HOU

Client Sample ID: Rinse Blank - Geo

Date Collected: 03/31/14 17:05
Date Received: 04/01/14 10:46

Lab Sample ID: 600-89701-67

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	3010A			50 mL	50 mL	131463	04/08/14 11:29	NER	TAL HOU
Total/NA	Analysis	6010B		1	50 mL	50 mL	131619	04/09/14 14:24	DCL	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-1

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Texas	NELAP	6	T104704223	10-31-14

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Chain of Custody Record

600-89701 Chain of Custody

ture on Receipt _____

Water? Yes☐ No☐

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates, Inc.	Dean Jainer	3/31/14	255294
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 of 6
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Project Name and Location (State)	**Carrier/Waybill Number**		
Exide Recycling Center, Frisco, TX			
Contract/Purchase Order/Quote No.			
1302086			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Soil	Containers & Preservatives: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: 6010 Metals (Select)	Chlorides, As, Hg, Se	In Acc w/ WMSA	Special Instructions/ Conditions of Receipt
2014-C2L-06A (0-0.5)		0847				X	X						X			
2014-C2L-06A (0.5-2)		0848														Hold
2014-C2L-06A (2-4)		0849														Hold
2014-C2L-06B (0-0.5)		0909														
2014-C2L-06B (0.5-2)		0910														Hold
2014-C2L-06B (2-4)		0911														Hold
2014-C2L-06C (0-0.5)		0930														
2014-C2L-06C (0.5-2)		0931														Hold
2014-C2L-06C (2-4)		0932														Hold
D-11B (0-0.5)		0950														Arsenic Only
D-11B * (0.5-2)		0951														Hold *
D-11B * (2-4)		0952														Hold

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

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

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
Jing Song Xi	3/31/14	1900			
2. Relinquished By	**Date**	**Time**	**2. Received By**	**Date**	**Time**
3. Relinquished By	**Date**	**Time**	**3. Received By**	**Date**	**Time**
				4/1/14	10:46

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

5/19/2014

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[redacted]

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates, Inc.	Dean Jones		255295
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 2 of 6
City: Exide Recycling Center / State / Zip Code	Site Contact	Lab Contact	Analysis (Attach list if more space is needed)
Project Name and Location (State): Exide Recycling Center, Frisco, TX	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.: 130 2086			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	6010 + Inorganics (Select) (Pb, Cd, Ni, Mn, Se)	In Acc w/ MSA	Special Instructions/ Conditions of Receipt
E-11C-A (0.5-2)	3/31/14	1009				X	X						X		Arsenic only
E-11C-A (2-4)		1010													Hold
E-11C-A (4-6)		1011													Hold
~~E-11E (0-0.5)~~															
E-11E (0-0.5)		1031													
E-11E (0.5-2)		1032													Hold
E-11E (2-4)		1033													Hold
2014-NT-3 (0-0.5)		1048													
2014-NT-3 (0.5-2)		1049													Hold
2014-NT-3 (2-4)		1050													Hold
2014-NT-4 (0-0.5)		1104													
2014-NT-4 (0.5-2)		1105													Hold

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: JAG SAG XI	3/31/14	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By	4/1/14	10:46

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

5/19/2014

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates Inc.	Dean Fisher		255296
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 3 of 6
City / State / Zip Code	Site Contact	Lab Contact	
Project Name and Location (State): Exide Recycling Center, Frisco, TX	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.: 1302086			

Analysis (Attach list if more space is needed): In Accl w/ DnsA

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Gas. Metals (Select)	(Pb, Cd, Sb, Ni, Se)	Special Instructions/ Conditions of Receipt
2014-NT-4 (2-4)	3/31/14	1106				X	X						X		Hold
2014-SL-5 (0-0.5)		1122													
2014-SL-5 (0.5-2)		1123													Hold
2014-SL-5 (2-4)		1124													Hold
2014-SL-5 (2-4) MS		1124													Hold
2014-SL-5 (2-4) MSD		1124													Hold
DUP-1		-													Hold
2014-SL-6 (0-0.5)		1149													
2014-SL-6 (0.5-2)		1150													Hold
2014-SL-6 (2-4)		1151													Hold
2014-SL-7 (0-0.5)		1210													
2014-SL-7 (0.5-2)		1211													Hold

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: JAG SAG XI	3/31/14	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

5/19/2014

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates, Inc.	Jean Joher		255297
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 4 of 6
City / State / Zip Code	Site Contact / Lab Contact	Analysis (Attach list if more space is needed)	
Project Name and Location (State): Exide Recycling Center, Frisco, TX	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.: 1302086			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Soil	Containers & Preservatives: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Goto Mobile (Select) (Pb,Cd,As,Al,Se)	In Acc w/ MSA	Special Instructions/ Conditions of Receipt
2014-SL-7 (2-4)	3/31/14	1212				X	X						X		Hold
2014-FFTA-05 (0-0.5)		1345													
2014-FFTA-05 (0.5-2)		1346													Hold
2014-FFTA-05 (2-4)		1347													Hold
2014-FFTA-04 (0-0.5)		1410													
2014-FFTA-04 (0.5-2)		1411													Hold
2014-FFTA-04 (2-4)		1412													Hold
2014-FFTA-04 (2-4) MS		1412													Hold
2014-FFTA-04 (2-4) MSD		1412													Hold
DUP-2		-													Hold
2014-SDA-6 (0-0.5)		1457													
2014-SDA-6 (0.5-2)		1452													Hold

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Jing Song Xi	3/31/14	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By	4/1/14	10:46

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

5/19/2014

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates, Inc.			255298
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 5 of 6
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Project Name and Location (State) Exide Recycling Center, Frisco, TX	**Carrier/Waybill Number**		
Contract/Purchase Order/Quote No. 1302086			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): 6010 Metals (Select) (Pb, Cd, As, Al, Fe, Sb)	In Acc w/ MSA	Special Instructions/ Conditions of Receipt
2014-SDA-6 (2-4)	3/31/14	1453				X	X						X		Hold
2014-TS-3 (0-0.5)		1424													
2014-TS-3 (0.5-2)		1425													Hold
2014-TS-3 (2-4)		1426													Hold
2014-SDA-7 (0-0.5)		1535													
2014-SDA-7 (0.5-2)		1536													Hold
2014-SDA-7 (2-4)		1537													Hold
SRB-VS-11B (0.5-2)		1546													
SRB-VS-11B (0.5-2) MS		1546													
SRB-VS-11B (0.5-2) MSD		1546													
SRB-VS-11B (2-4)		1547													Hold
DUP-3		-													

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: JAG SOAG X1	3/31/14	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By: D. Fisher	4/1/14	10:46

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates, Inc.	Dean Tarver		255299
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 6 **of** 6
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Project Name and Location (State)	**Carrier/Waybill Number**		
Exide Recycling Center, Frisco, TX			
Contract/Purchase Order/Quote No.			
1302086			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	Analysis: Col. Metals (Select)	(Pb, Cd, As, At, Se)	In Acc w/ MSA	Special Instructions/ Conditions of Receipt
B3RA (0-0.5)	3/31/14	1614				X	X						X			
B3RA (0.5-2)		1615				↓	↓						↓			Hold
B3RA (2-4)		1616				↓	↓						↓			Hold
ECO-8B (0-0.5)		1639				↓	↓						↓			
ECO-8B (0.5-2)		1640				↓	↓						↓			Hold
ECO-8B (2-4)		1641				↓	↓						↓			Hold
Rinse Blank - Geo		1705		X					X				X			

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: JMG SAG XI	3/31/14	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By	4/1/14	10:46

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

5/19/2014

Upton, Cathy

From: Faeth-Boyd, Anne [Anne_Faeth-Boyd@golder.com]
Sent: Saturday, May 17, 2014 11:37 PM
To: Upton, Cathy
Cc: Higginbotham, Christina; Thomas, Jim
Subject: Additional metals reported - please
Importance: High
Follow Up Flag: Follow up
Flag Status: Red

Cathy,

Can we please get all metals reported for E-11C-A (0.5-2.0), sampled on 3/31/14? Would it be possible to get this on Monday?

Thanks,
Anne

Anne Faeth-Boyd, R.G., P.E. | Senior Project Engineer | **Golder Associates Inc.**
820 South Main Street, Suite 100, St. Charles, Missouri, USA 63301
T: +1 (636) 724-9191 | **F:** +1 (636) 724-9323 | **C:** +1 314 503-5179 | **E:** Anne_Faeth-Boyd@golder.com | **www.golder.com**

Work Safe, Home Safe

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Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-89701-1

Login Number: 89701

List Source: TestAmerica Houston

List Number: 1

Creator: Lockett, DuJuan D

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	1.8, 1.9
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.	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	Check done at department level as required.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-89701-3
Client Project/Site: Exide Recycling Center, Frisco TX

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
4/24/2014 4:26:47 PM
Cathy Upton, Project Management Assistant II
(713)690-4444
cathy.upton@testamericainc.com

Designee for

Dean Joiner, Project Manager II
(713)690-4444
dean.joiner@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.

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-89701-3 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☐ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☐ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☑ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton		4/24/2014
Name (printed)	Signature	Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/24/2014
Project Name:	Exide Recycling Center, Frisco TX	Laboratory Job Number:	600-89701-3
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				R05D
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			R07C
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?		X			R08C
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/24/2014
Project Name:	Exide Recycling Center, Frisco TX	Laboratory Job Number:	600-89701-3
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			S09A
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
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5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/24/2014
Project Name:	Exide Recycling Center, Frisco TX	Laboratory Job Number:	600-89701-3
Reviewer Name:	Dean A Joiner		

ER #[1]	Description
R05D	Method 6010B: The method blank for batch 132543 contained lead above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. Method 6010B: The method blank for batch 132552 contained lead above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.
R07C	Method 6010B: 600-89701-58 MS failed the recovery criteria for the following analyte(s): Antimony, Arsenic. Matrix interference is suspected. Method 6010B: 600-89701-58 MSD failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected. Method 6010B: 600-90591-A-3-G MS failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected.
R08C	Method 6010B: 600-90591-A-3-F DU failed the RPD criteria for the following analyte(s): Lead. Non-homogeneity is suspected.
S09A	Method 6010B: The serial dilution performed for the following sample(s) associated with batch 132572 was outside control limits for arsenic: 600-89701-58 SD.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
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3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Detection Check Standard

Matrix:	Soil
Method:	6010B
Preparation:	3050
Date Analyzed:	3/28/2014
Date Prepared:	3/27/2014
Instrument:	Thermo 6500
TALS Batches:	130577p, 130672
Prep/Reagent Factor =	50
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.299654	0.5	0.36	25
Antimony	0.231553	0.45	0.31	2.5
Arsenic	0.217923	0.5	0.57	1
Barium	0.011322	0.03	0.03	1
Beryllium	0.014513	0.02	0.02	0.25
Boron	0.385535	0.6	0.49	20
Cadmium	0.025642	0.05	0.045	0.25
Calcium	0.86399	1.5	2.07	100
Chromium	0.050606	0.1	0.11	0.5
Cobalt	0.067622	0.1	0.105	0.5
Copper	0.173703	0.5	0.535	0.5
Iron	2.534007	4	4.035	20
Lead	0.104832	0.2	0.18	0.5
Selenium	0.258884	0.5	0.505	2
Manganese	0.038111	0.05	0.05	1.5
Molybdenum	0.136448	0.35	0.325	0.5
Nickel	0.116599	0.15	0.145	1
Silver	0.118848	0.2	0.22	0.5
Sodium	0.885548	2.4	2.13	100
Thallium	0.276988	0.7	0.615	1.5
Tin	0.08729	0.15	0.13	1
Titanium	0.014529	0.03	0.035	0.5
Vanadium	0.079068	0.15	0.165	0.5
Zinc	0.108432	0.2	0.285	1.5

Job ID: 600-89701-3

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-89701-3

Comments
No additional comments.

Receipt
The samples were received on 4/1/2014 10:46 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.8º C and 1.9º C.

Except:

The following sample(s) was activated for Metals analysis by the client on 04/16/14: 2014-C2L-06A (0.5-2)) (600-89701-2), 2014-C2L-06C (0.5-2) (600-89701-8), 2014-NT-3 (0.5-2) (600-89701-20), 2014-SDA-7 (0.5-2) (600-89701-53), 2014-SL-5 (0.5-2) (600-89701-26), 2014-TS-3 (0.5-2) (600-89701-50), B3RA (0.5-2) (600-89701-61), D-11B (0.5-2) (600-89701-11), ECO-8B (0.5-2) (600-89701-64). These samples were originally on Hold on the chain-of-custody (COC). Please see attached email.

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-3

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU
Moisture	Percent Moisture	EPA	TAL HOU

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 HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-89701-2	2014-C2L-06A (0.5-2))	Solid	03/31/14 08:48	04/01/14 10:46
600-89701-8	2014-C2L-06C (0.5-2)	Solid	03/31/14 09:31	04/01/14 10:46
600-89701-11	D-11B (0.5-2)	Solid	03/31/14 09:51	04/01/14 10:46
600-89701-20	2014-NT-3 (0.5-2)	Solid	03/31/14 10:49	04/01/14 10:46
600-89701-26	2014-SL-5 (0.5-2)	Solid	03/31/14 11:23	04/01/14 10:46
600-89701-50	2014-TS-3 (0.5-2)	Solid	03/31/14 14:25	04/01/14 10:46
600-89701-53	2014-SDA-7 (0.5-2)	Solid	03/31/14 15:36	04/01/14 10:46
600-89701-58	SRB-VS-11B (2-4)	Solid	03/31/14 15:47	04/01/14 10:46
600-89701-61	B3RA (0.5-2)	Solid	03/31/14 16:15	04/01/14 10:46
600-89701-64	ECO-8B (0.5-2)	Solid	03/31/14 16:40	04/01/14 10:46

Client Sample ID: 2014-C2L-06A (0.5-2)) — Lab Sample ID: 600-89701-2

Date Collected: 03/31/14 08:48 — **Matrix: Solid**
Date Received: 04/01/14 10:46 — **Percent Solids: 70.2**

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	132	b	0.705	0.148	mg/Kg	☼	04/21/14 12:19	04/21/14 18:12	1
Selenium	0.529	J	2.82	0.365	mg/Kg	☼	04/21/14 12:19	04/21/14 18:12	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	30		1.0	1.0	%			04/17/14 14:26	1
Percent Solids	70		1.0	1.0	%			04/17/14 14:26	1

Client Sample ID: 2014-C2L-06C (0.5-2) — Lab Sample ID: 600-89701-8

Date Collected: 03/31/14 09:31 — **Matrix: Solid**
Date Received: 04/01/14 10:46 — **Percent Solids: 78.8**

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.294	U	3.17	0.294	mg/Kg	☼	04/21/14 12:19	04/21/14 18:14	1
Arsenic	7.88		1.27	0.277	mg/Kg	☼	04/21/14 12:19	04/21/14 18:14	1
Lead	51.6	b	0.635	0.133	mg/Kg	☼	04/21/14 12:19	04/21/14 18:14	1
Selenium	0.329	U	2.54	0.329	mg/Kg	☼	04/21/14 12:19	04/21/14 18:14	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			04/17/14 14:26	1
Percent Solids	79		1.0	1.0	%			04/17/14 14:26	1

Client Sample ID: D-11B (0.5-2) — Lab Sample ID: 600-89701-11

Date Collected: 03/31/14 09:51 — **Matrix: Solid**
Date Received: 04/01/14 10:46 — **Percent Solids: 78.0**

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	9.53		1.27	0.277	mg/Kg	☼	04/21/14 12:19	04/21/14 18:16	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			04/17/14 14:26	1
Percent Solids	78		1.0	1.0	%			04/17/14 14:26	1

Client Sample ID: 2014-NT-3 (0.5-2) — Lab Sample ID: 600-89701-20

Date Collected: 03/31/14 10:49 — **Matrix: Solid**
Date Received: 04/01/14 10:46 — **Percent Solids: 80.0**

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	59.3	b	0.607	0.127	mg/Kg	☼	04/21/14 13:54	04/22/14 11:10	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			04/17/14 14:26	1
Percent Solids	80		1.0	1.0	%			04/17/14 14:26	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-3

Client Sample ID: 2014-SL-5 (0.5-2)

Lab Sample ID: 600-89701-26
Date Collected: 03/31/14 11:23
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 87.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	9.99	b	0.538	0.113	mg/Kg	☼	04/21/14 13:54	04/22/14 11:12	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12		1.0	1.0	%			04/17/14 14:26	1
Percent Solids	88		1.0	1.0	%			04/17/14 14:26	1

Client Sample ID: 2014-TS-3 (0.5-2)

Lab Sample ID: 600-89701-50
Date Collected: 03/31/14 14:25
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 79.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14.0	b	0.589	0.123	mg/Kg	☼	04/21/14 13:54	04/22/14 11:15	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			04/17/14 14:26	1
Percent Solids	79		1.0	1.0	%			04/17/14 14:26	1

Client Sample ID: 2014-SDA-7 (0.5-2)

Lab Sample ID: 600-89701-53
Date Collected: 03/31/14 15:36
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 81.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.275	U	2.97	0.275	mg/Kg	☼	04/21/14 13:54	04/22/14 11:17	1
Arsenic	14.0		1.19	0.259	mg/Kg	☼	04/21/14 13:54	04/22/14 11:17	1
Lead	287	b	0.594	0.124	mg/Kg	☼	04/21/14 13:54	04/22/14 11:17	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			04/17/14 14:26	1
Percent Solids	81		1.0	1.0	%			04/17/14 14:26	1

Client Sample ID: SRB-VS-11B (2-4)

Lab Sample ID: 600-89701-58
Date Collected: 03/31/14 15:47
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 88.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.245	U	2.64	0.245	mg/Kg	☼	04/21/14 13:54	04/22/14 11:19	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	12		1.0	1.0	%			04/17/14 14:26	1
Percent Solids	88		1.0	1.0	%			04/17/14 14:26	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-3

Client Sample ID: B3RA (0.5-2)

Lab Sample ID: 600-89701-61
Date Collected: 03/31/14 16:15
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 76.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	11.4		1.27	0.276	mg/Kg	☼	04/21/14 13:54	04/22/14 11:36	1
Lead	26.2	b	0.633	0.133	mg/Kg	☼	04/21/14 13:54	04/22/14 11:36	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			04/17/14 14:26	1
Percent Solids	77		1.0	1.0	%			04/17/14 14:26	1

Client Sample ID: ECO-8B (0.5-2)

Lab Sample ID: 600-89701-64
Date Collected: 03/31/14 16:40
Matrix: Solid
Date Received: 04/01/14 10:46
Percent Solids: 81.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.70	J	3.01	0.278	mg/Kg	☼	04/21/14 13:54	04/22/14 11:38	1
Arsenic	15.5		1.20	0.262	mg/Kg	☼	04/21/14 13:54	04/22/14 11:38	1
Lead	1860	b	0.601	0.126	mg/Kg	☼	04/21/14 13:54	04/22/14 11:38	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		1.0	1.0	%			04/17/14 14:26	1
Percent Solids	82		1.0	1.0	%			04/17/14 14:26	1

Qualifiers

Metals

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.

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
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)

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-132543/1-A
Matrix: Solid
Analysis Batch: 132533

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 132543

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		04/21/14 12:19	04/21/14 17:01	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/21/14 12:19	04/21/14 17:01	1
Lead	0.1200	J	0.500	0.105	mg/Kg		04/21/14 12:19	04/21/14 17:01	1
Selenium	0.259	U	2.00	0.259	mg/Kg		04/21/14 12:19	04/21/14 17:01	1

Lab Sample ID: LCSSRM 600-132543/2-A
Matrix: Solid
Analysis Batch: 132533

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 132543

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	73.74		mg/Kg		83.6	45.4 - 231.3
Arsenic	99.6	105.4		mg/Kg		105.8	80.8 - 119.5
Cadmium	182	187.7		mg/Kg		103.1	81.9 - 118.1
Lead	115	124.6		mg/Kg		108.3	81.8 - 119.1
Selenium	150	152.4		mg/Kg		101.6	77.3 - 122.7

Lab Sample ID: 600-90591-A-3-G MS
Matrix: Solid
Analysis Batch: 132533

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 132543

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.415	J	47.6	34.86	N1	mg/Kg		72	75 - 125
Arsenic	0.560	J	47.6	50.67		mg/Kg		105	75 - 125
Cadmium	0.0450	J	23.8	24.89		mg/Kg		104	75 - 125
Lead	1.22	b	47.6	53.95		mg/Kg		111	75 - 125
Selenium	0.259	U	47.6	47.71		mg/Kg		100	75 - 125

Lab Sample ID: 600-90591-A-3-H MSD
Matrix: Solid
Analysis Batch: 132533

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 132543

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.415	J	48.5	36.91		mg/Kg		75	75 - 125	6	20
Arsenic	0.560	J	48.5	50.58		mg/Kg		103	75 - 125	0	20
Cadmium	0.0450	J	24.3	24.83		mg/Kg		102	75 - 125	0	20
Lead	1.22	b	48.5	53.79		mg/Kg		108	75 - 125	0	20
Selenium	0.259	U	48.5	48.01		mg/Kg		99	75 - 125	1	20

Lab Sample ID: 600-90591-A-3-F DU
Matrix: Solid
Analysis Batch: 132533

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 132543

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.415	J	0.227	U	mg/Kg		NC	20
Arsenic	0.560	J	0.6324	J	mg/Kg		12	20

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

Lab Sample ID: 600-90591-A-3-F DU — **Client Sample ID: Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 132533 — **Prep Batch: 132543**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead	1.22	b	1.569		mg/Kg		25	20
Selenium	0.259	U	0.254	U	mg/Kg		NC	20

Lab Sample ID: MB 600-132552/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 132626 — **Prep Batch: 132552**

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		04/21/14 13:54	04/22/14 11:05	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/21/14 13:54	04/22/14 11:05	1
Lead	0.2300	J	0.500	0.105	mg/Kg		04/21/14 13:54	04/22/14 11:05	1
Selenium	0.259	U	2.00	0.259	mg/Kg		04/21/14 13:54	04/22/14 11:05	1

Lab Sample ID: LCSSRM 600-132552/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 132626 — **Prep Batch: 132552**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	72.10		mg/Kg		81.7	45.4 - 231.3
Arsenic	99.6	105.7		mg/Kg		106.1	80.8 - 119.5
Cadmium	182	199.7		mg/Kg		109.7	81.9 - 118.1
Lead	115	126.4		mg/Kg		109.9	81.8 - 119.1
Selenium	150	157.8		mg/Kg		105.2	77.3 - 122.7

Lab Sample ID: 600-89701-58 MS — **Client Sample ID: SRB-VS-11B (2-4)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 132626 — **Prep Batch: 132552**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.245	U	53.9	9.738	N1	mg/Kg	☼	18	75 - 125
Arsenic	40.0		53.9	111.4	N1	mg/Kg	☼	133	75 - 125
Cadmium	0.0271		26.9	25.63		mg/Kg	☼	95	75 - 125
Lead	12.2		53.9	70.34		mg/Kg	☼	108	75 - 125
Selenium	0.274		53.9	46.23		mg/Kg	☼	86	75 - 125

Lab Sample ID: 600-89701-58 MSD — **Client Sample ID: SRB-VS-11B (2-4)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 132626 — **Prep Batch: 132552**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.245	U	54.4	10.22	N1	mg/Kg	☼	19	75 - 125	5	20
Arsenic	40.0		54.4	92.55		mg/Kg	☼	97	75 - 125	19	20
Cadmium	0.0271		27.2	23.73		mg/Kg	☼	87	75 - 125	8	20
Lead	12.2		54.4	71.67		mg/Kg	☼	109	75 - 125	2	20
Selenium	0.274		54.4	43.22		mg/Kg	☼	79	75 - 125	7	20

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

Lab Sample ID: 600-89701-58 DU
Matrix: Solid
Analysis Batch: 132626

Client Sample ID: SRB-VS-11B (2-4)
Prep Type: Total/NA
Prep Batch: 132552

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Antimony	0.245	U		0.245	U	mg/Kg	☼			NC	20
Arsenic	40.0			35.01		mg/Kg	☼			13	20
Lead	12.2			12.34		mg/Kg	☼			1	20
Selenium	0.274			0.274	U	mg/Kg	☼			NC	20

Method: Moisture - Percent Moisture

Lab Sample ID: 600-89701-2 DU
Matrix: Solid
Analysis Batch: 132331

Client Sample ID: 2014-C2L-06A (0.5-2))
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	30			29		%				3	20
Percent Solids	70			71		%				1	20

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-3

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Antimony	2.50	0.232	mg/Kg	6010B
Arsenic	1.00	0.218	mg/Kg	6010B
Lead	0.500	0.105	mg/Kg	6010B
Selenium	2.00	0.259	mg/Kg	6010B

General Chemistry

Analyte	MQL	MDL	Units	Method
Percent Moisture	1.0	1.0	%	Moisture
Percent Solids	1.0	1.0	%	Moisture

Metals

Analysis Batch: 132533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-2	2014-C2L-06A (0.5-2))	Total/NA	Solid	6010B	132543
600-89701-8	2014-C2L-06C (0.5-2)	Total/NA	Solid	6010B	132543
600-89701-11	D-11B (0.5-2)	Total/NA	Solid	6010B	132543
600-90591-A-3-F DU	Duplicate	Total/NA	Solid	6010B	132543
600-90591-A-3-G MS	Matrix Spike	Total/NA	Solid	6010B	132543
600-90591-A-3-H MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	132543
LCSSRM 600-132543/2-A	Lab Control Sample	Total/NA	Solid	6010B	132543
MB 600-132543/1-A	Method Blank	Total/NA	Solid	6010B	132543

Prep Batch: 132543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-2	2014-C2L-06A (0.5-2))	Total/NA	Solid	3050B	
600-89701-8	2014-C2L-06C (0.5-2)	Total/NA	Solid	3050B	
600-89701-11	D-11B (0.5-2)	Total/NA	Solid	3050B	
600-90591-A-3-F DU	Duplicate	Total/NA	Solid	3050B	
600-90591-A-3-G MS	Matrix Spike	Total/NA	Solid	3050B	
600-90591-A-3-H MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	
LCSSRM 600-132543/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-132543/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 132552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-20	2014-NT-3 (0.5-2)	Total/NA	Solid	3050B	
600-89701-26	2014-SL-5 (0.5-2)	Total/NA	Solid	3050B	
600-89701-50	2014-TS-3 (0.5-2)	Total/NA	Solid	3050B	
600-89701-53	2014-SDA-7 (0.5-2)	Total/NA	Solid	3050B	
600-89701-58	SRB-VS-11B (2-4)	Total/NA	Solid	3050B	
600-89701-58 DU	SRB-VS-11B (2-4)	Total/NA	Solid	3050B	
600-89701-58 MS	SRB-VS-11B (2-4)	Total/NA	Solid	3050B	
600-89701-58 MSD	SRB-VS-11B (2-4)	Total/NA	Solid	3050B	
600-89701-61	B3RA (0.5-2)	Total/NA	Solid	3050B	
600-89701-64	ECO-8B (0.5-2)	Total/NA	Solid	3050B	
LCSSRM 600-132552/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-132552/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 132626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-20	2014-NT-3 (0.5-2)	Total/NA	Solid	6010B	132552
600-89701-26	2014-SL-5 (0.5-2)	Total/NA	Solid	6010B	132552
600-89701-50	2014-TS-3 (0.5-2)	Total/NA	Solid	6010B	132552
600-89701-53	2014-SDA-7 (0.5-2)	Total/NA	Solid	6010B	132552
600-89701-58	SRB-VS-11B (2-4)	Total/NA	Solid	6010B	132552
600-89701-58 DU	SRB-VS-11B (2-4)	Total/NA	Solid	6010B	132552
600-89701-58 MS	SRB-VS-11B (2-4)	Total/NA	Solid	6010B	132552
600-89701-58 MSD	SRB-VS-11B (2-4)	Total/NA	Solid	6010B	132552
600-89701-61	B3RA (0.5-2)	Total/NA	Solid	6010B	132552
600-89701-64	ECO-8B (0.5-2)	Total/NA	Solid	6010B	132552
LCSSRM 600-132552/2-A	Lab Control Sample	Total/NA	Solid	6010B	132552
MB 600-132552/1-A	Method Blank	Total/NA	Solid	6010B	132552

QC Association Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-3

General Chemistry

Analysis Batch: 132331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-2	2014-C2L-06A (0.5-2))	Total/NA	Solid	Moisture	
600-89701-2 DU	2014-C2L-06A (0.5-2))	Total/NA	Solid	Moisture	
600-89701-8	2014-C2L-06C (0.5-2)	Total/NA	Solid	Moisture	
600-89701-11	D-11B (0.5-2)	Total/NA	Solid	Moisture	
600-89701-20	2014-NT-3 (0.5-2)	Total/NA	Solid	Moisture	
600-89701-26	2014-SL-5 (0.5-2)	Total/NA	Solid	Moisture	
600-89701-50	2014-TS-3 (0.5-2)	Total/NA	Solid	Moisture	
600-89701-53	2014-SDA-7 (0.5-2)	Total/NA	Solid	Moisture	
600-89701-58	SRB-VS-11B (2-4)	Total/NA	Solid	Moisture	
600-89701-61	B3RA (0.5-2)	Total/NA	Solid	Moisture	
600-89701-64	ECO-8B (0.5-2)	Total/NA	Solid	Moisture	
600-90579-B-6 MS	Matrix Spike	Total/NA	Solid	Moisture	
600-90579-B-6 MSD	Matrix Spike Duplicate	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-3

Client Sample ID: 2014-C2L-06A (0.5-2)) — Lab Sample ID: 600-89701-2

Date Collected: 03/31/14 08:48 — **Matrix: Solid**
Date Received: 04/01/14 10:46 — **Percent Solids: 70.2**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	50 mL	132543	04/21/14 12:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	132533	04/21/14 18:12	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			132331	04/17/14 14:26	AYS	TAL HOU

Client Sample ID: 2014-C2L-06C (0.5-2) — Lab Sample ID: 600-89701-8

Date Collected: 03/31/14 09:31 — **Matrix: Solid**
Date Received: 04/01/14 10:46 — **Percent Solids: 78.8**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	50 mL	132543	04/21/14 12:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	132533	04/21/14 18:14	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			132331	04/17/14 14:26	AYS	TAL HOU

Client Sample ID: D-11B (0.5-2) — Lab Sample ID: 600-89701-11

Date Collected: 03/31/14 09:51 — **Matrix: Solid**
Date Received: 04/01/14 10:46 — **Percent Solids: 78.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	50 mL	132543	04/21/14 12:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	132533	04/21/14 18:16	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			132331	04/17/14 14:26	AYS	TAL HOU

Client Sample ID: 2014-NT-3 (0.5-2) — Lab Sample ID: 600-89701-20

Date Collected: 03/31/14 10:49 — **Matrix: Solid**
Date Received: 04/01/14 10:46 — **Percent Solids: 80.0**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	132552	04/21/14 13:54	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	132626	04/22/14 11:10	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			132331	04/17/14 14:26	AYS	TAL HOU

Client Sample ID: 2014-SL-5 (0.5-2) — Lab Sample ID: 600-89701-26

Date Collected: 03/31/14 11:23 — **Matrix: Solid**
Date Received: 04/01/14 10:46 — **Percent Solids: 87.6**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	132552	04/21/14 13:54	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	132626	04/22/14 11:12	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			132331	04/17/14 14:26	AYS	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-3

Client Sample ID: 2014-TS-3 (0.5-2)

Lab Sample ID: 600-89701-50

Date Collected: 03/31/14 14:25
Date Received: 04/01/14 10:46

Matrix: Solid
Percent Solids: 79.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.07 g	50 mL	132552	04/21/14 13:54	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	132626	04/22/14 11:15	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			132331	04/17/14 14:26	AYS	TAL HOU

Client Sample ID: 2014-SDA-7 (0.5-2)

Lab Sample ID: 600-89701-53

Date Collected: 03/31/14 15:36
Date Received: 04/01/14 10:46

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			1.04 g	50 mL	132552	04/21/14 13:54	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	132626	04/22/14 11:17	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			132331	04/17/14 14:26	AYS	TAL HOU

Client Sample ID: SRB-VS-11B (2-4)

Lab Sample ID: 600-89701-58

Date Collected: 03/31/14 15:47
Date Received: 04/01/14 10:46

Matrix: Solid
Percent Solids: 88.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.07 g	50 mL	132552	04/21/14 13:54	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	132626	04/22/14 11:19	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			132331	04/17/14 14:26	AYS	TAL HOU

Client Sample ID: B3RA (0.5-2)

Lab Sample ID: 600-89701-61

Date Collected: 03/31/14 16:15
Date Received: 04/01/14 10:46

Matrix: Solid
Percent Solids: 76.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	132552	04/21/14 13:54	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	132626	04/22/14 11:36	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			132331	04/17/14 14:26	AYS	TAL HOU

Client Sample ID: ECO-8B (0.5-2)

Lab Sample ID: 600-89701-64

Date Collected: 03/31/14 16:40
Date Received: 04/01/14 10:46

Matrix: Solid
Percent Solids: 81.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	50 mL	132552	04/21/14 13:54	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	132626	04/22/14 11:38	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			132331	04/17/14 14:26	AYS	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-3

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Texas	NELAP	6	T104704223	10-31-14

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Chain of Custody Record

600-89701 Chain of Custody

ture on Receipt _____

Water? Yes☐ No☐

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates, Inc.	Dean Jaimes	3/31/14	255294
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 of 6
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Project Name and Location (State)	**Carrier/Waybill Number**		
Exide Recycling Center, Frisco, TX			
Contract/Purchase Order/Quote No.			
1302086			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Soil	Containers & Preservatives: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: Total Metals (Select)	Chloride, As, Hg, Se	In Acc w/ WSA	Special Instructions/ Conditions of Receipt
2014-C2L-06A (0-0.5)		0847				X	X						X			
2014-C2L-06A (0.5-2)		0848														Hold
2014-C2L-06A (2-4)		0849														Hold
2014-C2L-06B (0-0.5)		0909														
2014-C2L-06B (0.5-2)		0910														Hold
2014-C2L-06B (2-4)		0911														Hold
2014-C2L-06C (0-0.5)		0930														
2014-C2L-06C (0.5-2)		0931														Hold
2014-C2L-06C (2-4)		0932														Hold
D-11B (0-0.5)		0950														Arsenic Only
D-11B * (0.5-2)		0951														Hold *
D-11B * (2-4)		0952														Hold

Possible Hazard Identification

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal

☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

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

Turn Around Time Required

☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Jing Song Xi	3/31/14	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By	4/1/14	10:46

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates, Inc.	Dean Jones		255295
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 2 of 6
City: Exide Recycling Center / State / Zip Code	Site Contact	Lab Contact	Analysis (Attach list if more space is needed)
Project Name and Location (State): Exide Recycling Center, Frisco, TX	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.: 130 2086			

In Acc w/ MnSA

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	6010 + Inorganics (Select)	Special Instructions/ Conditions of Receipt
E-11C-A (0.5-2)	3/31/14	1009				X	X						X	Arsenic Only
E-11C-A (2-4)		1010												Hold
E-11C-A (4-6)		1011												Hold
~~E-11E (0-0.5)~~														
E-11E (0-0.5)		1031												
E-11E (0.5-2)		1032												Hold
E-11E (2-4)		1033												Hold
2014-NT-3 (0-0.5)		1048												
2014-NT-3 (0.5-2)		1049												Hold
2014-NT-3 (2-4)		1050												Hold
2014-NT-4 (0-0.5)		1104												
2014-NT-4 (0.5-2)		1105												Hold

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

1. Relinquished By	Date	Time	1. Received By	Date	Time
JAG SOAG XI	3/31/14	1900			
2. Relinquished By	Date	Time	2. Received By	Date	Time
3. Relinquished By	Date	Time	3. Received By	Date	Time
				4/1/14	10:46

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

4/24/2014

[redacted]

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates Inc.	Dean Fisher		255296
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 3 of 6
City / State / Zip Code	Site Contact	Lab Contact	
Project Name and Location (State): Exide Recycling Center, Frisco, TX	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.: 1302086			

Analysis (Attach list if more space is needed): In Acc w/ QAPP

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Gross Alpha (Select)	(Pb, Cd, Sb, Ni, Se)	Special Instructions/ Conditions of Receipt
2014-NT-4 (2-4)	3/31/14	1106				X	X						X		Hold
2014-SL-5 (0-0.5)		1122													
2014-SL-5 (0.5-2)		1123													Hold
2014-SL-5 (2-4)		1124													Hold
2014-SL-5 (2-4) MS		1124													Hold
2014-SL-5 (2-4) MSD		1124													Hold
DUP-1		-													Hold
2014-SL-6 (0-0.5)		1149													
2014-SL-6 (0.5-2)		1150													Hold
2014-SL-6 (2-4)		1151													Hold
2014-SL-7 (0-0.5)		1210													
2014-SL-7 (0.5-2)		1211													Hold

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: JAG SAG XI	3/31/14	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

4/24/2014

[redacted]

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates, Inc.	Jean Joher		255297
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 4 of 6
City / State / Zip Code	Site Contact / Lab Contact	Analysis (Attach list if more space is needed)	
Project Name and Location (State): Exide Recycling Center, Frisco, TX	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.: 130286			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Soil	Containers & Preservatives: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Goto Mobile (Select)	(Pb, Cd, As, Al, Se)	In Acc w/ MSA	Special Instructions/ Conditions of Receipt
2014-SL-7 (2-4)	3/31/14	1212				X	X						X			Hold
2014-FFTA-05 (0-0.5)		1345														
2014-FFTA-05 (0.5-2)		1346														Hold
2014-FFTA-05 (2-4)		1347														Hold
2014-FFTA-04 (0-0.5)		1410														
2014-FFTA-04 (0.5-2)		1411														Hold
2014-FFTA-04 (2-4)		1412														Hold
2014-FFTA-04 (2-4) MS		1412														Hold
2014-FFTA-04 (2-4) MSD		1412														Hold
DUP-2		-														Hold
2014-SDA-6 (0-0.5)		1457														
2014-SDA-6 (0.5-2)	↓	1452				↓	↓						↓			Hold

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Jing Song Xi	3/31/14	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By	4/1/14	10:46

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates, Inc.			255298
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 5 of 6
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Project Name and Location (State) Exide Recycling Center, Frisco, TX	**Carrier/Waybill Number**		
Contract/Purchase Order/Quote No. 1302086			

Analysis (Attach list if more space is needed): In Acc w/ MSA

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/ NaOH	6010 Metals (Select) (Pb, Cd, As, Al, Fe)	Special Instructions/ Conditions of Receipt
2014-SDA-6 (2-4)	3/31/14	1453				X	X						X	Hold
2014-TS-3 (0-0.5)		1424												
2014-TS-3 (0.5-2)		1425												Hold
2014-TS-3 (2-4)		1426												Hold
2014-SDA-7 (0-0.5)		1535												
2014-SDA-7 (0.5-2)		1536												Hold
2014-SDA-7 (2-4)		1537												Hold
SRB-VS-11B (0.5-2)		1546												
SRB-VS-11B (0.5-2) MS		1546												
SRB-VS-11B (0.5-2) MSD		1546												
SRB-VS-11B (2-4)		1547												Hold
DUP-3		-												

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: JAG SAG KJ	3/31/14	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By: D. Fuller	4/1/14	10:46

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

4/24/2014

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Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates, Inc.	Dean Jones		255299
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 6 **of** 6
City / State / Zip Code	**Site Contact**	**Lab Contact**	
Project Name and Location (State)	**Carrier/Waybill Number**		
Exide Recycling Center, Frisco, TX			
Contract/Purchase Order/Quote No.			
1302086			

Analysis (Attach list if more space is needed)

In Acc w/ MSA

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Col. + Mobil (select)	(Sb, Cd, As, At, Se)	Special Instructions/ Conditions of Receipt
B3RA (0-0.5)	3/31/14	1614				X	X						X		
B3RA (0.5-2)		1615				↓	↓						↓		Hold
B3RA (2-4)		1616				↓	↓						↓		Hold
ECO-8B (0-0.5)		1639				↓	↓						↓		
ECO-8B (0.5-2)		1640				↓	↓						↓		Hold
ECO-8B (2-4)		1641				↓	↓						↓		Hold
Rinse Blank - Geo		1705		X					X				X		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.	JMG SAG XI	3/31/14	1900			
2.						
3.					4/1/14	10:46

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Upton, Cathy

From: Higginbotham, Christina [Christina_Higginbotham@golder.com]
Sent: Wednesday, April 16, 2014 1:05 PM
To: Upton, Cathy; Joiner, Dean
Cc: Faeth-Boyd, Anne; Xi, Jing Song; Forthaus, Brett; Thomas, Jim; Janzen, Joshua
Subject: Hold Samples to Analyze - 89701, 89799, 89971
Follow Up Flag: Follow up
Flag Status: Completed

Cathy and Dean,

Please log in the following hold samples for analysis as follows:

Lab Package	J 89701-1	Final	
Location	**Depth to Analyze**	**Analytes**	**Notes**
2014-C2L-06A	0.5-2	Lead, Selenium	
2014-C2L-06C	0.5-2	Antimony, Arsenic, Lead, Selenium	
D-11B	0.5-2	Arsenic	
2014-NT-3	0.5-2	Lead	
2014-SL-5	0.5-2	Lead	
2014-TS-3	0.5-2	Lead	
2014-SDA-7	0.5-2	Antimony, Arsenic, Lead	
SRB-VS-11B	2-4	Antimony	
B3RA	0.5-2	Arsenic, Lead	
ECO 8B	0.5-2	Antimony, Arsenic, Lead	

Lab Package	J 89799-1	Final	
Location	**Depth to Analyze**	**Analytes**	**Notes**
2014-NDA-7	0.5-2	Lead, Antimony, methylene chloride	dup exceedence for shallow interval (and mc
2014-FFTA-07	0.5-2	Arsenic, Lead	
2014-FFTA-08	0.5-2	Bis(2-chloroethyl)ether, Arsenic, Lead	
2014-FFTA-06	0.5-2	Arsenic, Lead, Methylene Chloride	
2014-NDA-9	0.5-2	Lead	
2014-NDA-8	0.5-2	Lead	

Lab Package	J 89971-1	Final	
Location	**Depth to Analyze**	**Analytes**	**Notes**
2014-CUFT-5B-A	2-4	Lead	
2014-CUFT-15	0.5-2	Lead	
2014-CUFT-16	0.5-2	Lead	

Christina Higginbotham, P.G. | Remediation Project Manager | **Golder Associates Inc.**
500 Century Plaza Drive, Suite 190, Houston, Texas, USA 77073
T: +1 (281) 821-6868 | **F:** +1 (281) 821-6870 | **C:** +1 (281) 620-7835 | **E:** CHigginbotham@golder.com |

www.golder.com

Work Safe, Home Safe

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Please consider the environment before printing this email.

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-89701-3

Login Number: 89701

List Source: TestAmerica Houston

List Number: 1

Creator: Lockett, DuJuan D

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	1.8, 1.9
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.	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	Check done at department level as required.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-89701-4
Client Project/Site: Exide Recycling Center, Frisco TX

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
5/14/2014 5:16:32 PM
Cathy Upton, Project Management Assistant II
(713)690-4444
cathy.upton@testamericainc.com

Designee for

Dean Joiner, Project Manager II
(713)690-4444
dean.joiner@testamericainc.com

LINKS

Review your project results through TotalAccess

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Visit us at: 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.

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-89701-4 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☐ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☐ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☑ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton				5/14/2014
Name (printed)		Signature		Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	5/14/2014
Project Name:	Exide Recycling Center, Frisco TX	Laboratory Job Number:	600-89701-4
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?			X		
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?			X		
		Were LCSs analyzed at the required frequency?			X		
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?			X		
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?			X		
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			R07C
		Were MS/MSD RPDs within laboratory QC limits?		X			R07D
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?		X			R08C
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				R10A
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	5/14/2014
Project Name:	Exide Recycling Center, Frisco TX	Laboratory Job Number:	600-89701-4
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	5/14/2014
Project Name:	Exide Recycling Center, Frisco TX	Laboratory Job Number:	600-89701-4
Reviewer Name:	Dean A Joiner		

ER #[1]	Description
R07C	Method 6010B: 600-89701-52 MS failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected. Method 6010B: 600-89701-52 MSD failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected. Method 6010B: 600-91726-A-1-E MS failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected. Method 6010B: 600-91726-A-1-F MSD failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected.
R07D	Method 6010B: 600-89701-52 MSD failed the RPD criteria for the following analyte(s): Antimony. Non-homogeneity is suspected.
R08C	Method 6010B: 600-89701-52 DU failed the RPD criteria for the following analyte(s): Antimony. Non-homogeneity is suspected.
R10A	The sample was run various times with different results. But due to the non-homogeneity of the sample, we cannot get reproducible results. We have reported the re-runs for your review.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Detection Check Standard

Matrix:	Soil
Method:	6010B
Preparation:	3050
Date Analyzed:	3/28/2014
Date Prepared:	3/27/2014
Instrument:	Thermo 6500
TALS Batches:	130577p, 130672
Prep/Reagent Factor =	50
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.299654	0.5	0.36	25
Antimony	0.231553	0.45	0.31	2.5
Arsenic	0.217923	0.5	0.57	1
Barium	0.011322	0.03	0.03	1
Beryllium	0.014513	0.02	0.02	0.25
Boron	0.385535	0.6	0.49	20
Cadmium	0.025642	0.05	0.045	0.25
Calcium	0.86399	1.5	2.07	100
Chromium	0.050606	0.1	0.11	0.5
Cobalt	0.067622	0.1	0.105	0.5
Copper	0.173703	0.5	0.535	0.5
Iron	2.534007	4	4.035	20
Lead	0.104832	0.2	0.18	0.5
Selenium	0.258884	0.5	0.505	2
Manganese	0.038111	0.05	0.05	1.5
Molybdenum	0.136448	0.35	0.325	0.5
Nickel	0.116599	0.15	0.145	1
Silver	0.118848	0.2	0.22	0.5
Sodium	0.885548	2.4	2.13	100
Thallium	0.276988	0.7	0.615	1.5
Tin	0.08729	0.15	0.13	1
Titanium	0.014529	0.03	0.035	0.5
Vanadium	0.079068	0.15	0.165	0.5
Zinc	0.108432	0.2	0.285	1.5

Job ID: 600-89701-4

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-89701-4

Comments
No additional comments.

Receipt
The samples were received on 4/1/2014 10:46 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 1.8º C and 1.9º C.

Except:

Method(s) 6010B: The following sample(s) was re-logged in for Antimony analysis by 6010B per the client on 05/06/14: 2014-SDA-7 (0-0.5) (600-89701-52). See attached email.

Metals
The sample was run various times with different results. But due to the non-homogeneity of the sample, we cannot get reproducible results. We have reported the re-runs for your review.

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-4

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU

Protocol References:

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

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-4

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-89701-52	2014-SDA-7 (0-0.5)	Solid	03/31/14 15:35	04/01/14 10:46

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-4

Client Sample ID: 2014-SDA-7 (0-0.5)
Date Collected: 03/31/14 15:35
Date Received: 04/01/14 10:46

Lab Sample ID: 600-89701-52
Matrix: Solid
Percent Solids: 84.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	20.1		2.74	0.254	mg/Kg	☼	05/09/14 11:56	05/12/14 11:43	1
Antimony	54.7		2.79	0.258	mg/Kg	☼	05/13/14 10:42	05/13/14 13:23	1

Qualifiers

Metals

Qualifier	Qualifier Description
F	Duplicate RPD exceeds the control limit
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
N2	RPD of the MS and MSD exceeds the control limits
U	Analyte was not detected at or above the SDL.

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
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)

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-134014/1-A
Matrix: Solid
Analysis Batch: 134136

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134014

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		05/09/14 11:56	05/12/14 11:27	1

Lab Sample ID: LCSSRM 600-134014/2-A
Matrix: Solid
Analysis Batch: 134136

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134014

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	73.70		mg/Kg		83.6	45.4 - 231.3

Lab Sample ID: 600-91726-A-1-E MS
Matrix: Solid
Analysis Batch: 134136

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 134014

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	2.82		49.5	29.24	N1	mg/Kg		53	75 - 125

Lab Sample ID: 600-91726-A-1-F MSD
Matrix: Solid
Analysis Batch: 134136

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 134014

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	2.82		49.0	30.36	N1	mg/Kg		56	75 - 125	4	20

Lab Sample ID: 600-91726-A-1-D DU
Matrix: Solid
Analysis Batch: 134136

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 134014

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	2.82		2.428		mg/Kg		15	20

Lab Sample ID: MB 600-134253/1-A
Matrix: Solid
Analysis Batch: 134244

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 134253

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		05/13/14 10:42	05/13/14 13:19	1

Lab Sample ID: LCSSRM 600-134253/2-A
Matrix: Solid
Analysis Batch: 134244

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 134253

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	69.54		mg/Kg		78.8	45.4 - 231.3

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

Lab Sample ID: 600-89701-52 MS
Matrix: Solid
Analysis Batch: 134244

Client Sample ID: 2014-SDA-7 (0-0.5)
Prep Type: Total/NA
Prep Batch: 134253

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	54.7		48.9	78.57	N1	mg/Kg	☼	49	75 - 125

Lab Sample ID: 600-89701-52 MSD
Matrix: Solid
Analysis Batch: 134244

Client Sample ID: 2014-SDA-7 (0-0.5)
Prep Type: Total/NA
Prep Batch: 134253

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	54.7		50.5	162.9	N1 N2	mg/Kg	☼	214	75 - 125	70	20

Lab Sample ID: 600-89701-52 DU
Matrix: Solid
Analysis Batch: 134244

Client Sample ID: 2014-SDA-7 (0-0.5)
Prep Type: Total/NA
Prep Batch: 134253

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	54.7		28.29	F	mg/Kg	☼	64	20

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-4

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Antimony	2.50	0.232	mg/Kg	6010B

Metals

Prep Batch: 134014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-52	2014-SDA-7 (0-0.5)	Total/NA	Solid	3050B	
600-91726-A-1-D DU	Duplicate	Total/NA	Solid	3050B	
600-91726-A-1-E MS	Matrix Spike	Total/NA	Solid	3050B	
600-91726-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	
LCSSRM 600-134014/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-134014/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 134136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-52	2014-SDA-7 (0-0.5)	Total/NA	Solid	6010B	134014
600-91726-A-1-D DU	Duplicate	Total/NA	Solid	6010B	134014
600-91726-A-1-E MS	Matrix Spike	Total/NA	Solid	6010B	134014
600-91726-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	134014
LCSSRM 600-134014/2-A	Lab Control Sample	Total/NA	Solid	6010B	134014
MB 600-134014/1-A	Method Blank	Total/NA	Solid	6010B	134014

Analysis Batch: 134244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-52	2014-SDA-7 (0-0.5)	Total/NA	Solid	6010B	134253
600-89701-52 DU	2014-SDA-7 (0-0.5)	Total/NA	Solid	6010B	134253
600-89701-52 MS	2014-SDA-7 (0-0.5)	Total/NA	Solid	6010B	134253
600-89701-52 MSD	2014-SDA-7 (0-0.5)	Total/NA	Solid	6010B	134253
LCSSRM 600-134253/2-A	Lab Control Sample	Total/NA	Solid	6010B	134253
MB 600-134253/1-A	Method Blank	Total/NA	Solid	6010B	134253

Prep Batch: 134253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-52	2014-SDA-7 (0-0.5)	Total/NA	Solid	3050B	
600-89701-52 DU	2014-SDA-7 (0-0.5)	Total/NA	Solid	3050B	
600-89701-52 MS	2014-SDA-7 (0-0.5)	Total/NA	Solid	3050B	
600-89701-52 MSD	2014-SDA-7 (0-0.5)	Total/NA	Solid	3050B	
LCSSRM 600-134253/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-134253/1-A	Method Blank	Total/NA	Solid	3050B	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-4

Client Sample ID: 2014-SDA-7 (0-0.5)
Date Collected: 03/31/14 15:35
Date Received: 04/01/14 10:46

Lab Sample ID: 600-89701-52
Matrix: Solid
Percent Solids: 84.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.08 g	50 mL	134014	05/09/14 11:56	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	134136	05/12/14 11:43	TWR	TAL HOU
Total/NA	Prep	3050B			1.06 g	50 mL	134253	05/13/14 10:42	TWR	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	134244	05/13/14 13:23	DCL	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89701-4

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Texas	NELAP	6	T104704223	10-31-14

Analysis Method	Prep Method	Matrix	Analyte

Chain of Custody Record

600-89701 Chain of Custody

ture on Receipt _____

Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates, Inc.	Dean Jaimes	3/31/14	255294
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 of 6
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Project Name and Location (State)	**Carrier/Waybill Number**		
Exide Recycling Center, Frisco, TX			
Contract/Purchase Order/Quote No.			
1302086			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Soil	Containers & Preservatives: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 6010 Metals (Select)	Chlorides, As, Hg, Se	In Acc w/ WMSA	Special Instructions/ Conditions of Receipt
2014-C2L-06A (0-0.5)		0847				X	X						X			
2014-C2L-06A (0.5-2)		0848														Hold
2014-C2L-06A (2-4)		0849														Hold
2014-C2L-06B (0-0.5)		0909														
2014-C2L-06B (0.5-2)		0910														Hold
2014-C2L-06B (2-4)		0911														Hold
2014-C2L-06C (0-0.5)		0930														
2014-C2L-06C (0.5-2)		0931														Hold
2014-C2L-06C (2-4)		0932														Hold
D-11B (0-0.5)		0950														Arsenic Only
D-11B * (0.5-2)		0951														Hold *
D-11B * (2-4)		0952														Hold

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Relinquished By	Date	Time	Received By	Date	Time
1.	Jing Song Xi	3/31/14	1900			
2.						
3.					4/1/14	10:46

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

5/14/2014

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates, Inc.	Dean Jones		255295
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 2 of 6
City: Exide Recycling Center / State / Zip Code	Site Contact	Lab Contact	Analysis (Attach list if more space is needed)
Project Name and Location (State): Exide Recycling Center, Frisco, TX	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.: 130 2086			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	6010 Inorganics (Select) (Pb, Cd, Ni, Mn, Se)	In Acc w/ MSA	Special Instructions/ Conditions of Receipt
E-11C-A (0.5-2)	3/31/14	1009				X	X						X		Arsenic Only
E-11C-A (2-4)		1010													Hold
E-11C-A (4-6)		1011													Hold
~~E-11E (0.5)~~															
E-11E (0-0.5)		1031													
E-11E (0.5-2)		1032													Hold
E-11E (2-4)		1033													Hold
2014-NT-3 (0-0.5)		1048													
2014-NT-3 (0.5-2)		1049													Hold
2014-NT-3 (2-4)		1050													Hold
2014-NT-4 (0-0.5)		1104													
2014-NT-4 (0.5-2)		1105													Hold

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: JAG SAG XI	3/31/14	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By	4/1/14	10:46

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

5/14/2014

[redacted]

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates Inc.	Dean Fisher		255296
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 3 of 6
City / State / Zip Code	Site Contact	Lab Contact	
Project Name and Location (State): Exide Recycling Center, Frisco, TX	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.: 1302086			

Analysis (Attach list if more space is needed): In Acc w/ QAPP

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Gas. Metals (Select)	(Pb, Cd, Sb, Ni, Se)	Special Instructions/ Conditions of Receipt
2014-NT-4 (2-4)	3/31/14	1106				X	X						X		Hold
2014-SL-5 (0-0.5)		1122													
2014-SL-5 (0.5-2)		1123													Hold
2014-SL-5 (2-4)		1124													Hold
2014-SL-5 (2-4) MS		1124													Hold
2014-SL-5 (2-4) MSD		1124													Hold
DUP-1		-													Hold
2014-SL-6 (0-0.5)		1149													
2014-SL-6 (0.5-2)		1150													Hold
2014-SL-6 (2-4)		1151													Hold
2014-SL-7 (0-0.5)		1210													
2014-SL-7 (0.5-2)		1211													Hold

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: JAG SAG XI	3/31/14	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

5/14/2014

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates, Inc.	Jean Joher		255297
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 4 of 6
City / State / Zip Code	Site Contact / Lab Contact	Analysis (Attach list if more space is needed)	
Project Name and Location (State): Exide Recycling Center, Frisco, TX	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.: 130286			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed	Soil	Containers & Preservatives: Unpres	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Goto Method (Select) (Pb,Cd,As,Al,Se)	In Acc w/ MSA	Special Instructions/ Conditions of Receipt
2014-SL-7 (2-4)	3/31/14	1212				X	X						X		Hold
2014-FFTA-05 (0-0.5)		1345													
2014-FFTA-05 (0.5-2)		1346													Hold
2014-FFTA-05 (2-4)		1347													Hold
2014-FFTA-04 (0-0.5)		1410													
2014-FFTA-04 (0.5-2)		1411													Hold
2014-FFTA-04 (2-4)		1412													Hold
2014-FFTA-04 (2-4) MS		1412													Hold
2014-FFTA-04 (2-4) MSD		1412													Hold
DUP-2		-													Hold
2014-SDA-6 (0-0.5)		1457													
2014-SDA-6 (0.5-2)	″	1452				″	″						″		Hold

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: JING SONG XI	3/31/14	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By	4/1/14	10:46

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

5/14/2014

Page 22 of 26

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates, Inc.			255298
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 5 of 6
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Project Name and Location (State) Exide Recycling Center, Frisco, TX	**Carrier/Waybill Number**		
Contract/Purchase Order/Quote No. 1302086			

Analysis (Attach list if more space is needed): In Acc w/ MSA

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	6010 Metals (Select) (Pb, Cd, As, Al, Fe)	Special Instructions/ Conditions of Receipt
2014-SDA-6 (2-4)	3/31/14	1453				X	X						X	Hold
2014-TS-3 (0-0.5)		1424												
2014-TS-3 (0.5-2)		1425												Hold
2014-TS-3 (2-4)		1426												Hold
2014-SDA-7 (0-0.5)		1535												
2014-SDA-7 (0.5-2)		1536												Hold
2014-SDA-7 (2-4)		1537												Hold
SRB-VS-11B (0.5-2)		1546												
SRB-VS-11B (0.5-2) MS		1546												
SRB-VS-11B (0.5-2) MSD		1546												
SRB-VS-11B (2-4)		1547												Hold
DUP-3		-												

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: JAG SAMPLER X1	3/31/14	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By: D. Fisher	4/1/14	10:46

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

5/14/2014

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates, Inc.	Dean Tarver		255299
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 6 **of** 6
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Project Name and Location (State)	**Carrier/Waybill Number**		
Exide Recycling Center, Frisco, TX			
Contract/Purchase Order/Quote No.			
1302086			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H_2SO_4	HNO_3	HCl	NaOH	ZnAc/NaOH	Analysis: Col. Metals (select)	(Pb, Cd, As, At, Se)	In Acc w/ MSA	Special Instructions/ Conditions of Receipt
B3RA (0-0.5)	3/31/14	1614				X	X						X			
B3RA (0.5-2)		1615														Hold
B3RA (2-4)		1616														Hold
ECO-8B (0-0.5)		1639														
ECO-8B (0.5-2)		1640														Hold
ECO-8B (2-4)		1641				↓	↓						↓			Hold
Rinse Blank - Geo		1705		X					X				X			

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: JMG SAG XI	3/31/14	1900	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By	4/1/14	10:46

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

5/14/2014

Upton, Cathy

From: Higginbotham, Christina [Christina_Higginbotham@golder.com]
Sent: Thursday, May 08, 2014 2:45 PM
To: Upton, Cathy
Cc: Faeth-Boyd, Anne
Subject: antimony sample
Follow Up Flag: Follow up
Flag Status: Completed

Cathy:

We had an anomalously high antimony concentration for sample 2014-SDA-7 (0-0.5) at 102 mg/kg.
Lab sample id: 600-89701-52.
Can we re-run this sample to confirm this concentration, please?

Thanks,
Christina

Christina Higginbotham, P.G. | Remediation Project Manager | **Golder Associates Inc.**
500 Century Plaza Drive, Suite 190, Houston, Texas, USA 77073
T: +1 (281) 821-6868 | **F:** +1 (281) 821-6870 | **C:** +1 (281) 620-7835 | **E:** CHigginbotham@golder.com | **www.golder.com**

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Please consider the environment before printing this email.

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-89701-4

Login Number: 89701

List Source: TestAmerica Houston

List Number: 1

Creator: Lockett, DuJuan D

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	1.8, 1.9
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.	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	Check done at department level as required.

Data Usability Summary
Test America Work Orders: 600-89971-1, 600-89971-2

Sample Dates:	April 4, 2014	**Project No.:**	1302086
Laboratory:	Test America (TLAP Certification T104704223)	**Client:**	Exide Technologies Inc.
Work Orders:	Work Orders: 600-89971-1, 600-89971-2		
Intended Use	Affected Property Assessment Report (APAR)		
Site:	Exide Former Operating Plant (FOP), 7471 5th Street, Frisco, TX		

1.0 TESTS/ METHODS

Total Metals by SW-846 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP)
Sulfate by SW-846 9056 – Ion Chromatography

2.0 SAMPLES

23 soil samples, one field duplicate, and one field MS/MSD pair. See Table 1 for a complete cross-referenced listing of samples.

Golder completed a review of the above chemical analysis data for conformance with the requirements of the Texas Risk Reduction Program (TRRP) guidance document, Review and Reporting of COC Concentration Data (RGG-366/TRRP-13 Revised May 2010) and for adherence to project objectives. The results of the review are discussed in this data usability summary (DUS).

Golder completed the review using the following laboratory and project submittals:

- Laboratory reportable data as defined in TRRP-13;
- Laboratory review checklists (LRC) with the associated exception reports;
- Laboratory Electronic Data Deliverable (EDD); and
- Project field notes from the sampling event.

The review of the reportable data included the quality control (QC) parameters listed below, as required per TRRP-13, using the applicable analytical method and project requirements:

- Data Completeness
- Chain-of-Custody Procedures
- Sample Condition - Holding Time, Preservation, and Containers
- Field Procedures
- Results Reporting Procedures
- Laboratory and Field QC Blanks

- Laboratory Control Spike and Matrix Spike Recoveries
- Surrogate Recoveries
- Laboratory and Field Duplicate Precision

Additionally, Golder used the LRC to evaluate the following QC parameters:

- Method Quantitation Limits (MQLs)
- Method Detection Limits (MDLs)
- Instrument Tuning, Calibration, and Performance
- Internal Standards

Criteria used for this data usability review are as follows:

- Inorganics: 70-130% spike recovery (and not less than 30% or data is rejected) and +MQL difference or 30% RPD (for laboratory duplicates) as recommended in TRRP-13; and
- Soil Samples: + 3x MQL difference (if either result is less than 5x MQL) or 50% RPD (for field duplicates) as recommended in TRRP-13.

If an item was found outside of the review criteria, the reviewer applied a data qualifier (DQ) and bias code to the results for the affected samples in accordance with TRRP-13. A list of all qualified results and definitions of the qualifier and bias codes are given in Table 2.

GLOSSARY OF TERMS

The following definitions apply for terms related to analyte reporting limits:

MDL (Method Detection Limit) – the minimum concentration of an analyte that the laboratory can measure and report with 99% confidence that the analyte concentration is greater than zero. The MDL is determined by the laboratory for each analyte in a given reagent matrix (water or soil) generally using the procedures specified in 40 CFR Part 136, Appendix B. It is a measure of the concentration an instrument can detect or 'see' in a given reagent matrix. TRRP-13 requires that the laboratory routinely check the MDL for reasonableness.

SDL (Sample Detection Limit) – the MDL adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes than prescribed in the analytical method, and taking into account sample characteristics, sample preparation, and analytical adjustments including dry-weight adjustments. It is a measure of the concentration an instrument can detect or 'see' in a given sample. For TRRP, non-detects are reported using the SDL. This term was originally called the SQL (Sample Quantitation Limit) before the TRRP rule revisions effective March 19, 2007.

Unadjusted MQL (Method Quantitation Limit) – the lowest non-zero concentration standard in the laboratory's initial calibration curve calculated using the normal aliquot sizes and final volumes prescribed in the analytical method. The unadjusted MQL is reported by the laboratory for each analyte in a given matrix (water or soil). It is a measure of the concentration an instrument can accurately measure in a typical sample. Per TRRP, the unadjusted MQLs should be below the Levels of Required Performance (LORPs) for purposes of assessment as well as demonstration of conformance with critical Protective Concentration Levels (PCLs).

MQL – the unadjusted MQL adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes than prescribed in the analytical method, and takes into account sample characteristics, sample preparation, and analytical adjustments including dry-weight adjustments. It is a measure of the concentration an instrument can accurately measure in a given sample. Analytes with concentrations above the SDL but below the MQL, though present in the sample, may not be accurately measured and are thus flagged as estimated (J).

LABORATORY CERTIFICATION

At the time the laboratory data were generated for this project, the laboratory was NELAC accredited under the Texas Laboratory Accreditation Program (TLAP) for the matrices, methods and parameters of analysis requested on the chain-of-custody forms. A copy of the applicable pages of the laboratory's National Environmental Laboratory Accreditation Program (NELAP) certificate valid during the period in which the laboratory generated the data in this report is included in Appendix 10.5.

USABILITY SUMMARY

1. Usability of Unqualified Non-Detects – Non-detects are reported at the sample detection limit (SDL) as required per TRRP. Additionally, according to the LRC, an MDL study was performed for each analyte and the MDLs were checked for reasonableness for each applicable analyte. The levels of required performance (LORPs) have been established by Golder/PBW as the Residential Assessment Levels (RALs), which are the minimum of the TRRP residential Tier 1 $^{Tot}Soil_{Comb}$ and Tier 1, 2 or 3 $^{GW}Soil_{Ing}$ PCLs for a 30-acre source area. As needed per TRRP, the unadjusted MQL stated by the laboratory is at or below the LORP for each applicable analyte, and thus the analytical methods are appropriate and the results can be used to demonstrate conformance with the criteria.
2. Usability of Qualified Data – There are no major QC deficiencies, and thus all data is usable as qualified for the intended use. As shown in Table 2, the reviewer qualified some detects as estimated (J) due to minor QC deficiencies. Detects that are biased high can be used; however, the reported concentration may be high. Detects that are estimated may be either low or high. Results with a laboratory J-flag (i.e., at a concentration between the SDL and MQL) should be considered estimates. The actual value is not expected to exceed the sample MQL.

Reviewer: Jing Song Xi 5/2/14

QUALITY CONTROL PARAMETERS AND OUTCOMES

Data Completeness

The laboratory data packages contain all necessary data (i.e., the laboratory reportable data per TRRP-13) and the EDD contain all sample results in acceptable format. Minor revisions were required for work orders 600-85636-1. All revisions are detailed in the laboratory narrative.

Chain-of-Custody

Proper sample custody procedures were used, which confirms that the integrity of the samples was maintained. Additionally, the information on the custody records is complete and agrees with that in the field notes and laboratory reports. The laboratory noted some container identifications did not match the chain-of-custody. In these cases, the records were logged in per the chain-of-custody.

Sample Condition

Samples were collected in appropriate containers, properly preserved in the field, and prepared and analyzed within the holding times as required in the analytical methods, which ensures that the samples were not affected by analyte degradation:

- For 600-89971-1, the temperature of the cooler at receipt was 2.2°C.

Field Procedures

The samples were collected and placed immediately into sterilized jars provided by the laboratory and then into a cooler with ice for overnight delivery to the laboratory.

One site-specific MS/MSD and field duplicate sample was collected with the 23 investigative samples.

Results Reporting Procedures

The hardcopy analytical results include a Result, MQL (adjusted), and SDL. The EDD includes the MDL, SDL (under the SQL column per previously used terminology) and the MQL, which is not adjusted for sample specific factors.

Results are reported in mg/kg with dry-weight correction for the metals. Non-detects are reported using the SDL as specified per TRRP and detects between the SDL and MQL are reported with a laboratory J-flag. The concentration reported for detects between the SDL and MQL is below the calibration range and thus is considered estimated.

MQLs- The LORPs have been established by Golder/PBW as the Residential Assessment Levels (RALs), which are the minimum of the TRRP residential Tier 1 Tier 1 $^{Tot}Soil_{Comb}$ and Tier 1, 2 or 3 $^{GW}Soil_{Ing}$ PCLs

for a 30-acre source area. The Unadjusted MQLs for the laboratory are at or below the LORPs for each applicable analyte.

MDLs- According to the LRC, an MDL study was performed for each analyte, and the MDLs were checked for reasonableness and either adjusted or supported by the analysis of detectability check standards (DCS) for each applicable analyte as required per TRRP-13. Results for the DCS are included in the data packages.

Laboratory Blanks

Results for samples prepared in the same QC batch as a contaminated method blank may be affected by laboratory contamination. No analytes were detected in the laboratory blanks.

Field QC Blanks

No field QC blanks were collected as part of this data package.

Laboratory Control Sample

The laboratory prepared one laboratory control sample (LCS) for each analytical batch and reported recoveries for all of the analytes for each test. The LCS recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on a sample, free of matrix effects.

Matrix Spike Recovery

The laboratory prepared one or more matrix spike (MS) and matrix spike duplicate (MSD) with each analytical batch plus a Post Digestion Spike (PDS) with each metals analytical batch. MS/MSD recoveries are reported for the same analytes as the LCS for MS/MSD prepared using a sample from the site, which includes one MS/MSD for Total Metals, as shown in Table 1.

PDS outcomes are given on the LRC for each job package; however PDS data are not reportable data per TRRP-13. According to the LRC, the PDS met method requirements, which indicates good accuracy for the analysis technique on the given sample matrix.

The MS/MSD recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on a sample free of matrix effects, except as follows:

QC Batch	Lab Sample ID	MS/MSD ID	Analyte	Parent Amount (mg/kg)	Spike Amount for MS/MSD (mg/kg)	MS % Recovery	MSD % Recovery	Qual
131778	600-89971-9	2014-C2L-C01-A	Antimony	0.278 U	59.0, 61.0	25	27	UJL
131778	600-89971-9	2014-C2L-C01-A	Lead	201	59.0, 61.0	-155	-179	-

NA – Not available.

Where antimony recovery data was slightly below 30% and the parent sample was non-detect, the data is accepted with a low bias. In sample 600-89971-9, the lead spike amount is sufficiently less than the amount in the unspiked parent sample; thus, the data are considered inconclusive and the MS/MSD recovery check was waived.

Surrogate Recovery

Since organic analyses were not requested for these data packages, surrogate recoveries were not evaluated.

Laboratory Duplicate Precision

The laboratory prepared one or more Matrix Spike Duplicate (MSD) with each analytical batch for each test. Additionally, the laboratory prepared one Matrix Duplicate (MD) with each metals analytical batch. RPDs are reported for the same analytes as the LCS for MSD/MD prepared using a sample from the site, which includes one MSD and MD for Total Metals.

The MSD and MD RPDs are within the TRRP recommended criteria, which indicates good precision for the preparation and analysis technique for the given sample matrix, except as follows:

QC Batch	Lab Sample ID	MS/MSD ID	Analyte	Parent Amount (mg/kg)	MSD RPD	MD RPD	Qual
131778	600-89971-9	2014-C2L-C01-A	Cadmium	1.12	9	32	J
131778	600-89971-9	2014-C2L-C01-A	Lead	201	17	32	J

Where MSD RPDs were acceptable and MD RPDs were only marginally above criteria, a batch effect was not indicated and the parent sample (only) was qualified as estimated.

Field Duplicate Precision

One field duplicate was collected with the samples. Results are summarized in Table 3. The RPDs (or the absolute difference between results for concentrations <5x MQL and for non-detects) are within the TRRP criteria, which indicates good precision for the sampling, preparation, and analysis technique on the given sample matrix.

Instrument Tuning

According to the LRC, instrument tuning met method requirements for the samples, which indicates the GC/MS instrument was properly set up to identify analytes.

Instrument Calibration

According to the LRC, initial and continuing calibration data met method requirements for all reported results, which indicates the instruments were properly calibrated to measure analyte concentrations.

Instrument Performance

According to the LRC, the serial dilution and ICP interference check samples met method requirements, which indicates that no significant matrix interference exists.

Internal Standards

According to the LRC, area counts and retention times were within method requirements.

TABLE 1

CROSS REFERENCE OF FIELD SAMPLE IDENTIFICATIONS AND LABORATORY IDENTIFICATIONS

Lab Sample ID	Field Sample ID	Prep Batch/ Analysis Batch	Sample Date	Matrix	Comments
600-89971-1	2014-CUFT-5B-A (0.5-2)	131778/131831	4/4/2014	Soil	
600-89971-2	2014-CUFT-18 (0-0.5)	131778/131831	4/4/2014	Soil	
600-89971-3	2014-CUFT-15 (0-0.5)	131778/131831	4/4/2014	Soil	
600-89971-4	2014-CUFT-16 (0-0.5)	131778/131831	4/4/2014	Soil	
600-89971-5	2014-CUFT-17 (0-0.5)	131778/131831	4/4/2014	Soil	
600-89971-6	Dup-01	131778/131831	4/4/2014	Soil	Duplicate of 2014-AD-03A (2-4)
600-89971-7	2014-AD-03A (2-4)	131778/131831	4/4/2014	Soil	
600-89971-8	2014-AD-06 (0-0.5)	131778/131831	4/4/2014	Soil	
600-89971-9	2014-C2L-C01A	131778/131831	4/4/2014	Soil	site-specific MS/MSD
600-89971-10	2014-C2L-C01B	131778/131831	4/4/2014	Soil	
600-89971-11	2014-C2L-C01C	131778/131831	4/4/2014	Soil	
600-89971-12	2014-CUFT-5B-A (2-4)		4/4/2014	Soil	Not reported
600-89971-13	2014-CUFT-18 (0.5-2)		4/4/2014	Soil	Not reported
600-89971-14	2014-CUFT-18 (2-4)		4/4/2014	Soil	Not reported
600-89971-15	2014-CUFT-15 (0.5-2)		4/4/2014	Soil	Not reported
600-89971-16	2014-CUFT-15 (2-4)		4/4/2014	Soil	Not reported
600-89971-17	2014-CUFT-16 (0.5-2)		4/4/2014	Soil	Not reported
600-89971-18	2014-CUFT-16 (2-4)		4/4/2014	Soil	Not reported
600-89971-19	2014-CUFT-17 (0.5-2)		4/4/2014	Soil	Not reported
600-89971-20	2014-CUFT-17 (2-4)		4/4/2014	Soil	Not reported
600-89971-21	2014-AD-03A (4-6)		4/4/2014	Soil	Not reported
600-89971-22	2014-AD-03A (6-8)		4/4/2014	Soil	Not reported
600-89971-23	2014-AD-06 (1-2.5)		4/4/2014	Soil	Not reported
600-89971-24	2014-AD-06 (2.5-4.5)		4/4/2014	Soil	Not reported

TABLE 2 - QUALIFIED DATA

Lab Sample ID	Field Sample ID	Analyte	Result	Units	Qualifer	Explanation
600-89971-1	2014-CUFT-5B-A (0.5-2)	Antimony	0.292 U	mg/kg	UJL	Matrix Spike recovery slightly below 30%
600-89971-2	2014-CUFT-18 (0-0.5)	Antimony	0.284 U	mg/kg	UJL	Matrix Spike recovery slightly below 30%
600-89971-3	2014-CUFT-15 (0-0.5)	Antimony	1.03 J	mg/kg	JL	analyte estimated between SDL and MQL; Matrix Spike recovery slightly below 30%
600-89971-4	2014-CUFT-16 (0-0.5)	Antimony	0.459 J	mg/kg	JL	analyte estimated between SDL and MQL; Matrix Spike recovery slightly below 30%
600-89971-5	2014-CUFT-17 (0-0.5)	Antimony	0.271 U	mg/kg	UJL	Matrix Spike recovery slightly below 30%
600-89971-6	Dup-01	Antimony	0.288 U	mg/kg	UJL	Matrix Spike recovery slightly below 30%
600-89971-7	2014-AD-03A (2-4)	Antimony	0.258 U	mg/kg	UJL	Matrix Spike recovery slightly below 30%
600-89971-8	2014-AD-06 (0-0.5)	Antimony	0.284 U	mg/kg	UJL	analyte estimated between SDL and MQL; Matrix Spike recovery slightly below 30%
		Selenium	0.319 J	mg/kg	J	analyte estimated between SDL and MQL
600-89971-9	2014-C2L-C01A	Antimony	0.278 U	mg/kg	UJL	Matrix Spike recovery slightly below 30%
		Selenium	0.708 J	mg/kg	J	analyte estimated between SDL and MQL
		Lead	201	mg/kg	J	MD RPD outside specifications
		Cadmium	1.12	mg/kg	J	MD RPD outside specifications
600-89971-10	2014-C2L-C01B	Antimony	0.254 U	mg/kg	UJL	Matrix Spike recovery slightly below 30%
		Selenium	0.460 J	mg/kg	J	analyte estimated between SDL and MQL
600-89971-11	2014-C2L-C01C	Antimony	0.259 U	mg/kg	UJL	Matrix Spike recovery slightly below 30%
		Cadmium	0.0951 J	mg/kg	J	analyte estimated between SDL and MQL

Note:

Detected results between the SDL and MQL (i.e., results with a laboratory J-flag) have been included in the above table since the reported concentration is below the calibration range.

J Estimated data; The analyte was detected and identified. The associated numerical value (i.e., the reported sample concentration) is the approximate concentration of the analyte in the sample.

NJ Tentatively identified, estimated data; The analysis indicates the presence of the analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.

NS Not selected; Another result (from a secondary dilution, different analytical method, re-sampling, etc.) is selected for use based on QC outcomes and/or reported concentrations.

R Rejected data; The data is unusable. Serious QC deficiencies make it impossible to verify the absence or presence of this analyte.

U Not detected; The analyte was not detected >5x (10x for common contaminants) the level in an associated blank and thus should be considered not detected above the level of the associated numerical value (i.e., the reported sample concentration).

UJ Estimated data; The analyte was not detected above the reported sample detection limit (SDL). The numerical value of the SDL is estimated and may be inaccurate.

H Bias in sample result is likely to be high

L Bias in sample result is likely to be low

TABLE 3 - FIELD DUPLICATE PRECISION CALCULATIONS

Duplicate and Parent Sample Field Identification	Analyte	Sample Result	Duplicate Result	RPD[a]	Accept or Reject	Qualifier Added
DUP-01 / 2014-AD-03A (2-4)	arsenic	8.91	9.16	2.8	A	-
	cadmium	0.367	0.423	14.2	A	-
	lead	15.5	13.8	11.6	A	-

[a] RPD = ((SR - DR)*200)/(SR + DR)

A - Acceptable Data

NA - Not Analyzed

The RPD test (<50%) applies if both results are greater than 5x MQL. Otherwise, the absolute difference test (< 3x MQL) applies.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-89799-1
Client Project/Site: Exide Recycling Center, Frisco TX

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
4/11/2014 4:42:42 PM
Cathy Upton, Project Management Assistant II
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Designee for

Dean Joiner, Project Manager II
(713)690-4444
dean.joiner@testamericainc.com

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.

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-89799-1 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☑ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☑ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton		4/10/2014
Name (printed)	Signature	Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/10/2014
Project Name:	Exide Recycling Center, Frisco TX	Laboratory Job Number:	600-89799-1
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?		X			R01A
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				R05D
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			R07C
		Were MS/MSD RPDs within laboratory QC limits?		X			R07D
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?		X			R10B
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/10/2014
Project Name:	Exide Recycling Center, Frisco TX	Laboratory Job Number:	600-89799-1
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

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Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/10/2014
Project Name:	Exide Recycling Center, Frisco TX	Laboratory Job Number:	600-89799-1
Reviewer Name:	Dean A Joiner		

ER #[1]	Description
R01A	One or more containers for the following sample(s) was received broken or leaking: Rinse Blank-Geo (600-89799-21).
R05D	Method 8260B: The method blank for batch 600-131549 contained methylene chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-analysis of samples was not performed.
R07C	Method 6010B: Due to the high concentration of lead, the matrix spike / matrix spike duplicate (MS/MSD) for batch 131489 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria. (600-89799-1 MS and 600-89799-1 MSD) Method 8260B: 600-89761-A-1-E MS failed the recovery criteria for the following analyte(s): Chloromethane, Vinyl chloride. Matrix interference is suspected. Method 8260B: 600-89799-1 MS failed the recovery criteria for the following analyte(s): Vinyl acetate. Matrix interference is suspected. Method 8260B: 600-89799-1 MSD failed the recovery criteria for the following analyte(s): Acetone. Matrix interference is suspected. Method 8260B: 600-89841-A-1-K MSD failed the recovery criteria for the following analyte(s): Tetrachloroethene. Matrix interference is suspected. Method 8270C LL: 600-89799-1 MS/MSD failed the recovery criteria for the following analyte(s): 3,3'-Dichlorobenzidine, Benzyl alcohol, Hexachlorocyclopentadiene. Matrix interference is suspected. Method 8270C LL: 600-89799-1 MSD failed the recovery criteria for the following analyte(s): 3,3'-Dichlorobenzidine, Benzyl alcohol, Hexachlorocyclopentadiene. Matrix interference is suspected. Method 8270C LL: 600-89799-21 MS/MSD failed the recovery criteria for the following analyte(s): Benzidine. This analyte is a known poor performer when analyzed using this method; therefore, the data have been qualified and reported. Method 8270C LL: 600-89799-21 MS failed the recovery criteria for the following analyte(s): 1,2-Dichlorobenzene. This analyte was biased high and was not detected in the associated samples; therefore, the data have been reported. Method 8270C LL: 600-89799-21 MSD failed the recovery criteria for the following analyte(s): Dibenz(a,h)anthracene. The associated laboratory control sample (LCS) and the MSD recovery were within acceptance limits. There was insufficient sample available to perform a re-extraction; therefore, the data have been reported.
R07D	Method 6010B: 600-89799-1 MSD failed the RPD criteria for the following analyte(s): Antimony, Lead. Non-homogeneity is suspected. Method 8260B: 600-89799-1 MSD failed the RPD criteria for the following analyte(s): Acetone, Vinyl acetate. Matrix interference and/or non-homogeneity is suspected. Method 8270C LL: 600-89799-21 MSD failed the RPD criteria for the following analyte(s): 1,2-Dichlorobenzene, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Nitroaniline, 4-Chlorophenyl phenyl ether, 4-Nitrophenol, Diethyl phthalate, Dimethyl phthalate, Fluorene, Hexachlorobutadiene, Hexachloroethane, Phenol.
R10B	Method(s) 8270C LL: The following sample(s) was diluted due to the nature of the sample matrix: 2014-FFTA-07 (0-0.5) (600-89799-5), 2014-NDA-7 (0-0.5) (600-89799-1), 2014-NDA-7 (0-0.5) (600-89799-1 MS), 2014-NDA-7 (0-0.5) (600-89799-1 MSD). Elevated reporting limits (RLs) are provided.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Detection Check Standard

Matrix:	Soil
Method:	6010B
Preparation:	3050
Date Analyzed:	3/28/2014
Date Prepared:	3/27/2014
Instrument:	Thermo 6500
TALS Batches:	130577p, 130672
Prep/Reagent Factor =	50
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.299654	0.5	0.36	25
Antimony	0.231553	0.45	0.31	2.5
Arsenic	0.217923	0.5	0.57	1
Barium	0.011322	0.03	0.03	1
Beryllium	0.014513	0.02	0.02	0.25
Boron	0.385535	0.6	0.49	20
Cadmium	0.025642	0.05	0.045	0.25
Calcium	0.86399	1.5	2.07	100
Chromium	0.050606	0.1	0.11	0.5
Cobalt	0.067622	0.1	0.105	0.5
Copper	0.173703	0.5	0.535	0.5
Iron	2.534007	4	4.035	20
Lead	0.104832	0.2	0.18	0.5
Selenium	0.258884	0.5	0.505	2
Manganese	0.038111	0.05	0.05	1.5
Molybdenum	0.136448	0.35	0.325	0.5
Nickel	0.116599	0.15	0.145	1
Silver	0.118848	0.2	0.22	0.5
Sodium	0.885548	2.4	2.13	100
Thallium	0.276988	0.7	0.615	1.5
Tin	0.08729	0.15	0.13	1
Titanium	0.014529	0.03	0.035	0.5
Vanadium	0.079068	0.15	0.165	0.5
Zinc	0.108432	0.2	0.285	1.5

Detection Check Standard

Matrix:	Water
Method:	200.7/6010
Preparation:	200.7P/3010
Date Analyzed:	3/28/2014
Date Prepared:	3/27/2014
Instrument:	Thermo6500
TALs Batches:	130582p, 130672
Units:	mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.0029	0.5
Antimony	0.0063	0.01	0.012	0.05
Arsenic	0.0033	0.01	0.0083	0.01
Barium	0.0022	0.005	0.0051	0.02
Beryllium	0.00134	0.002	0.0039	0.005
Boron	0.0077	0.02	0.0201	0.2
Cadmium	0.00073	0.001	0.001	0.005
Calcium	0.022	0.05	0.042	1
Chromium	0.0016	0.002	0.0035	0.01
Cobalt	0.00063	0.001	0.001	0.01
Copper	0.0014	0.002	0.0021	0.01
Iron	0.087	0.1	0.1009	0.4
Lithium	0.0024	0.005	0.0045	0.2
Lead	0.0029	0.005	0.004	0.01
Selenium	0.0042	0.01	0.01	0.04
Manganese	0.00084	0.002	0.0021	0.01
Molybdenum	0.0027	0.005	0.005	0.01
Nickel	0.00179	0.005	0.0047	0.01
Silver	0.0012	0.0025	0.0024	0.01
Silicon	0.00779	0.02	0.016	0.2
Sodium	0.02	0.05	0.0469	1
Strontium	0.0005	0.001	0.001	0.005
Thallium	0.0078	0.02	0.0205	0.03
Tin	0.0028	0.005	0.0046	0.01
Titanium	0.0011	0.002	0.0019	0.01
Vanadium	0.0017	0.002	0.0046	0.01
Zinc	0.0022	0.005	0.0049	0.01

Detection Check Standard

Matrix:	Solid
Method:	8260B
Preparation:	Wei Shen
Date Analyzed:	10/16/2013
Date Prepared:	10/16/2013
TALs Batches:	118344
Units:	ug/Kg

Analyte	MDL	DCS Spike	Measured Result	MQL
1,1,1,2-Tetrachloroethane	1.4	5	4.8	5
1,1,1-Trichloroethane	0.74	5	3.9	5
1,1,2,2-Tetrachloroethane	0.87	5	4.4	5
1,1,2-Trichloro-1,2,2-trifluoroethane	1.44	5	4.3	5
1,1,2-Trichloroethane	0.73	5	4.3	5
1,1-Dichloroethane	0.87	5	8.7	5
1,1-Dichloroethene	1.22	5	9.1	5
1,1-Dichloropropene	0.65	5	3.4	5
1,2 Dichloroethene, Total	1.9	10	19	10
1,2,3-Trichlorobenzene	0.62	5	4.3	5
1,2,3-Trichloropropane	1.31	5	5.3	5
1,2,3-Trimethylbenzene	1.8	5	5.3	5
1,2,4-Trichlorobenzene	1.97	5	4.3	5
1,2,4-Trimethylbenzene	0.92	5	5.2	5
1,2-Dibromo-3-chloropropane	2.44	5	5.6	10
1,2-Dibromoethane (EDB)	1.02	5	4.4	5
1,2-Dichlorobenzene	0.8	5	4.2	5
1,2-Dichloroethane	0.9	5	5.1	5
1,2-Dichloropropane	0.71	5	4.8	5
1,3,5-Trichlorobenzene	5	5	4.1	5
1,3,5-Trimethylbenzene	1.6	5	5.2	5
1,3-Dichlorobenzene	0.71	5	7.9	5
1,3-Dichloropropane	0.63	5	4.3	5
1,3-Dichloropropane, Total	0.58	10	9.3	5
1,4-Dichlorobenzene	0.66	5	5.6	5
1,4-Dioxane	62.07	100	120	500
2,2-Dichloropropane	1.82	5	9.4	5
2-Butanone (MEK)	1.9	10	9.3	10
2-Chloro-1,3-butadiene	2.71	5	5.4	10
2-Chloroethyl vinylether	0.98	10	8	10
2-Chlorotoluene	0.68	5	7.9	5
2-Hexanone	1.01	10	10.8	10
4-Chlorotoluene	0.83	5	5.3	5
4-Isopropyltoluene	1.02	10	9.1	5
4-Methyl-2-pentanone	1.47	10	10.2	10
Acetone	1.66	10	6.5	10
Acetonitrile	1.39	10	49	10
Acrylonitrile	5.82	50	86	25
Allyl chloride (3-Chloro-1-propene)	1.39	5	8.9	5

Detection Check Standard

Matrix: Solid
Method: 8260B
Preparation: Wei Shen
Date Analyzed: 10/16/2013
Date Prepared: 10/16/2013
TALs Batches: 118344
Units: ug/Kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Benzene	0.63	5	8.6	5
Bromoform	1.37	5	4.3	5
Bromomethane	1.78	5	5.2	10
Carbon Disulfide	0.55	10	9.2	5
Carbon Tetrachloride	1.13	5	4.3	5
Chlorobenzene	0.96	5	8	5
Chlorobromomethane	1.78	5	5.2	5
Chlorodibromomethane	0.94	5	4.4	5
Chloroethane	1.4	5	5.5	10
Chloroform	5.74	5	9.8	5
Chloromethane	1.66	5	5.8	10
cis-1,2-Dichloroethene	0.83	5	9.8	5
cis-1,3-Dichloropropene	0.54	5	5	5
Dibromomethane	0.75	5	4.9	5
Dichlorobromomethane	0.66	5	4.2	5
Dichlorodifluoromethane	1.54	5	4.3	5
Ethyl methacrylate	1.66	5	4.4	5
Ethylbenzene	1.02	5	4.9	5
Hexachlorobutadiene	1.13	5	9	5
Isobutyl alcohol	17.2	50	49	50
Isopropylbenzene	0.92	5	4.9	5
Methacrylonitrile	5	5	0.88	10
Methyl Iodide	2.5	5	8.5	10
Methyl methacrylate	2.86	10	21.9	10
Methyl tert-butyl ether	1.83	5	4.8	5
Methylcyclohexane	1.5	5	4.2	5
Methylene Chloride	2.19	5	7.8	10
m-Xylene & P-Xylene	1.52	5	4.5	10
Naphthalene	2.37	5	4.5	10
n-Butyl acetate	2.4	5	5.3	10
n-Butylbenzene	0.58	5	8.5	5
n-Propylbenzene	0.95	5	5.2	5
o-Xylene	1.13	5	7.8	5
Pentachloroethane	5	5	1.47	5
Propionaldehyde	64	5	4.9	100
Propionitrile	2.36	5	70	10
sec-Butylbenzene	0.7	5	8.6	5
Styrene	0.71	5	8.3	5
tert-Butylbenzene	0.95	5	5	5

Detection Check Standard

Matrix:	Solid
Method:	8260B
Preparation:	Wei Shen
Date Analyzed:	10/16/2013
Date Prepared:	10/16/2013
TALs Batches:	118344
Units:	ug/Kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Tetrachloroethene	1.4	5	4.7	5
Toluene	1.38	5	4.6	5
trans-1,2-Dichloroethene	1.14	5	9.2	5
trans-1,3-Dichloropropene	0.58	5	4.3	5
trans-1,4-Dichloro-2-butene	1.9	5	5	10
Trichloroethene	1.4	5	4.4	5
Trichlorofluoromethane	0.66	5	5.6	5
Trichlorotrifluoroethane	1.44	5	5.6	5
Vinyl Acetate	0.93	5	7.6	10
Vinyl Chloride	0.9	5	4.8	10
Xylenes (total)	1.13	5	12	5

Matrix: Water
Method: 8260B_LL
Date Analyzed: 12/10/2013
TALS Batch: 122598
Units: ug/L

Analyte	MDL	DCS Spike	Measured Result	MQL
1,1,1,2-Tetrachloroethane	0.180	0.500	0.411	1
1,1,1-Trichloroethane	0.150	0.500	0.475	1
1,1,2,2-Tetrachloroethane	0.220	0.500	0.515	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.000	0.250	0.276	1
1,1,2-Trichloroethane	0.280	0.500	0.507	1
1,1-Dichloroethane	0.110	0.250	0.300	1
1,1-Dichloroethene	0.190	0.500	0.439	1
1,1-Dichloropropene	0.210	0.500	0.431	1
1,2,3-Trichlorobenzene	0.570	0.500	0.950	1
1,2,3-Trichloropropane	0.290	0.500	0.568	1
1,2,3-Trimethylbenzene	0.130	0.500	0.449	1
1,2,4-Trichlorobenzene	0.310	0.500	0.713	1
1,2,4-Trimethylbenzene	0.140	0.500	0.434	1
1,2-Dibromo-3-Chloropropane	0.810	0.500	0.665	1
1,2-Dichlorobenzene	0.100	0.250	0.349	1
1,2-Dichloroethane	0.140	0.500	0.500	1
1,2-Dichloroethene, Total	0.300	1.000	0.970	1
1,2-Dichloropropane	0.160	0.500	0.474	1
1,3,5-Trichlorobenzene	1.000	0.500	0.578	1
1,3,5-Trimethylbenzene	0.100	0.250	0.262	1
1,3-Dichlorobenzene	0.130	0.500	0.530	1
1,3-Dichloropropane	0.220	0.500	0.531	1
1,4-Dichlorobenzene	0.110	0.250	0.336	1
1,4-Dioxane	30.790	10.000	11.352	50
1-Chlorohexane	0.260	0.250	0.279	1
2,2-Dichloropropane	0.130	0.500	0.452	1
2-Butanone (MEK)	0.760	1.000	0.963	2
2-Chloro-1,3-butadiene	0.330	0.500	0.406	1
2-Chloroethyl vinyl ether	0.500	1.000	0.798	2
2-Chlorotoluene	0.130	0.500	0.439	1
2-Hexanone	0.350	1.000	0.789	2
3-Chloro-1-propene	0.240	0.500	0.425	2
4-Chlorotoluene	0.140	0.500	0.490	1
4-Isopropyltoluene	0.100	0.250	0.279	1
4-Methyl-2-pentanone (MIBK)	0.450	1.000	0.931	2
Acetone	0.990	1.000	1.452	5
Acrolein	1.630	2.500	2.455	5
Acrylonitrile	0.520	2.500	2.614	5
Benzene	0.080	0.250	0.304	1
Benzyl chloride	0.240	0.500	0.977	1
Bromobenzene	0.190	0.500	0.523	1
Bromoform	0.190	0.500	0.410	1
Bromomethane	0.250	0.500	0.468	2
Butadiene	0.210	0.500	0.496	1
Carbon disulfide	0.240	0.500	0.478	2
Carbon tetrachloride	0.150	0.500	0.378	1
Chlorobenzene	0.120	0.250	0.317	1
Chlorobromomethane	0.180	0.500	0.480	1

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Matrix: Water
Method: 8260B_LL
Date Analyzed: 12/10/2013
TALS Batch: 122598
Units: ug/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Chlorodibromomethane	0.150	0.500	0.403	1
Chloroethane	0.080	0.250	0.313	2
Chloroform	0.130	0.500	0.471	1
Chloromethane	0.180	0.500	0.516	2
cis-1,2-Dichloroethene	0.060	0.250	0.324	1
cis-1,3-Dichloropropene	0.180	0.500	0.371	1
Cyclohexane	0.160	0.500	0.410	1
Cyclohexanone	8.640	25.000	30.305	50
Dibromomethane	0.520	0.500	0.962	1
Dichlorobromomethane	0.160	0.500	0.403	1
Dichlorodifluoromethane	0.120	0.250	0.245	1
Dichlorofluoromethane	1.000	0.500	0.472	1
Ethyl acetate	0.410	1.000	1.448	2
Ethyl acrylate	0.340	0.500	0.640	2
Ethyl ether	0.150	0.500	0.480	1
Ethyl methacrylate	0.260	0.500	0.415	2
Ethylbenzene	0.110	0.250	0.006	1
Ethylene Dibromide	0.180	0.500	0.474	1
Hexachlorobutadiene	0.170	0.500	0.620	1
Hexane	0.160	0.500	0.404	1
Iodomethane	0.158	0.500	0.484	2
Isobutyl alcohol	3.320	12.500	13.826	10
Isooctane	0.330	0.500	1.097	1
Isopropyl alcohol	3.720	5.000	5.417	10
Isopropyl ether	0.090	0.250	0.271	1
Isopropylbenzene	0.180	0.500	0.427	1
Methyl acetate	0.550	1.250	1.371	2
Methyl methacrylate	0.330	1.000	0.835	1
Methyl tert-butyl ether	0.120	0.250	0.287	1
Methylcyclohexane	0.100	0.250	0.292	1
Methylene Chloride	0.150	0.500	0.488	5
m-Xylene & p-Xylene	0.170	0.500	0.442	1
Naphthalene	0.320	0.500	0.776	2
n-Butyl acetate	0.190	0.500	0.384	1
n-Butylbenzene	0.160	0.500	0.423	1
N-Propylbenzene	0.150	0.500	0.418	1
o-Xylene	0.120	0.250	0.265	1
Propionitrile	0.660	2.500	2.335	2
sec-Butylbenzene	0.120	0.250	0.266	1
Styrene	0.070	0.250	0.230	1
tert-Butylbenzene	0.080	0.250	0.290	1
Tetrachloroethene	0.130	0.500	0.598	1
Toluene	0.150	0.500	0.503	1
trans-1,2-Dichloroethene	0.090	0.250	0.287	1
trans-1,3-Dichloropropene	0.210	0.500	0.763	1
Trichloroethene	0.180	0.500	0.481	1
Trichlorofluoromethane	0.080	0.250	0.234	1
Trihalomethanes, Total	1.000	2.000	1.680	5

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Matrix: Water
Method: 8260B_LL
Date Analyzed: 12/10/2013
TALS Batch: 122598
Units: ug/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Vinyl acetate	0.210	0.500	0.428	2
Vinyl chloride	0.110	0.250	0.293	2
Xylenes, Total	0.260	1.000	0.900	1

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Matrix: Water
Method: 8270C_LL
Prep Method: 3510C_LL
Date Analyzed: 1/14/2014
Job #: 600-85250
TALS Batch: 124915
Units: ug/L

Analyte	MDL	DCS Spike	Measured Result	MQL
1,1'-Biphenyl	0.100	0.250	0.169	1
1,2,4,5-Tetrachlorobenzene	0.100	0.250	0.177	1.5
1,2,4-Trichlorobenzene	0.120	0.250	0.175	2
1,2-Dichlorobenzene	0.170	0.250	0.169	1.75
1,2-Dinitrobenzene	0.500	0.500	0.518	5
1,2-Diphenylhydrazine	0.110	0.250	0.145	2
1,3-Dichlorobenzene	0.170	0.250	0.156	1.5
1,3-Dinitrobenzene	0.080	0.500	0.432	1
1,4-Dichlorobenzene	0.130	0.250	0.185	2
1-Methylnaphthalene	0.090	0.250	0.194	2
2,2'-oxybis[1-chloropropane]	0.400	0.250	0.107	1.5
2,3,4,6-Tetrachlorophenol	0.500	0.250	0.506	1
2,4,5-Trichlorophenol	0.250	0.250	0.099	2
2,4,6-Trichlorophenol	0.180	0.250	0.118	2
2,4-Dichlorophenol	0.150	0.250	0.110	2.5
2,4-Dimethylphenol	0.310	0.250	0.088	2.5
2,4-Dinitrophenol	0.390	2.000	3.540	5
2,4-Dinitrotoluene	0.130	0.250	0.509	1.5
2,6-Dinitrotoluene	0.080	0.250	0.359	1
2-Chloronaphthalene	0.080	0.500	0.481	1.5
2-Chlorophenol	0.130	0.250	0.159	2
2-Methylnaphthalene	0.070	0.250	0.183	1.5
2-Methylphenol	0.120	0.250	0.159	1.5
2-Nitroaniline	0.190	0.250	0.340	2.5
2-Nitrophenol	0.220	0.250	0.479	1
3 & 4 Methylphenol	0.200	0.250	0.134	1
3,3'-Dichlorobenzidine	0.180	0.250	0.254	10
3-Nitroaniline	0.160	0.500	0.199	2.5
4,6-Dinitro-2-methylphenol	0.830	0.500	2.340	2.5
4-Bromophenyl phenyl ether	0.100	0.250	0.094	1.5
4-Chloro-3-methylphenol	0.170	0.250	0.077	1
4-Chloroaniline	0.210	0.250	0.126	1
4-Chlorophenyl phenyl ether	0.100	0.250	0.177	1.5
4-Nitroaniline	0.250	0.250	0.112	2.5
4-Nitrophenol	0.560	1.000	0.272	2.5
Acenaphthene	0.080	0.250	0.169	1
Acenaphthylene	0.060	0.500	0.517	1
Acetophenone	0.150	0.250	0.144	1.5
Aniline	0.080	0.250	0.095	1.5
Anthracene	0.050	0.250	0.171	1
Azobenzene	0.070	0.250	0.136	1.5
Benzidine	0.061	2.500	3.750	10
Benzo[a]anthracene	0.080	0.250	0.173	2
Benzo[a]pyrene	0.080	0.250	0.146	1.5
Benzo[b]fluoranthene	0.070	0.250	0.161	2
Benzo[g,h,i]perylene	0.080	0.250	0.159	2.5

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Matrix:	Water
Method:	8270C_LL
Prep Method:	3510C_LL
Date Analyzed:	1/14/2014
Job #:	600-85250
TALS Batch:	124915
Units:	ug/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Benzo[k]fluoranthene	0.090	0.250	0.162	2
Benzoic acid	2.510	2.500	5.980	10
Benzyl alcohol	0.170	0.250	0.083	5.5
Bis(2-chloroethoxy)methane	0.130	0.250	0.167	1.5
Bis(2-chloroethyl)ether	0.150	0.250	0.150	1.5
Bis(2-ethylhexyl) phthalate	0.370	0.250	0.445	2.5
Butyl benzyl phthalate	0.120	0.250	0.266	2.5
Caprolactam	1.000	0.500	0.079	1
Carbazole	0.170	0.500	0.480	6.25
Chrysene	0.080	0.250	0.167	1.5
Dibenz(a,h)anthracene	0.080	0.250	0.112	2.5
Dibenzofuran	0.080	0.250	0.159	1.5
Diethyl phthalate	1.500	0.250	0.510	2.5
Dimethyl phthalate	0.070	0.250	0.153	2.5
Di-n-butyl phthalate	0.110	0.250	0.186	2.5
Di-n-octyl phthalate	0.160	0.250	0.441	5
Fluoranthene	0.070	0.250	0.155	2.5
Fluorene	0.070	0.250	0.155	1.5
Hexachlorobenzene	0.110	0.250	0.181	1.5
Hexachlorobutadiene	0.180	0.250	0.187	2
Hexachlorocyclopentadiene	0.130	0.250	0.748	1.5
Hexachloroethane	0.100	0.250	0.169	2
Indeno[1,2,3-cd]pyrene	0.070	0.250	0.417	2
Isophorone	0.110	0.250	0.151	1.5
Methyl Phenols,Total	0.200	0.500	0.160	1
Naphthalene	0.080	0.250	0.808	5
Nitrobenzene	0.110	0.250	0.152	1.5
N-Nitrosodimethylamine	0.260	0.250	0.129	2
N-Nitrosodi-n-propylamine	0.100	0.250	0.151	2.5
Pentachlorophenol	0.610	2.000	0.713	2.5
Phenanthrene	0.060	0.500	0.516	1.5
Phenol	0.040	0.500	0.224	1.5
Pyrene	0.110	0.250	0.169	2
Pyridine	0.040	0.500	0.215	4

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Matrix: Solid
Method: 8270C_LL
Prep Method: 3550B
Date Analyzed: 1/14/2014
Job #: 600-85250
TALS Batch: 124915
Units: ug/Kg

Analyte	MDL	DCS Spike	easured Res	MQL
1,1'-Biphenyl	4.000	8.325	5.256	16.67
1,2,4,5-Tetrachlorobenzene	6.750	8.325	5.130	16.67
1,2,4-Trichlorobenzene	2.100	8.325	5.680	16.67
1,2-Dichlorobenzene	3.020	8.325	5.170	16.67
1,2-Dinitrobenzene	16.67	16.700	16.440	16.67
1,2-Diphenylhydrazine	1.62	8.325	3.996	16.67
1,3-Dichlorobenzene	1.54	8.325	5.320	16.67
1,3-Dinitrobenzene	2.960	8.325	26.173	16.67
1,4-Dichlorobenzene	2.250	8.325	5.379	33.33
1-Methylnaphthalene	1.57	8.325	5.355	16.67
2,2'-oxybis[1-chloropropane]	8.84	8.325	2.960	16.67
2,3,4,6-Tetrachlorophenol	16.67	8.325	14.768	16.67
2,4,5-Trichlorophenol	10.01	8.325	2.328	25
2,4,6-Trichlorophenol	2.680	8.325	3.467	25
2,4-Dichlorophenol	3.870	8.325	3.640	16.67
2,4-Dimethylphenol	8.58	8.325	3.098	16.67
2,4-Dinitrophenol	4.72	33.340	113.700	100
2,4-Dinitrotoluene	3.610	8.325	17.077	33.33
2,6-Dinitrotoluene	2.950	8.325	12.672	16.67
2-Chloronaphthalene	1.21	16.700	17.750	16.67
2-Chlorophenol	1.97	8.325	5.019	16.67
2-Methylnaphthalene	2.740	8.325	5.122	16.67
2-Methylphenol	3.230	8.325	4.362	16.67
2-Nitroaniline	4.890	8.325	12.066	16.67
2-Nitrophenol	3.890	8.325	16.417	16.67
3 & 4 Methylphenol	2.790	8.325	4.404	33.33
3,3'-Dichlorobenzidine	10.16	8.325	8.085	33.33
3-Nitroaniline	7.15	16.700	14.950	16.67
4,6-Dinitro-2-methylphenol	4.98	33.340	71.840	100
4-Bromophenyl phenyl ether	2.840	8.325	1.884	16.67
4-Chloro-3-methylphenol	15.58	8.325	3.275	16.67
4-Chloroaniline	5.820	8.325	1.829	33.33
4-Chlorophenyl phenyl ether	1.8	8.325	5.183	16.67
4-Nitroaniline	11.15	16.700	12.650	16.67
4-Nitrophenol	5.08	66.700	13.360	100
Acenaphthene	1.44	8.325	4.821	16.67
Acenaphthylene	1	16.700	16.830	16.67
Acetophenone	3.300	8.325	4.178	16.67
Aniline	2.980	8.325	0.469	16.67
Anthracene	1.28	8.325	5.564	16.67
Azobenzene	1.85	8.325	3.888	16.67
Benzidine	9.02	83.500	105.8	330
Benzo[a]anthracene	1.38	8.325	6.235	16.67
Benzo[a]pyrene	1.61	8.325	4.924	16.67
Benzo[b]fluoranthene	1.72	8.325	5.525	33.33
Benzo[g,h,i]perylene	5.070	8.325	5.567	16.67

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Matrix: Solid
Method: 8270C_LL
Prep Method: 3550B
Date Analyzed: 1/14/2014
Job #: 600-85250
TALS Batch: 124915
Units: ug/Kg

Analyte	MDL	DCS Spike	easured Res	MQL
Benzo[k]fluoranthene	1.49	8.325	5.827	16.67
Benzyl alcohol	5.830	8.325	3.366	16.67
Bis(2-chloroethoxy)methane	1.42	8.325	4.458	33.33
Bis(2-chloroethyl)ether	1.65	8.325	4.605	16.67
Bis(2-ethylhexyl) phthalate	5.370	8.325	15.260	66.68
Butyl benzyl phthalate	6.190	8.325	9.234	66.68
Caprolactam	16.67	8.325	3.730	16.67
Carbazole	3.12	16.700	17.670	16.67
Chrysene	1.02	8.325	6.650	16.67
Dibenz(a,h)anthracene	3.630	8.325	5.160	16.67
Dibenzofuran	1.78	8.325	5.582	16.67
Diethyl phthalate	8.43	8.325	19.777	66.68
Dimethyl phthalate	4.890	8.325	5.365	66.68
Di-n-butyl phthalate	2.590	8.325	6.934	66.68
Di-n-octyl phthalate	1.9	8.325	15.675	66.68
Fluoranthene	3.110	8.325	5.995	16.67
Fluorene	2.360	8.325	4.966	16.67
Hexachlorobenzene	1.52	8.325	5.214	16.67
Hexachlorobutadiene	1.92	8.325	5.106	16.67
Hexachlorocyclopentadiene	4.610	8.325	23.511	16.67
Hexachloroethane	2.310	8.325	4.483	16.67
Indeno[1,2,3-cd]pyrene	3.500	8.325	14.357	33.33
Isophorone	1	8.325	4.643	16.67
Naphthalene	1.35	8.325	26.441	16.67
Nitrobenzene	2.960	8.325	5.492	16.67
N-Nitrosodimethylamine	4.190	8.325	4.231	33.33
N-Nitrosodi-n-propylamine	2.220	8.325	4.262	33.33
Pentachlorophenol	4	66.700	24.790	83.33
Phenanthrene	4.95	16.700	18.110	16.67
Phenol	4.240	8.325	4.269	16.67
Pyrene	1.83	8.325	5.666	16.67
Pyridine	3.52	16.700	9.340	33.33

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Job ID: 600-89799-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-89799-1

Comments
Soil samples were received in bulk jars.

Receipt
The samples were received on 4/2/2014 10:22 AM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 2.5º C.

Except:

One or more containers for the following sample(s) was received broken or leaking: Rinse Blank-Geo (600-89799-21).

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89799-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL HOU
6010B	Metals (ICP)	SW846	TAL HOU
Moisture	Percent Moisture	EPA	TAL HOU

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 HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89799-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-89799-1	2014-NDA-7 (0-0.5)	Solid	04/01/14 10:01	04/02/14 10:22
600-89799-4	DUP-4	Solid	04/01/14 00:00	04/02/14 10:22
600-89799-5	2014-FFTA-07 (0-0.5)	Solid	04/01/14 10:55	04/02/14 10:22
600-89799-8	2014-FFTA-08 (0-0.5)	Solid	04/01/14 11:32	04/02/14 10:22
600-89799-11	2014-FFTA-06 (0.-0.5)	Solid	04/01/14 12:10	04/02/14 10:22
600-89799-14	2014-NDA-9 (0-0.5)	Solid	04/01/14 14:15	04/02/14 10:22
600-89799-17	2014-NDA-8 (0-0.5)	Solid	04/01/14 14:46	04/02/14 10:22
600-89799-20	Field Blank	Water	04/01/14 15:25	04/02/14 10:22
600-89799-21	Rinse Blank-Geo	Water	04/01/14 15:30	04/02/14 10:22
600-89799-22	Trip Blank	Water	04/01/14 00:00	04/02/14 10:22

Client Sample ID: 2014-NDA-7 (0-0.5)
Date Collected: 04/01/14 10:01
Date Received: 04/02/14 10:22

Lab Sample ID: 600-89799-1
Matrix: Solid
Percent Solids: 82.7

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00201	U	0.0121	0.00201	mg/Kg	☼		04/06/14 17:39	1
Benzene	0.000762	U	0.00605	0.000762	mg/Kg	☼		04/06/14 17:39	1
Chlorobromomethane	0.00215	U	0.00605	0.00215	mg/Kg	☼		04/06/14 17:39	1
Bromoform	0.00166	U	0.00605	0.00166	mg/Kg	☼		04/06/14 17:39	1
Bromomethane	0.00100	U	0.0121	0.00100	mg/Kg	☼		04/06/14 17:39	1
2-Butanone (MEK)	0.00230	U	0.0121	0.00230	mg/Kg	☼		04/06/14 17:39	1
Carbon disulfide	0.000665	U	0.0121	0.000665	mg/Kg	☼		04/06/14 17:39	1
Carbon tetrachloride	0.00137	U	0.00605	0.00137	mg/Kg	☼		04/06/14 17:39	1
Dibromochloromethane	0.00114	U	0.00605	0.00114	mg/Kg	☼		04/06/14 17:39	1
Chlorobenzene	0.00116	U	0.00605	0.00116	mg/Kg	☼		04/06/14 17:39	1
Chloroethane	0.00169	U	0.0121	0.00169	mg/Kg	☼		04/06/14 17:39	1
Chloroform	0.000798	U	0.00605	0.000798	mg/Kg	☼		04/06/14 17:39	1
Chloromethane	0.00201	U	0.0121	0.00201	mg/Kg	☼		04/06/14 17:39	1
1,1-Dichloroethane	0.00105	U	0.00605	0.00105	mg/Kg	☼		04/06/14 17:39	1
1,2-Dichloroethane	0.00109	U	0.00605	0.00109	mg/Kg	☼		04/06/14 17:39	1
1,1-Dichloroethene	0.00148	U	0.00605	0.00148	mg/Kg	☼		04/06/14 17:39	1
cis-1,2-Dichloroethene	0.00100	U	0.00605	0.00100	mg/Kg	☼		04/06/14 17:39	1
trans-1,2-Dichloroethene	0.00138	U	0.00605	0.00138	mg/Kg	☼		04/06/14 17:39	1
1,2-Dichloropropane	0.000859	U	0.00605	0.000859	mg/Kg	☼		04/06/14 17:39	1
cis-1,3-Dichloropropene	0.000653	U	0.00605	0.000653	mg/Kg	☼		04/06/14 17:39	1
trans-1,3-Dichloropropene	0.000701	U	0.00605	0.000701	mg/Kg	☼		04/06/14 17:39	1
Ethylbenzene	0.00123	U	0.00605	0.00123	mg/Kg	☼		04/06/14 17:39	1
2-Hexanone	0.00122	U	0.0121	0.00122	mg/Kg	☼		04/06/14 17:39	1
Methylene Chloride	**0.00530**	**J**	0.0121	0.00265	mg/Kg	☼		04/06/14 17:39	1
4-Methyl-2-pentanone (MIBK)	0.00178	U	0.0121	0.00178	mg/Kg	☼		04/06/14 17:39	1
Styrene	0.000859	U	0.00605	0.000859	mg/Kg	☼		04/06/14 17:39	1
1,1,2,2-Tetrachloroethane	0.00105	U	0.00605	0.00105	mg/Kg	☼		04/06/14 17:39	1
Tetrachloroethene	0.000859	U	0.00605	0.000859	mg/Kg	☼		04/06/14 17:39	1
Toluene	0.00167	U	0.00605	0.00167	mg/Kg	☼		04/06/14 17:39	1
1,1,1-Trichloroethane	0.000895	U	0.00605	0.000895	mg/Kg	☼		04/06/14 17:39	1
1,1,2-Trichloroethane	0.000883	U	0.00605	0.000883	mg/Kg	☼		04/06/14 17:39	1
Trichloroethene	0.00169	U	0.00605	0.00169	mg/Kg	☼		04/06/14 17:39	1
Vinyl acetate	0.00112	U	0.00605	0.00112	mg/Kg	☼		04/06/14 17:39	1
Vinyl chloride	0.00109	U	0.0121	0.00109	mg/Kg	☼		04/06/14 17:39	1
o-Xylene	0.00137	U	0.00605	0.00137	mg/Kg	☼		04/06/14 17:39	1
m-Xylene & p-Xylene	0.00184	U	0.0121	0.00184	mg/Kg	☼		04/06/14 17:39	1
Xylenes, Total	0.00137	U	0.00605	0.00137	mg/Kg	☼		04/06/14 17:39	1
Bromodichloromethane	0.000798	U	0.00605	0.000798	mg/Kg	☼		04/06/14 17:39	1
1,2-Dichloroethene, Total	0.00230	U	0.0121	0.00230	mg/Kg	☼		04/06/14 17:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*50 - 130*		*04/06/14 17:39*	*1*
Dibromofluoromethane	*89*		*68 - 140*		*04/06/14 17:39*	*1*
4-Bromofluorobenzene	*102*		*57 - 140*		*04/06/14 17:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*81*		*61 - 130*		*04/06/14 17:39*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.0173	U	0.201	0.0173	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Acenaphthylene	0.0120	U	0.201	0.0120	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89799-1

Client Sample ID: 2014-NDA-7 (0-0.5)
Date Collected: 04/01/14 10:01
Date Received: 04/02/14 10:22

Lab Sample ID: 600-89799-1
Matrix: Solid
Percent Solids: 82.7

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	0.0154	U	0.201	0.0154	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Benzidine	0.109	U	1.00	0.109	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Benzo[a]anthracene	0.0166	U	0.201	0.0166	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Benzo[a]pyrene	0.0194	U	0.201	0.0194	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Benzo[b]fluoranthene	0.0207	U	0.201	0.0207	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Benzo[g,h,i]perylene	0.0611	U	0.201	0.0611	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Benzo[k]fluoranthene	0.0179	U	0.201	0.0179	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Benzyl alcohol	0.0702	U	0.201	0.0702	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Bis(2-chloroethoxy)methane	0.0171	U	0.201	0.0171	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Bis(2-chloroethyl)ether	0.0199	U	0.201	0.0199	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
bis (2-Chloroisopropyl) ether	0.106	U	0.201	0.106	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Bis(2-ethylhexyl) phthalate	0.0647	U	0.803	0.0647	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
4-Bromophenyl phenyl ether	0.0342	U	0.201	0.0342	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Butyl benzyl phthalate	0.0746	U	0.803	0.0746	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Carbazole	0.0376	U	0.201	0.0376	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
4-Chloroaniline	0.0701	U	0.201	0.0701	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
4-Chloro-3-methylphenol	0.188	U	0.201	0.188	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
2-Chloronaphthalene	0.0146	U	0.201	0.0146	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
2-Chlorophenol	0.0237	U	0.201	0.0237	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
4-Chlorophenyl phenyl ether	0.0217	U	0.201	0.0217	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Chrysene	0.0123	U	0.201	0.0123	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Dibenz(a,h)anthracene	0.0437	U	0.201	0.0437	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Dibenzofuran	0.0214	U	0.201	0.0214	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
1,2-Dichlorobenzene	0.0364	U	0.201	0.0364	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
1,3-Dichlorobenzene	0.0186	U	0.201	0.0186	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
1,4-Dichlorobenzene	0.0271	U	0.201	0.0271	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
3,3'-Dichlorobenzidine	0.122	U	0.201	0.122	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
2,4-Dichlorophenol	0.0466	U	0.201	0.0466	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Diethyl phthalate	0.102	U	0.803	0.102	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
2,4-Dimethylphenol	0.103	U	0.201	0.103	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Dimethyl phthalate	0.0589	U	0.803	0.0589	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Di-n-butyl phthalate	0.0312	U	0.803	0.0312	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
4,6-Dinitro-2-methylphenol	0.0600	U	0.201	0.0600	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
2,4-Dinitrophenol	0.0569	U	1.20	0.0569	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
2,4-Dinitrotoluene	0.0435	U	0.201	0.0435	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
2,6-Dinitrotoluene	0.0355	U	0.201	0.0355	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Di-n-octyl phthalate	0.0229	U	0.803	0.0229	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Fluoranthene	0.0375	U	0.201	0.0375	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Fluorene	0.0284	U	0.201	0.0284	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Hexachlorobenzene	0.0183	U	0.201	0.0183	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Hexachlorobutadiene	0.0231	U	0.201	0.0231	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Hexachlorocyclopentadiene	0.0555	U	0.201	0.0555	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Hexachloroethane	0.0278	U	0.201	0.0278	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Indeno[1,2,3-cd]pyrene	0.0422	U	0.201	0.0422	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Isophorone	0.0120	U	0.201	0.0120	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
2-Methylnaphthalene	0.0330	U	0.201	0.0330	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
2-Methylphenol	0.0389	U	0.201	0.0389	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
3 & 4 Methylphenol	0.0336	U	0.401	0.0336	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Naphthalene	0.0163	U	0.201	0.0163	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10

Client Sample ID: 2014-NDA-7 (0-0.5)

Lab Sample ID: 600-89799-1

Date Collected: 04/01/14 10:01
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 82.7

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitroaniline	0.0589	U	0.201	0.0589	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
3-Nitroaniline	0.0861	U	0.201	0.0861	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
4-Nitroaniline	0.134	U	0.201	0.134	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Nitrobenzene	0.0357	U	0.201	0.0357	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
2-Nitrophenol	0.0469	U	0.201	0.0469	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
4-Nitrophenol	0.0612	U	0.201	0.0612	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
N-Nitrosodimethylamine	0.0505	U	0.201	0.0505	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
N-Nitrosodi-n-propylamine	0.0267	U	0.201	0.0267	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
N-Nitrosodiphenylamine	0.0228	U	0.201	0.0228	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Pentachlorophenol	0.0482	U	2.01	0.0482	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Phenanthrene	0.0596	U	0.201	0.0596	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Phenol	0.0511	U	0.201	0.0511	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
Pyrene	0.0220	U	0.201	0.0220	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
1,2,4-Trichlorobenzene	0.0253	U	0.201	0.0253	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
2,4,5-Trichlorophenol	0.121	U	0.201	0.121	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10
2,4,6-Trichlorophenol	0.0323	U	0.201	0.0323	mg/Kg	☼	04/07/14 11:29	04/08/14 13:22	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*62*		*38 - 130*	*04/07/14 11:29*	*04/08/14 13:22*	*10*
2-Fluorophenol	*51*		*25 - 132*	*04/07/14 11:29*	*04/08/14 13:22*	*10*
Nitrobenzene-d5	*57*		*10 - 155*	*04/07/14 11:29*	*04/08/14 13:22*	*10*
Phenol-d5 (Surr)	*47*		*27 - 130*	*04/07/14 11:29*	*04/08/14 13:22*	*10*
Terphenyl-d14	*73*		*53 - 134*	*04/07/14 11:29*	*04/08/14 13:22*	*10*
2,4,6-Tribromophenol	*36*		*10 - 148*	*04/07/14 11:29*	*04/08/14 13:22*	*10*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.98**	**J**	3.02	0.280	mg/Kg	☼	04/08/14 12:20	04/08/14 17:12	1
Arsenic	**14.3**		1.21	0.264	mg/Kg	☼	04/08/14 12:20	04/08/14 17:12	1
Cadmium	**4.17**		0.302	0.0310	mg/Kg	☼	04/08/14 12:20	04/08/14 17:12	1
Lead	**633**		0.605	0.127	mg/Kg	☼	04/08/14 12:20	04/08/14 17:12	1
Selenium	**0.659**	**J**	2.42	0.313	mg/Kg	☼	04/08/14 12:20	04/08/14 17:12	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**17**		1.0	1.0	%			04/03/14 13:28	1
Percent Solids	**83**		1.0	1.0	%			04/03/14 13:28	1

Client Sample ID: DUP-4

Lab Sample ID: 600-89799-4

Date Collected: 04/01/14 00:00
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 86.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00191	U	0.0115	0.00191	mg/Kg	☼		04/06/14 18:52	1
Benzene	0.000725	U	0.00575	0.000725	mg/Kg	☼		04/06/14 18:52	1
Chlorobromomethane	0.00205	U	0.00575	0.00205	mg/Kg	☼		04/06/14 18:52	1
Bromoform	0.00158	U	0.00575	0.00158	mg/Kg	☼		04/06/14 18:52	1
Bromomethane	0.000955	U	0.0115	0.000955	mg/Kg	☼		04/06/14 18:52	1
2-Butanone (MEK)	0.00219	U	0.0115	0.00219	mg/Kg	☼		04/06/14 18:52	1

Client Sample ID: DUP-4
Date Collected: 04/01/14 00:00
Date Received: 04/02/14 10:22

Lab Sample ID: 600-89799-4
Matrix: Solid
Percent Solids: 86.9

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	0.000633	U	0.0115	0.000633	mg/Kg	☼		04/06/14 18:52	1
Carbon tetrachloride	0.00130	U	0.00575	0.00130	mg/Kg	☼		04/06/14 18:52	1
Dibromochloromethane	0.00108	U	0.00575	0.00108	mg/Kg	☼		04/06/14 18:52	1
Chlorobenzene	0.00110	U	0.00575	0.00110	mg/Kg	☼		04/06/14 18:52	1
Chloroethane	0.00161	U	0.0115	0.00161	mg/Kg	☼		04/06/14 18:52	1
Chloroform	0.000759	U	0.00575	0.000759	mg/Kg	☼		04/06/14 18:52	1
Chloromethane	0.00191	U	0.0115	0.00191	mg/Kg	☼		04/06/14 18:52	1
1,1-Dichloroethane	0.00100	U	0.00575	0.00100	mg/Kg	☼		04/06/14 18:52	1
1,2-Dichloroethane	0.00104	U	0.00575	0.00104	mg/Kg	☼		04/06/14 18:52	1
1,1-Dichloroethene	0.00140	U	0.00575	0.00140	mg/Kg	☼		04/06/14 18:52	1
cis-1,2-Dichloroethene	0.000955	U	0.00575	0.000955	mg/Kg	☼		04/06/14 18:52	1
trans-1,2-Dichloroethene	0.00131	U	0.00575	0.00131	mg/Kg	☼		04/06/14 18:52	1
1,2-Dichloropropane	0.000817	U	0.00575	0.000817	mg/Kg	☼		04/06/14 18:52	1
cis-1,3-Dichloropropene	0.000621	U	0.00575	0.000621	mg/Kg	☼		04/06/14 18:52	1
trans-1,3-Dichloropropene	0.000667	U	0.00575	0.000667	mg/Kg	☼		04/06/14 18:52	1
Ethylbenzene	0.00117	U	0.00575	0.00117	mg/Kg	☼		04/06/14 18:52	1
2-Hexanone	0.00116	U	0.0115	0.00116	mg/Kg	☼		04/06/14 18:52	1
Methylene Chloride	**0.0183**		0.0115	0.00252	mg/Kg	☼		04/06/14 18:52	1
4-Methyl-2-pentanone (MIBK)	0.00169	U	0.0115	0.00169	mg/Kg	☼		04/06/14 18:52	1
Styrene	0.000817	U	0.00575	0.000817	mg/Kg	☼		04/06/14 18:52	1
1,1,2,2-Tetrachloroethane	0.00100	U	0.00575	0.00100	mg/Kg	☼		04/06/14 18:52	1
Tetrachloroethene	0.000817	U	0.00575	0.000817	mg/Kg	☼		04/06/14 18:52	1
Toluene	0.00159	U	0.00575	0.00159	mg/Kg	☼		04/06/14 18:52	1
1,1,1-Trichloroethane	0.000851	U	0.00575	0.000851	mg/Kg	☼		04/06/14 18:52	1
1,1,2-Trichloroethane	0.000840	U	0.00575	0.000840	mg/Kg	☼		04/06/14 18:52	1
Trichloroethene	0.00161	U	0.00575	0.00161	mg/Kg	☼		04/06/14 18:52	1
Vinyl acetate	0.00107	U	0.00575	0.00107	mg/Kg	☼		04/06/14 18:52	1
Vinyl chloride	0.00104	U	0.0115	0.00104	mg/Kg	☼		04/06/14 18:52	1
o-Xylene	0.00130	U	0.00575	0.00130	mg/Kg	☼		04/06/14 18:52	1
m-Xylene & p-Xylene	0.00175	U	0.0115	0.00175	mg/Kg	☼		04/06/14 18:52	1
Xylenes, Total	0.00130	U	0.00575	0.00130	mg/Kg	☼		04/06/14 18:52	1
Bromodichloromethane	0.000759	U	0.00575	0.000759	mg/Kg	☼		04/06/14 18:52	1
1,2-Dichloroethene, Total	0.00219	U	0.0115	0.00219	mg/Kg	☼		04/06/14 18:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*90*		*50 - 130*		*04/06/14 18:52*	*1*
Dibromofluoromethane	*88*		*68 - 140*		*04/06/14 18:52*	*1*
4-Bromofluorobenzene	*102*		*57 - 140*		*04/06/14 18:52*	*1*
1,2-Dichloroethane-d4 (Surr)	*79*		*61 - 130*		*04/06/14 18:52*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00165	U	0.0191	0.00165	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Acenaphthylene	0.00114	U	0.0191	0.00114	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Anthracene	0.00146	U	0.0191	0.00146	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Benzidine	0.0103	U	0.0953	0.0103	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Benzo[a]anthracene	**0.00547**	**J**	0.0191	0.00158	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Benzo[a]pyrene	0.00184	U	0.0191	0.00184	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Benzo[b]fluoranthene	0.00197	U	0.0191	0.00197	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Benzo[g,h,i]perylene	0.00580	U	0.0191	0.00580	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1

Client Sample ID: DUP-4
Date Collected: 04/01/14 00:00
Date Received: 04/02/14 10:22

Lab Sample ID: 600-89799-4
Matrix: Solid
Percent Solids: 86.9

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	0.00170	U	0.0191	0.00170	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Benzyl alcohol	0.00667	U	0.0191	0.00667	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Bis(2-chloroethoxy)methane	0.00162	U	0.0191	0.00162	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Bis(2-chloroethyl)ether	0.00189	U	0.0191	0.00189	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
bis (2-Chloroisopropyl) ether	0.0101	U	0.0191	0.0101	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Bis(2-ethylhexyl) phthalate	**0.0961**		0.0763	0.00614	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
4-Bromophenyl phenyl ether	0.00325	U	0.0191	0.00325	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Butyl benzyl phthalate	**0.0226**	**J**	0.0763	0.00708	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Carbazole	0.00357	U	0.0191	0.00357	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
4-Chloroaniline	0.00666	U	0.0191	0.00666	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
4-Chloro-3-methylphenol	0.0178	U	0.0191	0.0178	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
2-Chloronaphthalene	0.00138	U	0.0191	0.00138	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
2-Chlorophenol	0.00225	U	0.0191	0.00225	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
4-Chlorophenyl phenyl ether	0.00206	U	0.0191	0.00206	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Chrysene	**0.00656**	**J**	0.0191	0.00117	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Dibenz(a,h)anthracene	0.00415	U	0.0191	0.00415	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Dibenzofuran	0.00204	U	0.0191	0.00204	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
1,2-Dichlorobenzene	0.00345	U	0.0191	0.00345	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
1,3-Dichlorobenzene	0.00176	U	0.0191	0.00176	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
1,4-Dichlorobenzene	0.00257	U	0.0191	0.00257	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
3,3'-Dichlorobenzidine	0.0116	U	0.0191	0.0116	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
2,4-Dichlorophenol	0.00443	U	0.0191	0.00443	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Diethyl phthalate	0.00964	U	0.0763	0.00964	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
2,4-Dimethylphenol	0.00981	U	0.0191	0.00981	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Dimethyl phthalate	0.00559	U	0.0763	0.00559	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Di-n-butyl phthalate	0.00296	U	0.0763	0.00296	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
4,6-Dinitro-2-methylphenol	0.00570	U	0.0191	0.00570	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
2,4-Dinitrophenol	0.00540	U	0.114	0.00540	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
2,4-Dinitrotoluene	0.00413	U	0.0191	0.00413	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
2,6-Dinitrotoluene	0.00337	U	0.0191	0.00337	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Di-n-octyl phthalate	0.00217	U	0.0763	0.00217	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Fluoranthene	**0.00423**	**J**	0.0191	0.00356	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Fluorene	0.00270	U	0.0191	0.00270	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Hexachlorobenzene	0.00174	U	0.0191	0.00174	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Hexachlorobutadiene	0.00220	U	0.0191	0.00220	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Hexachlorocyclopentadiene	0.00527	U	0.0191	0.00527	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Hexachloroethane	0.00264	U	0.0191	0.00264	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Indeno[1,2,3-cd]pyrene	0.00400	U	0.0191	0.00400	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Isophorone	0.00114	U	0.0191	0.00114	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
2-Methylnaphthalene	**0.0185**	**J**	0.0191	0.00313	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
2-Methylphenol	0.00369	U	0.0191	0.00369	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
3 & 4 Methylphenol	0.00319	U	0.0381	0.00319	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Naphthalene	**0.0145**	**J**	0.0191	0.00154	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
2-Nitroaniline	0.00559	U	0.0191	0.00559	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
3-Nitroaniline	0.00818	U	0.0191	0.00818	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
4-Nitroaniline	0.0128	U	0.0191	0.0128	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Nitrobenzene	0.00339	U	0.0191	0.00339	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
2-Nitrophenol	0.00445	U	0.0191	0.00445	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
4-Nitrophenol	0.00581	U	0.0191	0.00581	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1

Client Sample ID: DUP-4

Lab Sample ID: 600-89799-4

Date Collected: 04/01/14 00:00
Date Received: 04/02/14 10:22

Matrix: Solid
Percent Solids: 86.9

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Nitrosodimethylamine	0.00479	U	0.0191	0.00479	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
N-Nitrosodi-n-propylamine	0.00254	U	0.0191	0.00254	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
N-Nitrosodiphenylamine	0.00216	U	0.0191	0.00216	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Pentachlorophenol	0.00457	U	0.191	0.00457	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Phenanthrene	0.00566	U	0.0191	0.00566	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Phenol	0.00485	U	0.0191	0.00485	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
Pyrene	**0.00559**	**J**	0.0191	0.00209	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
1,2,4-Trichlorobenzene	0.00240	U	0.0191	0.00240	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
2,4,5-Trichlorophenol	0.0114	U	0.0191	0.0114	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1
2,4,6-Trichlorophenol	0.00306	U	0.0191	0.00306	mg/Kg	☼	04/07/14 11:29	04/08/14 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*73*		*38 - 130*	*04/07/14 11:29*	*04/08/14 14:45*	*1*
2-Fluorophenol	*60*		*25 - 132*	*04/07/14 11:29*	*04/08/14 14:45*	*1*
Nitrobenzene-d5	*63*		*10 - 155*	*04/07/14 11:29*	*04/08/14 14:45*	*1*
Phenol-d5 (Surr)	*65*		*27 - 130*	*04/07/14 11:29*	*04/08/14 14:45*	*1*
Terphenyl-d14	*93*		*53 - 134*	*04/07/14 11:29*	*04/08/14 14:45*	*1*
2,4,6-Tribromophenol	*64*		*10 - 148*	*04/07/14 11:29*	*04/08/14 14:45*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**2.82**		2.71	0.251	mg/Kg	☼	04/08/14 12:20	04/08/14 17:23	1
Arsenic	**13.4**		1.09	0.237	mg/Kg	☼	04/08/14 12:20	04/08/14 17:23	1
Cadmium	**3.20**		0.271	0.0278	mg/Kg	☼	04/08/14 12:20	04/08/14 17:23	1
Lead	**577**		0.543	0.114	mg/Kg	☼	04/08/14 12:20	04/08/14 17:23	1
Selenium	**0.586**	**J**	2.17	0.281	mg/Kg	☼	04/08/14 12:20	04/08/14 17:23	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13**		1.0	1.0	%			04/03/14 13:28	1
Percent Solids	**87**		1.0	1.0	%			04/03/14 13:28	1

Client Sample ID: 2014-FFTA-07 (0-0.5)

Lab Sample ID: 600-89799-5

Date Collected: 04/01/14 10:55
Date Received: 04/02/14 10:22

Matrix: Solid
Percent Solids: 82.5

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00201	U	0.0121	0.00201	mg/Kg	☼		04/06/14 19:17	1
Benzene	0.000764	U	0.00606	0.000764	mg/Kg	☼		04/06/14 19:17	1
Chlorobromomethane	0.00216	U	0.00606	0.00216	mg/Kg	☼		04/06/14 19:17	1
Bromoform	0.00166	U	0.00606	0.00166	mg/Kg	☼		04/06/14 19:17	1
Bromomethane	0.00101	U	0.0121	0.00101	mg/Kg	☼		04/06/14 19:17	1
2-Butanone (MEK)	0.00230	U	0.0121	0.00230	mg/Kg	☼		04/06/14 19:17	1
Carbon disulfide	0.000667	U	0.0121	0.000667	mg/Kg	☼		04/06/14 19:17	1
Carbon tetrachloride	0.00137	U	0.00606	0.00137	mg/Kg	☼		04/06/14 19:17	1
Dibromochloromethane	0.00114	U	0.00606	0.00114	mg/Kg	☼		04/06/14 19:17	1
Chlorobenzene	0.00116	U	0.00606	0.00116	mg/Kg	☼		04/06/14 19:17	1
Chloroethane	0.00170	U	0.0121	0.00170	mg/Kg	☼		04/06/14 19:17	1
Chloroform	0.000800	U	0.00606	0.000800	mg/Kg	☼		04/06/14 19:17	1

Client Sample ID: 2014-FFTA-07 (0-0.5)
Date Collected: 04/01/14 10:55
Date Received: 04/02/14 10:22

Lab Sample ID: 600-89799-5
Matrix: Solid
Percent Solids: 82.5

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	0.00201	U	0.0121	0.00201	mg/Kg	☼		04/06/14 19:17	1
1,1-Dichloroethane	0.00105	U	0.00606	0.00105	mg/Kg	☼		04/06/14 19:17	1
1,2-Dichloroethane	0.00109	U	0.00606	0.00109	mg/Kg	☼		04/06/14 19:17	1
1,1-Dichloroethene	0.00148	U	0.00606	0.00148	mg/Kg	☼		04/06/14 19:17	1
cis-1,2-Dichloroethene	0.00101	U	0.00606	0.00101	mg/Kg	☼		04/06/14 19:17	1
trans-1,2-Dichloroethene	0.00138	U	0.00606	0.00138	mg/Kg	☼		04/06/14 19:17	1
1,2-Dichloropropane	0.000861	U	0.00606	0.000861	mg/Kg	☼		04/06/14 19:17	1
cis-1,3-Dichloropropene	0.000655	U	0.00606	0.000655	mg/Kg	☼		04/06/14 19:17	1
trans-1,3-Dichloropropene	0.000703	U	0.00606	0.000703	mg/Kg	☼		04/06/14 19:17	1
Ethylbenzene	0.00124	U	0.00606	0.00124	mg/Kg	☼		04/06/14 19:17	1
2-Hexanone	0.00122	U	0.0121	0.00122	mg/Kg	☼		04/06/14 19:17	1
Methylene Chloride	0.00266	U	0.0121	0.00266	mg/Kg	☼		04/06/14 19:17	1
4-Methyl-2-pentanone (MIBK)	0.00178	U	0.0121	0.00178	mg/Kg	☼		04/06/14 19:17	1
Styrene	0.000861	U	0.00606	0.000861	mg/Kg	☼		04/06/14 19:17	1
1,1,2,2-Tetrachloroethane	0.00105	U	0.00606	0.00105	mg/Kg	☼		04/06/14 19:17	1
Tetrachloroethene	0.000861	U	0.00606	0.000861	mg/Kg	☼		04/06/14 19:17	1
Toluene	0.00167	U	0.00606	0.00167	mg/Kg	☼		04/06/14 19:17	1
1,1,1-Trichloroethane	0.000897	U	0.00606	0.000897	mg/Kg	☼		04/06/14 19:17	1
1,1,2-Trichloroethane	0.000885	U	0.00606	0.000885	mg/Kg	☼		04/06/14 19:17	1
Trichloroethene	0.00170	U	0.00606	0.00170	mg/Kg	☼		04/06/14 19:17	1
Vinyl acetate	0.00113	U	0.00606	0.00113	mg/Kg	☼		04/06/14 19:17	1
Vinyl chloride	0.00109	U	0.0121	0.00109	mg/Kg	☼		04/06/14 19:17	1
o-Xylene	0.00137	U	0.00606	0.00137	mg/Kg	☼		04/06/14 19:17	1
m-Xylene & p-Xylene	0.00184	U	0.0121	0.00184	mg/Kg	☼		04/06/14 19:17	1
Xylenes, Total	0.00137	U	0.00606	0.00137	mg/Kg	☼		04/06/14 19:17	1
Bromodichloromethane	0.000800	U	0.00606	0.000800	mg/Kg	☼		04/06/14 19:17	1
1,2-Dichloroethene, Total	0.00230	U	0.0121	0.00230	mg/Kg	☼		04/06/14 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*50 - 130*		*04/06/14 19:17*	*1*
Dibromofluoromethane	*85*		*68 - 140*		*04/06/14 19:17*	*1*
4-Bromofluorobenzene	*101*		*57 - 140*		*04/06/14 19:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*75*		*61 - 130*		*04/06/14 19:17*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00867	U	0.100	0.00867	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Acenaphthylene	0.00602	U	0.100	0.00602	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Anthracene	0.00770	U	0.100	0.00770	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Benzidine	0.0543	U	0.501	0.0543	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Benzo[a]anthracene	0.00830	U	0.100	0.00830	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Benzo[a]pyrene	0.00969	U	0.100	0.00969	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Benzo[b]fluoranthene	0.0104	U	0.100	0.0104	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Benzo[g,h,i]perylene	0.0305	U	0.100	0.0305	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Benzo[k]fluoranthene	0.00897	U	0.100	0.00897	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Benzyl alcohol	0.0351	U	0.100	0.0351	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Bis(2-chloroethoxy)methane	0.00854	U	0.100	0.00854	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Bis(2-chloroethyl)ether	0.00993	U	0.100	0.00993	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
bis (2-Chloroisopropyl) ether	0.0532	U	0.100	0.0532	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Bis(2-ethylhexyl) phthalate	0.0323	U	0.401	0.0323	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89799-1

Client Sample ID: 2014-FFTA-07 (0-0.5)
Date Collected: 04/01/14 10:55
Date Received: 04/02/14 10:22

Lab Sample ID: 600-89799-5
Matrix: Solid
Percent Solids: 82.5

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Bromophenyl phenyl ether	0.0171	U	0.100	0.0171	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Butyl benzyl phthalate	0.0372	U	0.401	0.0372	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Carbazole	0.0188	U	0.100	0.0188	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
4-Chloroaniline	0.0350	U	0.100	0.0350	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
4-Chloro-3-methylphenol	0.0938	U	0.100	0.0938	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
2-Chloronaphthalene	0.00728	U	0.100	0.00728	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
2-Chlorophenol	0.0119	U	0.100	0.0119	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
4-Chlorophenyl phenyl ether	0.0108	U	0.100	0.0108	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Chrysene	0.00614	U	0.100	0.00614	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Dibenz(a,h)anthracene	0.0218	U	0.100	0.0218	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Dibenzofuran	0.0107	U	0.100	0.0107	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
1,2-Dichlorobenzene	0.0182	U	0.100	0.0182	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
1,3-Dichlorobenzene	0.00927	U	0.100	0.00927	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
1,4-Dichlorobenzene	0.0135	U	0.100	0.0135	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
3,3'-Dichlorobenzidine	0.0611	U	0.100	0.0611	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
2,4-Dichlorophenol	0.0233	U	0.100	0.0233	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Diethyl phthalate	0.0507	U	0.401	0.0507	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
2,4-Dimethylphenol	0.0516	U	0.100	0.0516	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Dimethyl phthalate	0.0294	U	0.401	0.0294	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Di-n-butyl phthalate	0.0156	U	0.401	0.0156	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
4,6-Dinitro-2-methylphenol	0.0300	U	0.100	0.0300	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
2,4-Dinitrophenol	0.0284	U	0.602	0.0284	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
2,4-Dinitrotoluene	0.0217	U	0.100	0.0217	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
2,6-Dinitrotoluene	0.0178	U	0.100	0.0178	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Di-n-octyl phthalate	0.0114	U	0.401	0.0114	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Fluoranthene	0.0187	U	0.100	0.0187	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Fluorene	0.0142	U	0.100	0.0142	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Hexachlorobenzene	0.00915	U	0.100	0.00915	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Hexachlorobutadiene	0.0116	U	0.100	0.0116	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Hexachlorocyclopentadiene	0.0277	U	0.100	0.0277	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Hexachloroethane	0.0139	U	0.100	0.0139	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Indeno[1,2,3-cd]pyrene	0.0211	U	0.100	0.0211	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Isophorone	0.00602	U	0.100	0.00602	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
2-Methylnaphthalene	**0.0181**	**J**	0.100	0.0165	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
2-Methylphenol	0.0194	U	0.100	0.0194	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
3 & 4 Methylphenol	0.0168	U	0.201	0.0168	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Naphthalene	0.00812	U	0.100	0.00812	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
2-Nitroaniline	0.0294	U	0.100	0.0294	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
3-Nitroaniline	0.0430	U	0.100	0.0430	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
4-Nitroaniline	0.0671	U	0.100	0.0671	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Nitrobenzene	0.0178	U	0.100	0.0178	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
2-Nitrophenol	0.0234	U	0.100	0.0234	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
4-Nitrophenol	0.0306	U	0.100	0.0306	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
N-Nitrosodimethylamine	0.0252	U	0.100	0.0252	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
N-Nitrosodi-n-propylamine	0.0134	U	0.100	0.0134	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
N-Nitrosodiphenylamine	0.0114	U	0.100	0.0114	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Pentachlorophenol	0.0241	U	1.00	0.0241	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Phenanthrene	0.0298	U	0.100	0.0298	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
Phenol	0.0255	U	0.100	0.0255	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5

Client Sample ID: 2014-FFTA-07 (0-0.5)

Date Collected: 04/01/14 10:55
Date Received: 04/02/14 10:22

Lab Sample ID: 600-89799-5

Matrix: Solid
Percent Solids: 82.5

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	0.0110	U	0.100	0.0110	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
1,2,4-Trichlorobenzene	0.0126	U	0.100	0.0126	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
2,4,5-Trichlorophenol	0.0602	U	0.100	0.0602	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5
2,4,6-Trichlorophenol	0.0161	U	0.100	0.0161	mg/Kg	☼	04/07/14 11:29	04/08/14 15:13	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*77*		*38 - 130*	*04/07/14 11:29*	*04/08/14 15:13*	*5*
2-Fluorophenol	*70*		*25 - 132*	*04/07/14 11:29*	*04/08/14 15:13*	*5*
Nitrobenzene-d5	*66*		*10 - 155*	*04/07/14 11:29*	*04/08/14 15:13*	*5*
Phenol-d5 (Surr)	*62*		*27 - 130*	*04/07/14 11:29*	*04/08/14 15:13*	*5*
Terphenyl-d14	*99*		*53 - 134*	*04/07/14 11:29*	*04/08/14 15:13*	*5*
2,4,6-Tribromophenol	*76*		*10 - 148*	*04/07/14 11:29*	*04/08/14 15:13*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.97**	**J**	3.00	0.278	mg/Kg	☼	04/08/14 12:20	04/08/14 17:25	1
Arsenic	**16.4**		1.20	0.262	mg/Kg	☼	04/08/14 12:20	04/08/14 17:25	1
Cadmium	**4.42**		0.300	0.0308	mg/Kg	☼	04/08/14 12:20	04/08/14 17:25	1
Lead	**663**		0.600	0.126	mg/Kg	☼	04/08/14 12:20	04/08/14 17:25	1
Selenium	**0.450**	**J**	2.40	0.311	mg/Kg	☼	04/08/14 12:20	04/08/14 17:25	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18**		1.0	1.0	%			04/03/14 13:28	1
Percent Solids	**82**		1.0	1.0	%			04/03/14 13:28	1

Client Sample ID: 2014-FFTA-08 (0-0.5)

Date Collected: 04/01/14 11:32
Date Received: 04/02/14 10:22

Lab Sample ID: 600-89799-8

Matrix: Solid
Percent Solids: 89.1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00186	U	0.0112	0.00186	mg/Kg	☼		04/06/14 19:41	1
Benzene	0.000707	U	0.00561	0.000707	mg/Kg	☼		04/06/14 19:41	1
Chlorobromomethane	0.00200	U	0.00561	0.00200	mg/Kg	☼		04/06/14 19:41	1
Bromoform	0.00154	U	0.00561	0.00154	mg/Kg	☼		04/06/14 19:41	1
Bromomethane	0.000931	U	0.0112	0.000931	mg/Kg	☼		04/06/14 19:41	1
2-Butanone (MEK)	0.00213	U	0.0112	0.00213	mg/Kg	☼		04/06/14 19:41	1
Carbon disulfide	0.000617	U	0.0112	0.000617	mg/Kg	☼		04/06/14 19:41	1
Carbon tetrachloride	0.00127	U	0.00561	0.00127	mg/Kg	☼		04/06/14 19:41	1
Dibromochloromethane	0.00105	U	0.00561	0.00105	mg/Kg	☼		04/06/14 19:41	1
Chlorobenzene	0.00108	U	0.00561	0.00108	mg/Kg	☼		04/06/14 19:41	1
Chloroethane	0.00157	U	0.0112	0.00157	mg/Kg	☼		04/06/14 19:41	1
Chloroform	0.000741	U	0.00561	0.000741	mg/Kg	☼		04/06/14 19:41	1
Chloromethane	0.00186	U	0.0112	0.00186	mg/Kg	☼		04/06/14 19:41	1
1,1-Dichloroethane	0.000976	U	0.00561	0.000976	mg/Kg	☼		04/06/14 19:41	1
1,2-Dichloroethane	0.00101	U	0.00561	0.00101	mg/Kg	☼		04/06/14 19:41	1
1,1-Dichloroethene	0.00137	U	0.00561	0.00137	mg/Kg	☼		04/06/14 19:41	1
cis-1,2-Dichloroethene	0.000931	U	0.00561	0.000931	mg/Kg	☼		04/06/14 19:41	1
trans-1,2-Dichloroethene	0.00128	U	0.00561	0.00128	mg/Kg	☼		04/06/14 19:41	1

Client Sample ID: 2014-FFTA-08 (0-0.5)
Date Collected: 04/01/14 11:32
Date Received: 04/02/14 10:22

Lab Sample ID: 600-89799-8
Matrix: Solid
Percent Solids: 89.1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	0.000797	U	0.00561	0.000797	mg/Kg	☼		04/06/14 19:41	1
cis-1,3-Dichloropropene	0.000606	U	0.00561	0.000606	mg/Kg	☼		04/06/14 19:41	1
trans-1,3-Dichloropropene	0.000651	U	0.00561	0.000651	mg/Kg	☼		04/06/14 19:41	1
Ethylbenzene	0.00114	U	0.00561	0.00114	mg/Kg	☼		04/06/14 19:41	1
2-Hexanone	0.00113	U	0.0112	0.00113	mg/Kg	☼		04/06/14 19:41	1
Methylene Chloride	0.00246	U	0.0112	0.00246	mg/Kg	☼		04/06/14 19:41	1
4-Methyl-2-pentanone (MIBK)	0.00165	U	0.0112	0.00165	mg/Kg	☼		04/06/14 19:41	1
Styrene	0.000797	U	0.00561	0.000797	mg/Kg	☼		04/06/14 19:41	1
1,1,2,2-Tetrachloroethane	0.000976	U	0.00561	0.000976	mg/Kg	☼		04/06/14 19:41	1
Tetrachloroethene	**0.00177**	**J**	0.00561	0.000797	mg/Kg	☼		04/06/14 19:41	1
Toluene	0.00155	U	0.00561	0.00155	mg/Kg	☼		04/06/14 19:41	1
1,1,1-Trichloroethane	0.000830	U	0.00561	0.000830	mg/Kg	☼		04/06/14 19:41	1
1,1,2-Trichloroethane	0.000819	U	0.00561	0.000819	mg/Kg	☼		04/06/14 19:41	1
Trichloroethene	0.00157	U	0.00561	0.00157	mg/Kg	☼		04/06/14 19:41	1
Vinyl acetate	0.00104	U	0.00561	0.00104	mg/Kg	☼		04/06/14 19:41	1
Vinyl chloride	0.00101	U	0.0112	0.00101	mg/Kg	☼		04/06/14 19:41	1
o-Xylene	0.00127	U	0.00561	0.00127	mg/Kg	☼		04/06/14 19:41	1
m-Xylene & p-Xylene	0.00171	U	0.0112	0.00171	mg/Kg	☼		04/06/14 19:41	1
Xylenes, Total	0.00127	U	0.00561	0.00127	mg/Kg	☼		04/06/14 19:41	1
Bromodichloromethane	0.000741	U	0.00561	0.000741	mg/Kg	☼		04/06/14 19:41	1
1,2-Dichloroethene, Total	0.00213	U	0.0112	0.00213	mg/Kg	☼		04/06/14 19:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*87*		*50 - 130*		*04/06/14 19:41*	*1*
Dibromofluoromethane	*87*		*68 - 140*		*04/06/14 19:41*	*1*
4-Bromofluorobenzene	*103*		*57 - 140*		*04/06/14 19:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*80*		*61 - 130*		*04/06/14 19:41*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00160	U	0.0185	0.00160	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Acenaphthylene	0.00111	U	0.0185	0.00111	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Anthracene	0.00142	U	0.0185	0.00142	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Benzidine	0.0100	U	0.0927	0.0100	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Benzo[a]anthracene	0.00154	U	0.0185	0.00154	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Benzo[a]pyrene	0.00179	U	0.0185	0.00179	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Benzo[b]fluoranthene	0.00191	U	0.0185	0.00191	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Benzo[g,h,i]perylene	0.00564	U	0.0185	0.00564	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Benzo[k]fluoranthene	0.00166	U	0.0185	0.00166	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Benzyl alcohol	0.00649	U	0.0185	0.00649	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Bis(2-chloroethoxy)methane	0.00158	U	0.0185	0.00158	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Bis(2-chloroethyl)ether	**0.0371**		0.0185	0.00184	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
bis (2-Chloroisopropyl) ether	0.00983	U	0.0185	0.00983	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Bis(2-ethylhexyl) phthalate	**0.132**		0.0742	0.00597	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
4-Bromophenyl phenyl ether	0.00316	U	0.0185	0.00316	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Butyl benzyl phthalate	**0.0257**	**J**	0.0742	0.00689	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Carbazole	0.00347	U	0.0185	0.00347	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
4-Chloroaniline	0.00647	U	0.0185	0.00647	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
4-Chloro-3-methylphenol	0.0173	U	0.0185	0.0173	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
2-Chloronaphthalene	0.00135	U	0.0185	0.00135	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89799-1

Client Sample ID: 2014-FFTA-08 (0-0.5)
Date Collected: 04/01/14 11:32
Date Received: 04/02/14 10:22

Lab Sample ID: 600-89799-8
Matrix: Solid
Percent Solids: 89.1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	0.00219	U	0.0185	0.00219	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
4-Chlorophenyl phenyl ether	0.00200	U	0.0185	0.00200	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Chrysene	0.00113	U	0.0185	0.00113	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Dibenz(a,h)anthracene	0.00404	U	0.0185	0.00404	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Dibenzofuran	0.00198	U	0.0185	0.00198	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
1,2-Dichlorobenzene	0.00336	U	0.0185	0.00336	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
1,3-Dichlorobenzene	0.00171	U	0.0185	0.00171	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
1,4-Dichlorobenzene	0.00250	U	0.0185	0.00250	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
3,3'-Dichlorobenzidine	0.0113	U	0.0185	0.0113	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
2,4-Dichlorophenol	0.00431	U	0.0185	0.00431	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Diethyl phthalate	0.00938	U	0.0742	0.00938	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
2,4-Dimethylphenol	0.00954	U	0.0185	0.00954	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Dimethyl phthalate	0.00544	U	0.0742	0.00544	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Di-n-butyl phthalate	0.00288	U	0.0742	0.00288	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
4,6-Dinitro-2-methylphenol	0.00554	U	0.0185	0.00554	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
2,4-Dinitrophenol	0.00525	U	0.111	0.00525	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
2,4-Dinitrotoluene	0.00402	U	0.0185	0.00402	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
2,6-Dinitrotoluene	0.00328	U	0.0185	0.00328	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Di-n-octyl phthalate	0.00211	U	0.0742	0.00211	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Fluoranthene	0.00346	U	0.0185	0.00346	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Fluorene	0.00263	U	0.0185	0.00263	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Hexachlorobenzene	0.00169	U	0.0185	0.00169	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Hexachlorobutadiene	0.00214	U	0.0185	0.00214	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Hexachlorocyclopentadiene	0.00513	U	0.0185	0.00513	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Hexachloroethane	0.00257	U	0.0185	0.00257	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Indeno[1,2,3-cd]pyrene	0.00389	U	0.0185	0.00389	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Isophorone	0.00111	U	0.0185	0.00111	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
2-Methylnaphthalene	**0.0270**		0.0185	0.00305	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
2-Methylphenol	0.00359	U	0.0185	0.00359	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
3 & 4 Methylphenol	0.00310	U	0.0371	0.00310	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Naphthalene	**0.0208**		0.0185	0.00150	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
2-Nitroaniline	0.00544	U	0.0185	0.00544	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
3-Nitroaniline	0.00795	U	0.0185	0.00795	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
4-Nitroaniline	0.0124	U	0.0185	0.0124	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Nitrobenzene	0.00329	U	0.0185	0.00329	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
2-Nitrophenol	0.00433	U	0.0185	0.00433	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
4-Nitrophenol	0.00565	U	0.0185	0.00565	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
N-Nitrosodimethylamine	0.00466	U	0.0185	0.00466	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
N-Nitrosodi-n-propylamine	0.00247	U	0.0185	0.00247	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
N-Nitrosodiphenylamine	0.00210	U	0.0185	0.00210	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Pentachlorophenol	0.00445	U	0.186	0.00445	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Phenanthrene	0.00551	U	0.0185	0.00551	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Phenol	0.00472	U	0.0185	0.00472	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
Pyrene	**0.00509**	**J**	0.0185	0.00204	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
1,2,4-Trichlorobenzene	0.00234	U	0.0185	0.00234	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
2,4,5-Trichlorophenol	0.0111	U	0.0185	0.0111	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1
2,4,6-Trichlorophenol	0.00298	U	0.0185	0.00298	mg/Kg	☼	04/07/14 11:29	04/08/14 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*81*		*38 - 130*	*04/07/14 11:29*	*04/08/14 15:41*	*1*

Client Sample ID: 2014-FFTA-08 (0-0.5)

Lab Sample ID: 600-89799-8

Date Collected: 04/01/14 11:32
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 89.1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*65*		*25 - 132*	*04/07/14 11:29*	*04/08/14 15:41*	*1*
Nitrobenzene-d5	*67*		*10 - 155*	*04/07/14 11:29*	*04/08/14 15:41*	*1*
Phenol-d5 (Surr)	*71*		*27 - 130*	*04/07/14 11:29*	*04/08/14 15:41*	*1*
Terphenyl-d14	*100*		*53 - 134*	*04/07/14 11:29*	*04/08/14 15:41*	*1*
2,4,6-Tribromophenol	*83*		*10 - 148*	*04/07/14 11:29*	*04/08/14 15:41*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**2.19**	**J**	2.67	0.247	mg/Kg	☼	04/08/14 12:20	04/08/14 17:28	1
Arsenic	**17.4**		1.07	0.233	mg/Kg	☼	04/08/14 12:20	04/08/14 17:28	1
Cadmium	**6.43**		0.267	0.0274	mg/Kg	☼	04/08/14 12:20	04/08/14 17:28	1
Lead	**566**		0.534	0.112	mg/Kg	☼	04/08/14 12:20	04/08/14 17:28	1
Selenium	**0.508**	**J**	2.14	0.277	mg/Kg	☼	04/08/14 12:20	04/08/14 17:28	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**11**		1.0	1.0	%			04/03/14 13:28	1
Percent Solids	**89**		1.0	1.0	%			04/03/14 13:28	1

Client Sample ID: 2014-FFTA-06 (0.-0.5)

Lab Sample ID: 600-89799-11

Date Collected: 04/01/14 12:10
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 83.3

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00199	U	0.0120	0.00199	mg/Kg	☼		04/06/14 20:05	1
Benzene	0.000756	U	0.00600	0.000756	mg/Kg	☼		04/06/14 20:05	1
Chlorobromomethane	0.00214	U	0.00600	0.00214	mg/Kg	☼		04/06/14 20:05	1
Bromoform	0.00164	U	0.00600	0.00164	mg/Kg	☼		04/06/14 20:05	1
Bromomethane	0.000996	U	0.0120	0.000996	mg/Kg	☼		04/06/14 20:05	1
2-Butanone (MEK)	0.00228	U	0.0120	0.00228	mg/Kg	☼		04/06/14 20:05	1
Carbon disulfide	0.000660	U	0.0120	0.000660	mg/Kg	☼		04/06/14 20:05	1
Carbon tetrachloride	0.00136	U	0.00600	0.00136	mg/Kg	☼		04/06/14 20:05	1
Dibromochloromethane	0.00113	U	0.00600	0.00113	mg/Kg	☼		04/06/14 20:05	1
Chlorobenzene	0.00115	U	0.00600	0.00115	mg/Kg	☼		04/06/14 20:05	1
Chloroethane	0.00168	U	0.0120	0.00168	mg/Kg	☼		04/06/14 20:05	1
Chloroform	0.000792	U	0.00600	0.000792	mg/Kg	☼		04/06/14 20:05	1
Chloromethane	0.00199	U	0.0120	0.00199	mg/Kg	☼		04/06/14 20:05	1
1,1-Dichloroethane	0.00104	U	0.00600	0.00104	mg/Kg	☼		04/06/14 20:05	1
1,2-Dichloroethane	0.00108	U	0.00600	0.00108	mg/Kg	☼		04/06/14 20:05	1
1,1-Dichloroethene	0.00146	U	0.00600	0.00146	mg/Kg	☼		04/06/14 20:05	1
cis-1,2-Dichloroethene	0.000996	U	0.00600	0.000996	mg/Kg	☼		04/06/14 20:05	1
trans-1,2-Dichloroethene	0.00137	U	0.00600	0.00137	mg/Kg	☼		04/06/14 20:05	1
1,2-Dichloropropane	0.000852	U	0.00600	0.000852	mg/Kg	☼		04/06/14 20:05	1
cis-1,3-Dichloropropene	0.000648	U	0.00600	0.000648	mg/Kg	☼		04/06/14 20:05	1
trans-1,3-Dichloropropene	0.000696	U	0.00600	0.000696	mg/Kg	☼		04/06/14 20:05	1
Ethylbenzene	0.00122	U	0.00600	0.00122	mg/Kg	☼		04/06/14 20:05	1
2-Hexanone	0.00121	U	0.0120	0.00121	mg/Kg	☼		04/06/14 20:05	1
Methylene Chloride	**0.0110**	**J**	0.0120	0.00263	mg/Kg	☼		04/06/14 20:05	1
4-Methyl-2-pentanone (MIBK)	0.00176	U	0.0120	0.00176	mg/Kg	☼		04/06/14 20:05	1

Client Sample ID: 2014-FFTA-06 (0.-0.5)
Date Collected: 04/01/14 12:10
Date Received: 04/02/14 10:22

Lab Sample ID: 600-89799-11
Matrix: Solid
Percent Solids: 83.3

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	0.000852	U	0.00600	0.000852	mg/Kg	☼		04/06/14 20:05	1
1,1,2,2-Tetrachloroethane	0.00104	U	0.00600	0.00104	mg/Kg	☼		04/06/14 20:05	1
Tetrachloroethene	0.000852	U	0.00600	0.000852	mg/Kg	☼		04/06/14 20:05	1
Toluene	0.00166	U	0.00600	0.00166	mg/Kg	☼		04/06/14 20:05	1
1,1,1-Trichloroethane	0.000888	U	0.00600	0.000888	mg/Kg	☼		04/06/14 20:05	1
1,1,2-Trichloroethane	0.000876	U	0.00600	0.000876	mg/Kg	☼		04/06/14 20:05	1
Trichloroethene	0.00168	U	0.00600	0.00168	mg/Kg	☼		04/06/14 20:05	1
Vinyl acetate	0.00112	U	0.00600	0.00112	mg/Kg	☼		04/06/14 20:05	1
Vinyl chloride	0.00108	U	0.0120	0.00108	mg/Kg	☼		04/06/14 20:05	1
o-Xylene	0.00136	U	0.00600	0.00136	mg/Kg	☼		04/06/14 20:05	1
m-Xylene & p-Xylene	0.00182	U	0.0120	0.00182	mg/Kg	☼		04/06/14 20:05	1
Xylenes, Total	0.00136	U	0.00600	0.00136	mg/Kg	☼		04/06/14 20:05	1
Bromodichloromethane	0.000792	U	0.00600	0.000792	mg/Kg	☼		04/06/14 20:05	1
1,2-Dichloroethene, Total	0.00228	U	0.0120	0.00228	mg/Kg	☼		04/06/14 20:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*89*		*50 - 130*		*04/06/14 20:05*	*1*
Dibromofluoromethane	*86*		*68 - 140*		*04/06/14 20:05*	*1*
4-Bromofluorobenzene	*106*		*57 - 140*		*04/06/14 20:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*80*		*61 - 130*		*04/06/14 20:05*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00172	U	0.0199	0.00172	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Acenaphthylene	0.00120	U	0.0199	0.00120	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Anthracene	0.00153	U	0.0199	0.00153	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Benzidine	0.0108	U	0.0997	0.0108	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Benzo[a]anthracene	0.00165	U	0.0199	0.00165	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Benzo[a]pyrene	0.00193	U	0.0199	0.00193	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Benzo[b]fluoranthene	0.00206	U	0.0199	0.00206	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Benzo[g,h,i]perylene	0.00607	U	0.0199	0.00607	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Benzo[k]fluoranthene	0.00178	U	0.0199	0.00178	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Benzyl alcohol	0.00697	U	0.0199	0.00697	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Bis(2-chloroethoxy)methane	0.00170	U	0.0199	0.00170	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Bis(2-chloroethyl)ether	0.00197	U	0.0199	0.00197	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
bis (2-Chloroisopropyl) ether	0.0106	U	0.0199	0.0106	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Bis(2-ethylhexyl) phthalate	**0.0595**	**J**	0.0798	0.00642	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
4-Bromophenyl phenyl ether	0.00340	U	0.0199	0.00340	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Butyl benzyl phthalate	**0.0459**	**J**	0.0798	0.00740	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Carbazole	0.00373	U	0.0199	0.00373	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
4-Chloroaniline	0.00696	U	0.0199	0.00696	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
4-Chloro-3-methylphenol	0.0186	U	0.0199	0.0186	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
2-Chloronaphthalene	0.00145	U	0.0199	0.00145	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
2-Chlorophenol	0.00236	U	0.0199	0.00236	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
4-Chlorophenyl phenyl ether	0.00215	U	0.0199	0.00215	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Chrysene	0.00122	U	0.0199	0.00122	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Dibenz(a,h)anthracene	0.00434	U	0.0199	0.00434	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Dibenzofuran	0.00213	U	0.0199	0.00213	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
1,2-Dichlorobenzene	0.00361	U	0.0199	0.00361	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
1,3-Dichlorobenzene	0.00184	U	0.0199	0.00184	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89799-1

Client Sample ID: 2014-FFTA-06 (0.-0.5)
Date Collected: 04/01/14 12:10
Date Received: 04/02/14 10:22

Lab Sample ID: 600-89799-11
Matrix: Solid
Percent Solids: 83.3

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.00269	U	0.0199	0.00269	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
3,3'-Dichlorobenzidine	0.0122	U	0.0199	0.0122	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
2,4-Dichlorophenol	0.00463	U	0.0199	0.00463	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Diethyl phthalate	0.0101	U	0.0798	0.0101	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
2,4-Dimethylphenol	0.0103	U	0.0199	0.0103	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Dimethyl phthalate	0.00585	U	0.0798	0.00585	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Di-n-butyl phthalate	0.00310	U	0.0798	0.00310	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
4,6-Dinitro-2-methylphenol	0.00596	U	0.0199	0.00596	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
2,4-Dinitrophenol	0.00565	U	0.120	0.00565	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
2,4-Dinitrotoluene	0.00432	U	0.0199	0.00432	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
2,6-Dinitrotoluene	0.00353	U	0.0199	0.00353	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Di-n-octyl phthalate	0.00227	U	0.0798	0.00227	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Fluoranthene	0.00372	U	0.0199	0.00372	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Fluorene	0.00282	U	0.0199	0.00282	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Hexachlorobenzene	0.00182	U	0.0199	0.00182	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Hexachlorobutadiene	0.00230	U	0.0199	0.00230	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Hexachlorocyclopentadiene	0.00551	U	0.0199	0.00551	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Hexachloroethane	0.00276	U	0.0199	0.00276	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Indeno[1,2,3-cd]pyrene	0.00419	U	0.0199	0.00419	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Isophorone	0.00120	U	0.0199	0.00120	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
2-Methylnaphthalene	0.00328	U	0.0199	0.00328	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
2-Methylphenol	0.00386	U	0.0199	0.00386	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
3 & 4 Methylphenol	**0.0120**	**J**	0.0399	0.00334	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Naphthalene	**0.00527**	**J**	0.0199	0.00161	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
2-Nitroaniline	0.00585	U	0.0199	0.00585	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
3-Nitroaniline	0.00855	U	0.0199	0.00855	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
4-Nitroaniline	0.0133	U	0.0199	0.0133	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Nitrobenzene	0.00354	U	0.0199	0.00354	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
2-Nitrophenol	0.00465	U	0.0199	0.00465	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
4-Nitrophenol	0.00608	U	0.0199	0.00608	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
N-Nitrosodimethylamine	0.00501	U	0.0199	0.00501	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
N-Nitrosodi-n-propylamine	0.00266	U	0.0199	0.00266	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
N-Nitrosodiphenylamine	0.00226	U	0.0199	0.00226	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Pentachlorophenol	0.00479	U	0.200	0.00479	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Phenanthrene	**0.00710**	**J**	0.0199	0.00592	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Phenol	0.00507	U	0.0199	0.00507	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
Pyrene	0.00219	U	0.0199	0.00219	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
1,2,4-Trichlorobenzene	0.00251	U	0.0199	0.00251	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
2,4,5-Trichlorophenol	0.0120	U	0.0199	0.0120	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1
2,4,6-Trichlorophenol	0.00321	U	0.0199	0.00321	mg/Kg	☼	04/07/14 11:29	04/08/14 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*76*		*38 - 130*	*04/07/14 11:29*	*04/08/14 16:09*	*1*
2-Fluorophenol	*58*		*25 - 132*	*04/07/14 11:29*	*04/08/14 16:09*	*1*
Nitrobenzene-d5	*64*		*10 - 155*	*04/07/14 11:29*	*04/08/14 16:09*	*1*
Phenol-d5 (Surr)	*65*		*27 - 130*	*04/07/14 11:29*	*04/08/14 16:09*	*1*
Terphenyl-d14	*93*		*53 - 134*	*04/07/14 11:29*	*04/08/14 16:09*	*1*
2,4,6-Tribromophenol	*68*		*10 - 148*	*04/07/14 11:29*	*04/08/14 16:09*	*1*

Client Sample ID: 2014-FFTA-06 (0.-0.5)

Lab Sample ID: 600-89799-11

Date Collected: 04/01/14 12:10
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 83.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.89	J	2.86	0.265	mg/Kg	☼	04/08/14 12:20	04/08/14 17:30	1
Arsenic	16.9		1.14	0.249	mg/Kg	☼	04/08/14 12:20	04/08/14 17:30	1
Cadmium	2.51		0.286	0.0293	mg/Kg	☼	04/08/14 12:20	04/08/14 17:30	1
Lead	736		0.572	0.120	mg/Kg	☼	04/08/14 12:20	04/08/14 17:30	1
Selenium	0.296	U	2.29	0.296	mg/Kg	☼	04/08/14 12:20	04/08/14 17:30	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17		1.0	1.0	%			04/03/14 13:28	1
Percent Solids	83		1.0	1.0	%			04/03/14 13:28	1

Client Sample ID: 2014-NDA-9 (0-0.5)

Lab Sample ID: 600-89799-14

Date Collected: 04/01/14 14:15
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 74.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.294	U	3.17	0.294	mg/Kg	☼	04/08/14 12:20	04/08/14 17:40	1
Arsenic	12.8		1.27	0.276	mg/Kg	☼	04/08/14 12:20	04/08/14 17:40	1
Cadmium	2.26		0.317	0.0325	mg/Kg	☼	04/08/14 12:20	04/08/14 17:40	1
Lead	282		0.634	0.133	mg/Kg	☼	04/08/14 12:20	04/08/14 17:40	1
Selenium	0.412	J	2.54	0.328	mg/Kg	☼	04/08/14 12:20	04/08/14 17:40	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26		1.0	1.0	%			04/04/14 09:45	1
Percent Solids	74		1.0	1.0	%			04/04/14 09:45	1

Client Sample ID: 2014-NDA-8 (0-0.5)

Lab Sample ID: 600-89799-17

Date Collected: 04/01/14 14:46
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 77.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.280	U	3.02	0.280	mg/Kg	☼	04/08/14 12:20	04/08/14 17:43	1
Arsenic	11.8		1.21	0.263	mg/Kg	☼	04/08/14 12:20	04/08/14 17:43	1
Cadmium	2.97		0.302	0.0310	mg/Kg	☼	04/08/14 12:20	04/08/14 17:43	1
Lead	318		0.604	0.127	mg/Kg	☼	04/08/14 12:20	04/08/14 17:43	1
Selenium	0.338	J	2.41	0.313	mg/Kg	☼	04/08/14 12:20	04/08/14 17:43	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			04/04/14 09:45	1
Percent Solids	77		1.0	1.0	%			04/04/14 09:45	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89799-1

Client Sample ID: Field Blank
Date Collected: 04/01/14 15:25
Date Received: 04/02/14 10:22

Lab Sample ID: 600-89799-20
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00227	U	0.0100	0.00227	mg/L			04/07/14 20:03	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			04/07/14 20:03	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			04/07/14 20:03	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			04/07/14 20:03	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			04/07/14 20:03	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			04/07/14 20:03	1
Carbon disulfide	0.00170	U	0.00500	0.00170	mg/L			04/07/14 20:03	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			04/07/14 20:03	1
Dibromochloromethane	0.000920	U	0.00500	0.000920	mg/L			04/07/14 20:03	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			04/07/14 20:03	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			04/07/14 20:03	1
Chloroform	0.000820	U	0.00500	0.000820	mg/L			04/07/14 20:03	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			04/07/14 20:03	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			04/07/14 20:03	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			04/07/14 20:03	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			04/07/14 20:03	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			04/07/14 20:03	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			04/07/14 20:03	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			04/07/14 20:03	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			04/07/14 20:03	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			04/07/14 20:03	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			04/07/14 20:03	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			04/07/14 20:03	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			04/07/14 20:03	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			04/07/14 20:03	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			04/07/14 20:03	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			04/07/14 20:03	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			04/07/14 20:03	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			04/07/14 20:03	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			04/07/14 20:03	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			04/07/14 20:03	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			04/07/14 20:03	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			04/07/14 20:03	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			04/07/14 20:03	1
o-Xylene	0.000930	U	0.00500	0.000930	mg/L			04/07/14 20:03	1
m-Xylene & p-Xylene	0.00126	U	0.0100	0.00126	mg/L			04/07/14 20:03	1
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			04/07/14 20:03	1
Bromodichloromethane	0.000760	U	0.00500	0.000760	mg/L			04/07/14 20:03	1
1,2-Dichloroethene, Total	0.000840	U	0.0100	0.000840	mg/L			04/07/14 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*86*		*70 - 130*		*04/07/14 20:03*	*1*
Dibromofluoromethane	*88*		*62 - 130*		*04/07/14 20:03*	*1*
4-Bromofluorobenzene	*81*		*67 - 139*		*04/07/14 20:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*50 - 134*		*04/07/14 20:03*	*1*

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89799-1

Client Sample ID: Rinse Blank-Geo
Date Collected: 04/01/14 15:30
Date Received: 04/02/14 10:22

Lab Sample ID: 600-89799-21
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00227	U	0.0100	0.00227	mg/L			04/07/14 20:27	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			04/07/14 20:27	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			04/07/14 20:27	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			04/07/14 20:27	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			04/07/14 20:27	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			04/07/14 20:27	1
Carbon disulfide	0.00170	U	0.00500	0.00170	mg/L			04/07/14 20:27	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			04/07/14 20:27	1
Dibromochloromethane	0.000920	U	0.00500	0.000920	mg/L			04/07/14 20:27	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			04/07/14 20:27	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			04/07/14 20:27	1
Chloroform	0.000820	U	0.00500	0.000820	mg/L			04/07/14 20:27	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			04/07/14 20:27	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			04/07/14 20:27	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			04/07/14 20:27	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			04/07/14 20:27	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			04/07/14 20:27	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			04/07/14 20:27	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			04/07/14 20:27	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			04/07/14 20:27	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			04/07/14 20:27	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			04/07/14 20:27	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			04/07/14 20:27	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			04/07/14 20:27	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			04/07/14 20:27	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			04/07/14 20:27	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			04/07/14 20:27	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			04/07/14 20:27	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			04/07/14 20:27	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			04/07/14 20:27	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			04/07/14 20:27	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			04/07/14 20:27	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			04/07/14 20:27	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			04/07/14 20:27	1
o-Xylene	0.000930	U	0.00500	0.000930	mg/L			04/07/14 20:27	1
m-Xylene & p-Xylene	0.00126	U	0.0100	0.00126	mg/L			04/07/14 20:27	1
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			04/07/14 20:27	1
Bromodichloromethane	0.000760	U	0.00500	0.000760	mg/L			04/07/14 20:27	1
1,2-Dichloroethene, Total	0.000840	U	0.0100	0.000840	mg/L			04/07/14 20:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*70 - 130*		*04/07/14 20:27*	*1*
Dibromofluoromethane	*91*		*62 - 130*		*04/07/14 20:27*	*1*
4-Bromofluorobenzene	*84*		*67 - 139*		*04/07/14 20:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*50 - 134*		*04/07/14 20:27*	*1*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.000160	U	0.000500	0.000160	mg/L		04/04/14 10:44	04/04/14 21:35	1
Acenaphthylene	0.000160	U	0.000500	0.000160	mg/L		04/04/14 10:44	04/04/14 21:35	1

Client Sample ID: Rinse Blank-Geo
Date Collected: 04/01/14 15:30
Date Received: 04/02/14 10:22

Lab Sample ID: 600-89799-21
Matrix: Water

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	0.000440	U	0.000500	0.000440	mg/L		04/04/14 10:44	04/04/14 21:35	1
Benzidine	0.0179	U	0.0500	0.0179	mg/L		04/04/14 10:44	04/04/14 21:35	1
Benzo[a]anthracene	0.000250	U	0.000500	0.000250	mg/L		04/04/14 10:44	04/04/14 21:35	1
Benzo[b]fluoranthene	0.000180	U	0.000500	0.000180	mg/L		04/04/14 10:44	04/04/14 21:35	1
Benzo[k]fluoranthene	0.000160	U	0.000500	0.000160	mg/L		04/04/14 10:44	04/04/14 21:35	1
Benzo[g,h,i]perylene	0.000350	U	0.000500	0.000350	mg/L		04/04/14 10:44	04/04/14 21:35	1
Benzo[a]pyrene	0.000130	U	0.000500	0.000130	mg/L		04/04/14 10:44	04/04/14 21:35	1
Bis(2-chloroethoxy)methane	0.000190	U	0.000500	0.000190	mg/L		04/04/14 10:44	04/04/14 21:35	1
Bis(2-chloroethyl)ether	0.000180	U	0.000500	0.000180	mg/L		04/04/14 10:44	04/04/14 21:35	1
Bis(2-ethylhexyl) phthalate	0.000590	U	0.00150	0.000590	mg/L		04/04/14 10:44	04/04/14 21:35	1
4-Bromophenyl phenyl ether	0.000250	U	0.000500	0.000250	mg/L		04/04/14 10:44	04/04/14 21:35	1
Butyl benzyl phthalate	0.000850	U	0.00250	0.000850	mg/L		04/04/14 10:44	04/04/14 21:35	1
4-Chloroaniline	0.000110	U	0.000500	0.000110	mg/L		04/04/14 10:44	04/04/14 21:35	1
2-Chloronaphthalene	0.000190	U	0.000500	0.000190	mg/L		04/04/14 10:44	04/04/14 21:35	1
4-Chlorophenyl phenyl ether	0.000230	U	0.000500	0.000230	mg/L		04/04/14 10:44	04/04/14 21:35	1
Carbazole	0.000350	U	0.000500	0.000350	mg/L		04/04/14 10:44	04/04/14 21:35	1
Chrysene	0.000240	U	0.000500	0.000240	mg/L		04/04/14 10:44	04/04/14 21:35	1
Di-n-butyl phthalate	0.00187	U	0.00500	0.00187	mg/L		04/04/14 10:44	04/04/14 21:35	1
Dibenz(a,h)anthracene	0.000290	U	0.000500	0.000290	mg/L		04/04/14 10:44	04/04/14 21:35	1
Dibenzofuran	0.000160	U	0.000500	0.000160	mg/L		04/04/14 10:44	04/04/14 21:35	1
1,2-Dichlorobenzene	**0.000292**	**J**	0.000500	0.000210	mg/L		04/04/14 10:44	04/04/14 21:35	1
1,3-Dichlorobenzene	0.000100	U	0.000500	0.000100	mg/L		04/04/14 10:44	04/04/14 21:35	1
1,4-Dichlorobenzene	0.000160	U	0.000500	0.000160	mg/L		04/04/14 10:44	04/04/14 21:35	1
3,3'-Dichlorobenzidine	0.000320	U	0.000500	0.000320	mg/L		04/04/14 10:44	04/04/14 21:35	1
Diethyl phthalate	0.00419	U	0.00500	0.00419	mg/L		04/04/14 10:44	04/04/14 21:35	1
Dimethyl phthalate	0.000180	U	0.00500	0.000180	mg/L		04/04/14 10:44	04/04/14 21:35	1
2,4-Dinitrotoluene	0.000320	U	0.000500	0.000320	mg/L		04/04/14 10:44	04/04/14 21:35	1
Di-n-octyl phthalate	**0.000311**	**J**	0.00500	0.000160	mg/L		04/04/14 10:44	04/04/14 21:35	1
Fluoranthene	0.000310	U	0.000500	0.000310	mg/L		04/04/14 10:44	04/04/14 21:35	1
Fluorene	0.000120	U	0.000500	0.000120	mg/L		04/04/14 10:44	04/04/14 21:35	1
Hexachlorobenzene	0.000250	U	0.000500	0.000250	mg/L		04/04/14 10:44	04/04/14 21:35	1
Hexachlorocyclopentadiene	0.000150	U	0.000500	0.000150	mg/L		04/04/14 10:44	04/04/14 21:35	1
Hexachloroethane	0.000170	U	0.000500	0.000170	mg/L		04/04/14 10:44	04/04/14 21:35	1
Hexachlorobutadiene	0.000190	U	0.000500	0.000190	mg/L		04/04/14 10:44	04/04/14 21:35	1
Indeno[1,2,3-cd]pyrene	0.000290	U	0.000500	0.000290	mg/L		04/04/14 10:44	04/04/14 21:35	1
Isophorone	0.000150	U	0.000500	0.000150	mg/L		04/04/14 10:44	04/04/14 21:35	1
2-Methylnaphthalene	0.000140	U	0.000500	0.000140	mg/L		04/04/14 10:44	04/04/14 21:35	1
Naphthalene	0.000160	U	0.000500	0.000160	mg/L		04/04/14 10:44	04/04/14 21:35	1
2-Nitroaniline	0.000350	U	0.000500	0.000350	mg/L		04/04/14 10:44	04/04/14 21:35	1
3-Nitroaniline	0.000130	U	0.000500	0.000130	mg/L		04/04/14 10:44	04/04/14 21:35	1
4-Nitroaniline	0.000230	U	0.000500	0.000230	mg/L		04/04/14 10:44	04/04/14 21:35	1
Nitrobenzene	0.000200	U	0.000500	0.000200	mg/L		04/04/14 10:44	04/04/14 21:35	1
N-Nitrosodimethylamine	0.000160	U	0.000500	0.000160	mg/L		04/04/14 10:44	04/04/14 21:35	1
N-Nitrosodiphenylamine	0.000330	U	0.000500	0.000330	mg/L		04/04/14 10:44	04/04/14 21:35	1
N-Nitrosodi-n-propylamine	0.000240	U	0.000500	0.000240	mg/L		04/04/14 10:44	04/04/14 21:35	1
Phenanthrene	0.000290	U	0.000500	0.000290	mg/L		04/04/14 10:44	04/04/14 21:35	1
Pyrene	0.000330	U	0.000500	0.000330	mg/L		04/04/14 10:44	04/04/14 21:35	1
1,2,4-Trichlorobenzene	0.000160	U	0.000500	0.000160	mg/L		04/04/14 10:44	04/04/14 21:35	1
Benzyl alcohol	0.000510	U	0.000500	0.000510	mg/L		04/04/14 10:44	04/04/14 21:35	1

Client Sample ID: Rinse Blank-Geo

Lab Sample ID: 600-89799-21

Date Collected: 04/01/14 15:30

Matrix: Water

Date Received: 04/02/14 10:22

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloro-3-methylphenol	0.000250	U	0.000500	0.000250	mg/L		04/04/14 10:44	04/04/14 21:35	1
2-Chlorophenol	0.000220	U	0.000500	0.000220	mg/L		04/04/14 10:44	04/04/14 21:35	1
2-Methylphenol	0.000190	U	0.000500	0.000190	mg/L		04/04/14 10:44	04/04/14 21:35	1
3 & 4 Methylphenol	0.000160	U	0.00100	0.000160	mg/L		04/04/14 10:44	04/04/14 21:35	1
2,4-Dichlorophenol	0.000260	U	0.000500	0.000260	mg/L		04/04/14 10:44	04/04/14 21:35	1
2,4-Dimethylphenol	0.000180	U	0.000500	0.000180	mg/L		04/04/14 10:44	04/04/14 21:35	1
4,6-Dinitro-2-methylphenol	0.000160	U	0.00100	0.000160	mg/L		04/04/14 10:44	04/04/14 21:35	1
2,4-Dinitrophenol	0.000400	U	0.00100	0.000400	mg/L		04/04/14 10:44	04/04/14 21:35	1
2-Nitrophenol	0.000220	U	0.000500	0.000220	mg/L		04/04/14 10:44	04/04/14 21:35	1
4-Nitrophenol	0.000330	U	0.00100	0.000330	mg/L		04/04/14 10:44	04/04/14 21:35	1
Pentachlorophenol	0.000960	U	0.00100	0.000960	mg/L		04/04/14 10:44	04/04/14 21:35	1
Phenol	0.000140	U	0.000500	0.000140	mg/L		04/04/14 10:44	04/04/14 21:35	1
2,4,5-Trichlorophenol	0.000290	U	0.000500	0.000290	mg/L		04/04/14 10:44	04/04/14 21:35	1
2,4,6-Trichlorophenol	0.000330	U	0.000500	0.000330	mg/L		04/04/14 10:44	04/04/14 21:35	1
2,6-Dinitrotoluene	0.000290	U	0.000500	0.000290	mg/L		04/04/14 10:44	04/04/14 21:35	1
bis (2-Chloroisopropyl) ether	0.000180	U	0.000500	0.000180	mg/L		04/04/14 10:44	04/04/14 21:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14	*100*		*52 - 130*	*04/04/14 10:44*	*04/04/14 21:35*	*1*
Nitrobenzene-d5	*62*		*40 - 130*	*04/04/14 10:44*	*04/04/14 21:35*	*1*
2-Fluorophenol	*39*		*12 - 130*	*04/04/14 10:44*	*04/04/14 21:35*	*1*
2-Fluorobiphenyl	*66*		*36 - 130*	*04/04/14 10:44*	*04/04/14 21:35*	*1*
2,4,6-Tribromophenol	*70*		*17 - 137*	*04/04/14 10:44*	*04/04/14 21:35*	*1*
Phenol-d5 (Surr)	*23*		*10 - 130*	*04/04/14 10:44*	*04/04/14 21:35*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00630	U	0.0500	0.00630	mg/L		04/04/14 11:38	04/07/14 10:39	1
Arsenic	0.00328	U	0.0100	0.00328	mg/L		04/04/14 11:38	04/07/14 10:39	1
Cadmium	0.000350	U	0.00500	0.000350	mg/L		04/04/14 11:38	04/07/14 10:39	1
Lead	0.00290	U	0.0100	0.00290	mg/L		04/04/14 11:38	04/07/14 10:39	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		04/04/14 11:38	04/07/14 10:39	1

Client Sample ID: Trip Blank

Lab Sample ID: 600-89799-22

Date Collected: 04/01/14 00:00

Matrix: Water

Date Received: 04/02/14 10:22

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00227	U	0.0100	0.00227	mg/L			04/08/14 19:57	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			04/08/14 19:57	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			04/08/14 19:57	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			04/08/14 19:57	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			04/08/14 19:57	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			04/08/14 19:57	1
Carbon disulfide	0.00170	U	0.00500	0.00170	mg/L			04/08/14 19:57	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			04/08/14 19:57	1
Dibromochloromethane	0.000920	U	0.00500	0.000920	mg/L			04/08/14 19:57	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			04/08/14 19:57	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			04/08/14 19:57	1

Client Sample ID: Trip Blank
Date Collected: 04/01/14 00:00
Date Received: 04/02/14 10:22

Lab Sample ID: 600-89799-22
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	0.000820	U	0.00500	0.000820	mg/L			04/08/14 19:57	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			04/08/14 19:57	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			04/08/14 19:57	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			04/08/14 19:57	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			04/08/14 19:57	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			04/08/14 19:57	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			04/08/14 19:57	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			04/08/14 19:57	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			04/08/14 19:57	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			04/08/14 19:57	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			04/08/14 19:57	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			04/08/14 19:57	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			04/08/14 19:57	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			04/08/14 19:57	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			04/08/14 19:57	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			04/08/14 19:57	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			04/08/14 19:57	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			04/08/14 19:57	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			04/08/14 19:57	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			04/08/14 19:57	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			04/08/14 19:57	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			04/08/14 19:57	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			04/08/14 19:57	1
o-Xylene	0.000930	U	0.00500	0.000930	mg/L			04/08/14 19:57	1
m-Xylene & p-Xylene	0.00126	U	0.0100	0.00126	mg/L			04/08/14 19:57	1
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			04/08/14 19:57	1
Bromodichloromethane	0.000760	U	0.00500	0.000760	mg/L			04/08/14 19:57	1
1,2-Dichloroethene, Total	0.000840	U	0.0100	0.000840	mg/L			04/08/14 19:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*70 - 130*		*04/08/14 19:57*	*1*
Dibromofluoromethane	*92*		*62 - 130*		*04/08/14 19:57*	*1*
4-Bromofluorobenzene	*104*		*67 - 139*		*04/08/14 19:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*50 - 134*		*04/08/14 19:57*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N2	RPD of the MS and MSD exceeds the control limits

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N2	RPD of the MS and MSD exceeds the control limits

Metals

Qualifier	Qualifier Description
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
N2	RPD of the MS and MSD exceeds the control limits
U	Analyte was not detected at or above the SDL.

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
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)

Surrogate Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89799-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	12DCE
Lab Sample ID	Client Sample ID	(50-130)	(68-140)	(57-140)	(61-130)
600-89799-1	2014-NDA-7 (0-0.5)	88	89	102	81
600-89799-1MS	2014-NDA-7 (0-0.5)	90	84	98	71
600-89799-1MSD	2014-NDA-7 (0-0.5)	89	84	97	74
600-89799-4	DUP-4	90	88	102	79
600-89799-5	2014-FFTA-07 (0-0.5)	88	85	101	75
600-89799-8	2014-FFTA-08 (0-0.5)	87	87	103	80
600-89799-11	2014-FFTA-06 (0.-0.5)	89	86	106	80
LCS 600-131319/3	Lab Control Sample	79	79	91	75
LCSD 600-131319/4	Lab Control Sample Dup	80	77	91	69
MB 600-131319/5	Method Blank	80	80	96	77

Surrogate Legend

TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane
BFB = 4-Bromofluorobenzene
12DCE = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	12DCE
Lab Sample ID	Client Sample ID	(70-130)	(62-130)	(67-139)	(50-134)
600-89799-20	Field Blank	86	88	81	89
600-89799-21	Rinse Blank-Geo	88	91	84	94
600-89799-22	Trip Blank	91	92	104	101
LCS 600-131416/3	Lab Control Sample	93	100	78	98
LCS 600-131549/3	Lab Control Sample	90	88	103	87
MB 600-131416/4	Method Blank	88	93	83	93
MB 600-131549/4	Method Blank	98	91	101	96

Surrogate Legend

TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane
BFB = 4-Bromofluorobenzene
12DCE = 1,2-Dichloroethane-d4 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	12DCE
Lab Sample ID	Client Sample ID	(70-130)	(62-130)	(67-139)	(50-134)
600-89761-A-1-D MSD	Matrix Spike Duplicate	90	92	75	84
600-89761-A-1-E MS	Matrix Spike	94	98	81	93
600-89841-A-1-K MSD	Matrix Spike Duplicate	97	91	110	105
600-89841-A-1-L MS	Matrix Spike	94	97	112	101

Surrogate Legend

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane
BFB = 4-Bromofluorobenzene
12DCE = 1,2-Dichloroethane-d4 (Surr)

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPH	TBP
Lab Sample ID	Client Sample ID	(38-130)	(25-132)	(10-155)	(27-130)	(53-134)	(10-148)
600-89799-1	2014-NDA-7 (0-0.5)	62	51	57	47	73	36
600-89799-1MS	2014-NDA-7 (0-0.5)	68	54	62	56	89	59
600-89799-1MSD	2014-NDA-7 (0-0.5)	63	53	52	57	98	57
600-89799-4	DUP-4	73	60	63	65	93	64
600-89799-5	2014-FFTA-07 (0-0.5)	77	70	66	62	99	76
600-89799-8	2014-FFTA-08 (0-0.5)	81	65	67	71	100	83
600-89799-11	2014-FFTA-06 (0.-0.5)	76	58	64	65	93	68
LCS 600-131363/2-A	Lab Control Sample	54	51	51	57	67	59
MB 600-131363/1-A	Method Blank	82	73	74	72	94	54

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TPH	NBZ	2FP	FBP	TBP	PHL
Lab Sample ID	Client Sample ID	(52-130)	(40-130)	(12-130)	(36-130)	(17-137)	(10-130)
600-89799-21	Rinse Blank-Geo	100	62	39	66	70	23
600-89799-21 MS	Rinse Blank-Geo	93	70	46	82	88	30
600-89799-21 MSD	Rinse Blank-Geo	93	69	46	68	94	33
LCS 600-131222/2-A	Lab Control Sample	85	75	37	61	92	25
MB 600-131222/1-A	Method Blank	109	78	45	81	96	25

Surrogate Legend

TPH = Terphenyl-d14
NBZ = Nitrobenzene-d5
2FP = 2-Fluorophenol
FBP = 2-Fluorobiphenyl
TBP = 2,4,6-Tribromophenol
PHL = Phenol-d5 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-131319/5
Matrix: Solid
Analysis Batch: 131319

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00166	U	0.0100	0.00166	mg/Kg			04/06/14 12:25	1
Benzene	0.000630	U	0.00500	0.000630	mg/Kg			04/06/14 12:25	1
Chlorobromomethane	0.00178	U	0.00500	0.00178	mg/Kg			04/06/14 12:25	1
Bromoform	0.00137	U	0.00500	0.00137	mg/Kg			04/06/14 12:25	1
Bromomethane	0.000830	U	0.0100	0.000830	mg/Kg			04/06/14 12:25	1
2-Butanone (MEK)	0.00190	U	0.0100	0.00190	mg/Kg			04/06/14 12:25	1
Carbon disulfide	0.000550	U	0.0100	0.000550	mg/Kg			04/06/14 12:25	1
Carbon tetrachloride	0.00113	U	0.00500	0.00113	mg/Kg			04/06/14 12:25	1
Dibromochloromethane	0.000940	U	0.00500	0.000940	mg/Kg			04/06/14 12:25	1
Chlorobenzene	0.000960	U	0.00500	0.000960	mg/Kg			04/06/14 12:25	1
Chloroethane	0.00140	U	0.0100	0.00140	mg/Kg			04/06/14 12:25	1
Chloroform	0.000660	U	0.00500	0.000660	mg/Kg			04/06/14 12:25	1
Chloromethane	0.00166	U	0.0100	0.00166	mg/Kg			04/06/14 12:25	1
1,1-Dichloroethane	0.000870	U	0.00500	0.000870	mg/Kg			04/06/14 12:25	1
1,2-Dichloroethane	0.000900	U	0.00500	0.000900	mg/Kg			04/06/14 12:25	1
1,1-Dichloroethene	0.00122	U	0.00500	0.00122	mg/Kg			04/06/14 12:25	1
cis-1,2-Dichloroethene	0.000830	U	0.00500	0.000830	mg/Kg			04/06/14 12:25	1
trans-1,2-Dichloroethene	0.00114	U	0.00500	0.00114	mg/Kg			04/06/14 12:25	1
1,2-Dichloropropane	0.000710	U	0.00500	0.000710	mg/Kg			04/06/14 12:25	1
cis-1,3-Dichloropropene	0.000540	U	0.00500	0.000540	mg/Kg			04/06/14 12:25	1
trans-1,3-Dichloropropene	0.000580	U	0.00500	0.000580	mg/Kg			04/06/14 12:25	1
Ethylbenzene	0.00102	U	0.00500	0.00102	mg/Kg			04/06/14 12:25	1
2-Hexanone	0.00101	U	0.0100	0.00101	mg/Kg			04/06/14 12:25	1
Methylene Chloride	0.00219	U	0.0100	0.00219	mg/Kg			04/06/14 12:25	1
4-Methyl-2-pentanone (MIBK)	0.00147	U	0.0100	0.00147	mg/Kg			04/06/14 12:25	1
Styrene	0.000710	U	0.00500	0.000710	mg/Kg			04/06/14 12:25	1
1,1,2,2-Tetrachloroethane	0.000870	U	0.00500	0.000870	mg/Kg			04/06/14 12:25	1
Tetrachloroethene	0.000710	U	0.00500	0.000710	mg/Kg			04/06/14 12:25	1
Toluene	0.00138	U	0.00500	0.00138	mg/Kg			04/06/14 12:25	1
1,1,1-Trichloroethane	0.000740	U	0.00500	0.000740	mg/Kg			04/06/14 12:25	1
1,1,2-Trichloroethane	0.000730	U	0.00500	0.000730	mg/Kg			04/06/14 12:25	1
Trichloroethene	0.00140	U	0.00500	0.00140	mg/Kg			04/06/14 12:25	1
Vinyl acetate	0.000930	U	0.00500	0.000930	mg/Kg			04/06/14 12:25	1
Vinyl chloride	0.000900	U	0.0100	0.000900	mg/Kg			04/06/14 12:25	1
o-Xylene	0.00113	U	0.00500	0.00113	mg/Kg			04/06/14 12:25	1
m-Xylene & p-Xylene	0.00152	U	0.0100	0.00152	mg/Kg			04/06/14 12:25	1
Xylenes, Total	0.00113	U	0.00500	0.00113	mg/Kg			04/06/14 12:25	1
Bromodichloromethane	0.000660	U	0.00500	0.000660	mg/Kg			04/06/14 12:25	1
1,2-Dichloroethene, Total	0.00190	U	0.0100	0.00190	mg/Kg			04/06/14 12:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*80*		*50 - 130*		*04/06/14 12:25*	*1*
Dibromofluoromethane	*80*		*68 - 140*		*04/06/14 12:25*	*1*
4-Bromofluorobenzene	*96*		*57 - 140*		*04/06/14 12:25*	*1*
1,2-Dichloroethane-d4 (Surr)	*77*		*61 - 130*		*04/06/14 12:25*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-131319/3
Matrix: Solid
Analysis Batch: 131319

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.100	0.1003		mg/Kg		100	13 - 150
Benzene	0.0500	0.04139		mg/Kg		83	70 - 131
Chlorobromomethane	0.0500	0.04511		mg/Kg		90	70 - 132
Bromoform	0.0500	0.06040		mg/Kg		121	43 - 150
Bromomethane	0.0500	0.03815		mg/Kg		76	37 - 147
2-Butanone (MEK)	0.100	0.1032		mg/Kg		103	33 - 150
Carbon disulfide	0.0500	0.03755		mg/Kg		75	51 - 141
Carbon tetrachloride	0.0500	0.04055		mg/Kg		81	58 - 130
Dibromochloromethane	0.0500	0.05415		mg/Kg		108	65 - 134
Chlorobenzene	0.0500	0.04839		mg/Kg		97	63 - 131
Chloroethane	0.0500	0.03749		mg/Kg		75	40 - 150
Chloroform	0.0500	0.04245		mg/Kg		85	69 - 130
Chloromethane	0.0500	0.04267		mg/Kg		85	44 - 141
1,1-Dichloroethane	0.0500	0.04249		mg/Kg		85	63 - 140
1,2-Dichloroethane	0.0500	0.04758		mg/Kg		95	58 - 137
1,1-Dichloroethene	0.0500	0.03744		mg/Kg		75	62 - 142
cis-1,2-Dichloroethene	0.0500	0.04237		mg/Kg		85	70 - 130
trans-1,2-Dichloroethene	0.0500	0.04017		mg/Kg		80	69 - 130
1,2-Dichloropropane	0.0500	0.04520		mg/Kg		90	70 - 130
cis-1,3-Dichloropropene	0.0500	0.05115		mg/Kg		102	65 - 130
trans-1,3-Dichloropropene	0.0500	0.05283		mg/Kg		106	70 - 130
Ethylbenzene	0.0500	0.04695		mg/Kg		94	66 - 130
2-Hexanone	0.100	0.1314		mg/Kg		131	35 - 150
Methylene Chloride	0.0500	0.03826		mg/Kg		77	61 - 150
4-Methyl-2-pentanone (MIBK)	0.100	0.1115		mg/Kg		112	21 - 150
Styrene	0.0500	0.05012		mg/Kg		100	65 - 133
1,1,2,2-Tetrachloroethane	0.0500	0.05727		mg/Kg		115	61 - 138
Tetrachloroethene	0.0500	0.03993		mg/Kg		80	43 - 143
Toluene	0.0500	0.04621		mg/Kg		92	67 - 130
1,1,1-Trichloroethane	0.0500	0.04007		mg/Kg		80	59 - 130
1,1,2-Trichloroethane	0.0500	0.05302		mg/Kg		106	67 - 134
Trichloroethene	0.0500	0.04077		mg/Kg		82	63 - 135
Vinyl acetate	0.100	0.09727		mg/Kg		97	40 - 150
Vinyl chloride	0.0500	0.03961		mg/Kg		79	40 - 148
o-Xylene	0.0500	0.04748		mg/Kg		95	62 - 130
m-Xylene & p-Xylene	0.0500	0.04700		mg/Kg		94	64 - 130
Xylenes, Total	0.100	0.09448		mg/Kg		94	63 - 130
Bromodichloromethane	0.0500	0.04603		mg/Kg		92	67 - 138
1,2-Dichloroethene, Total	0.100	0.08254		mg/Kg		83	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*79*		*50 - 130*
Dibromofluoromethane	*79*		*68 - 140*
4-Bromofluorobenzene	*91*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*75*		*61 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 600-131319/4
Matrix: Solid
Analysis Batch: 131319

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.100	0.07686		mg/Kg		77	13 - 150	27	30
Benzene	0.0500	0.04357		mg/Kg		87	70 - 131	5	30
Chlorobromomethane	0.0500	0.04492		mg/Kg		90	70 - 132	0	30
Bromoform	0.0500	0.05565		mg/Kg		111	43 - 150	8	30
Bromomethane	0.0500	0.04073		mg/Kg		81	37 - 147	7	30
2-Butanone (MEK)	0.100	0.08632		mg/Kg		86	33 - 150	18	30
Carbon disulfide	0.0500	0.04087		mg/Kg		82	51 - 141	8	30
Carbon tetrachloride	0.0500	0.04357		mg/Kg		87	58 - 130	7	30
Dibromochloromethane	0.0500	0.05303		mg/Kg		106	65 - 134	2	30
Chlorobenzene	0.0500	0.05082		mg/Kg		102	63 - 131	5	30
Chloroethane	0.0500	0.04037		mg/Kg		81	40 - 150	7	30
Chloroform	0.0500	0.04413		mg/Kg		88	69 - 130	4	30
Chloromethane	0.0500	0.04407		mg/Kg		88	44 - 141	3	30
1,1-Dichloroethane	0.0500	0.04485		mg/Kg		90	63 - 140	5	30
1,2-Dichloroethane	0.0500	0.04530		mg/Kg		91	58 - 137	5	30
1,1-Dichloroethene	0.0500	0.04058		mg/Kg		81	62 - 142	8	30
cis-1,2-Dichloroethene	0.0500	0.04522		mg/Kg		90	70 - 130	7	30
trans-1,2-Dichloroethene	0.0500	0.04298		mg/Kg		86	69 - 130	7	30
1,2-Dichloropropane	0.0500	0.04607		mg/Kg		92	70 - 130	2	30
cis-1,3-Dichloropropene	0.0500	0.05149		mg/Kg		103	65 - 130	1	30
trans-1,3-Dichloropropene	0.0500	0.05116		mg/Kg		102	70 - 130	3	30
Ethylbenzene	0.0500	0.05032		mg/Kg		101	66 - 130	7	30
2-Hexanone	0.100	0.1060		mg/Kg		106	35 - 150	21	30
Methylene Chloride	0.0500	0.03934		mg/Kg		79	61 - 150	3	30
4-Methyl-2-pentanone (MIBK)	0.100	0.09086		mg/Kg		91	21 - 150	20	30
Styrene	0.0500	0.05257		mg/Kg		105	65 - 133	5	30
1,1,2,2-Tetrachloroethane	0.0500	0.05066		mg/Kg		101	61 - 138	12	30
Tetrachloroethene	0.0500	0.04368		mg/Kg		87	43 - 143	9	30
Toluene	0.0500	0.04885		mg/Kg		98	67 - 130	6	30
1,1,1-Trichloroethane	0.0500	0.04302		mg/Kg		86	59 - 130	7	30
1,1,2-Trichloroethane	0.0500	0.05029		mg/Kg		101	67 - 134	5	30
Trichloroethene	0.0500	0.04359		mg/Kg		87	63 - 135	7	30
Vinyl acetate	0.100	0.08586		mg/Kg		86	40 - 150	12	30
Vinyl chloride	0.0500	0.04207		mg/Kg		84	40 - 148	6	30
o-Xylene	0.0500	0.05081		mg/Kg		102	62 - 130	7	30
m-Xylene & p-Xylene	0.0500	0.04975		mg/Kg		99	64 - 130	6	30
Xylenes, Total	0.100	0.1006		mg/Kg		101	63 - 130	6	30
Bromodichloromethane	0.0500	0.04780		mg/Kg		96	67 - 138	4	30
1,2-Dichloroethene, Total	0.100	0.08820		mg/Kg		88	70 - 130	7	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*80*		*50 - 130*
Dibromofluoromethane	*77*		*68 - 140*
4-Bromofluorobenzene	*91*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*69*		*61 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 600-89799-1MS
Matrix: Solid
Analysis Batch: 131319

Client Sample ID: 2014-NDA-7 (0-0.5)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.00201	U	0.121	0.1605		mg/Kg	☼	133	13 - 150
Benzene	0.000762	U	0.0605	0.05571		mg/Kg	☼	92	70 - 131
Chlorobromomethane	0.00215	U	0.0605	0.05688		mg/Kg	☼	94	70 - 132
Bromoform	0.00166	U	0.0605	0.06380		mg/Kg	☼	106	43 - 150
Bromomethane	0.00100	U	0.0605	0.04364		mg/Kg	☼	72	37 - 147
2-Butanone (MEK)	0.00230	U	0.121	0.08927		mg/Kg	☼	74	33 - 150
Carbon disulfide	0.000665	U	0.0605	0.05186		mg/Kg	☼	86	51 - 141
Carbon tetrachloride	0.00137	U	0.0605	0.05612		mg/Kg	☼	93	58 - 130
Dibromochloromethane	0.00114	U	0.0605	0.06392		mg/Kg	☼	106	65 - 134
Chlorobenzene	0.00116	U	0.0605	0.06162		mg/Kg	☼	102	63 - 131
Chloroethane	0.00169	U	0.0605	0.04684		mg/Kg	☼	77	40 - 150
Chloroform	0.000798	U	0.0605	0.05663		mg/Kg	☼	94	69 - 130
Chloromethane	0.00201	U	0.0605	0.05221		mg/Kg	☼	86	44 - 141
1,1-Dichloroethane	0.00105	U	0.0605	0.05907		mg/Kg	☼	98	63 - 140
1,2-Dichloroethane	0.00109	U	0.0605	0.05592		mg/Kg	☼	92	58 - 137
1,1-Dichloroethene	0.00148	U	0.0605	0.05412		mg/Kg	☼	90	62 - 142
cis-1,2-Dichloroethene	0.00100	U	0.0605	0.05773		mg/Kg	☼	95	70 - 130
trans-1,2-Dichloroethene	0.00138	U	0.0605	0.05643		mg/Kg	☼	93	69 - 130
1,2-Dichloropropane	0.000859	U	0.0605	0.05788		mg/Kg	☼	96	70 - 130
cis-1,3-Dichloropropene	0.000653	U	0.0605	0.06171		mg/Kg	☼	102	65 - 130
trans-1,3-Dichloropropene	0.000701	U	0.0605	0.05938		mg/Kg	☼	98	70 - 130
Ethylbenzene	0.00123	U	0.0605	0.06278		mg/Kg	☼	104	66 - 130
2-Hexanone	0.00122	U	0.121	0.1100		mg/Kg	☼	91	35 - 150
Methylene Chloride	0.00530	J	0.0605	0.06182		mg/Kg	☼	93	61 - 150
4-Methyl-2-pentanone (MIBK)	0.00178	U	0.121	0.1108		mg/Kg	☼	92	21 - 150
Styrene	0.000859	U	0.0605	0.06134		mg/Kg	☼	101	65 - 133
1,1,2,2-Tetrachloroethane	0.00105	U	0.0605	0.05828		mg/Kg	☼	96	61 - 138
Tetrachloroethene	0.000859	U	0.0605	0.06884		mg/Kg	☼	114	43 - 143
Toluene	0.00167	U	0.0605	0.06417		mg/Kg	☼	106	67 - 130
1,1,1-Trichloroethane	0.000895	U	0.0605	0.05697		mg/Kg	☼	94	59 - 130
1,1,2-Trichloroethane	0.000883	U	0.0605	0.06189		mg/Kg	☼	102	67 - 134
Trichloroethene	0.00169	U	0.0605	0.05586		mg/Kg	☼	92	63 - 135
Vinyl acetate	0.00112	U	0.121	0.02244	N1	mg/Kg	☼	19	40 - 150
Vinyl chloride	0.00109	U	0.0605	0.05100		mg/Kg	☼	84	40 - 148
o-Xylene	0.00137	U	0.0605	0.06352		mg/Kg	☼	105	62 - 130
m-Xylene & p-Xylene	0.00184	U	0.0605	0.06205		mg/Kg	☼	103	64 - 130
Xylenes, Total	0.00137	U	0.121	0.1256		mg/Kg	☼	104	63 - 130
Bromodichloromethane	0.000798	U	0.0605	0.05673		mg/Kg	☼	94	67 - 138
1,2-Dichloroethene, Total	0.00230	U	0.121	0.1142		mg/Kg	☼	94	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*90*		*50 - 130*
Dibromofluoromethane	*84*		*68 - 140*
4-Bromofluorobenzene	*98*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*71*		*61 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 600-89799-1MSD
Matrix: Solid
Analysis Batch: 131319

Client Sample ID: 2014-NDA-7 (0-0.5)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.00201	U	0.121	0.2306	N1 N2	mg/Kg	☼	191	13 - 150	36	30
Benzene	0.000762	U	0.0605	0.05156		mg/Kg	☼	85	70 - 131	8	30
Chlorobromomethane	0.00215	U	0.0605	0.05370		mg/Kg	☼	89	70 - 132	6	30
Bromoform	0.00166	U	0.0605	0.05968		mg/Kg	☼	99	43 - 150	7	30
Bromomethane	0.00100	U	0.0605	0.04141		mg/Kg	☼	68	37 - 147	5	30
2-Butanone (MEK)	0.00230	U	0.121	0.08698		mg/Kg	☼	72	33 - 150	3	30
Carbon disulfide	0.000665	U	0.0605	0.04583		mg/Kg	☼	76	51 - 141	12	30
Carbon tetrachloride	0.00137	U	0.0605	0.05040		mg/Kg	☼	83	58 - 130	11	30
Dibromochloromethane	0.00114	U	0.0605	0.05908		mg/Kg	☼	98	65 - 134	8	30
Chlorobenzene	0.00116	U	0.0605	0.05622		mg/Kg	☼	93	63 - 131	9	30
Chloroethane	0.00169	U	0.0605	0.05092		mg/Kg	☼	84	40 - 150	8	30
Chloroform	0.000798	U	0.0605	0.05259		mg/Kg	☼	87	69 - 130	7	30
Chloromethane	0.00201	U	0.0605	0.05363		mg/Kg	☼	89	44 - 141	3	30
1,1-Dichloroethane	0.00105	U	0.0605	0.05365		mg/Kg	☼	89	63 - 140	10	30
1,2-Dichloroethane	0.00109	U	0.0605	0.05367		mg/Kg	☼	89	58 - 137	4	30
1,1-Dichloroethene	0.00148	U	0.0605	0.04951		mg/Kg	☼	82	62 - 142	9	30
cis-1,2-Dichloroethene	0.00100	U	0.0605	0.05378		mg/Kg	☼	89	70 - 130	7	30
trans-1,2-Dichloroethene	0.00138	U	0.0605	0.05192		mg/Kg	☼	86	69 - 130	8	30
1,2-Dichloropropane	0.000859	U	0.0605	0.05401		mg/Kg	☼	89	70 - 130	7	30
cis-1,3-Dichloropropene	0.000653	U	0.0605	0.05092		mg/Kg	☼	84	65 - 130	19	30
trans-1,3-Dichloropropene	0.000701	U	0.0605	0.05189		mg/Kg	☼	86	70 - 130	13	30
Ethylbenzene	0.00123	U	0.0605	0.05559		mg/Kg	☼	92	66 - 130	12	30
2-Hexanone	0.00122	U	0.121	0.08950		mg/Kg	☼	74	35 - 150	21	30
Methylene Chloride	0.00530	J	0.0605	0.04973		mg/Kg	☼	73	61 - 150	22	30
4-Methyl-2-pentanone (MIBK)	0.00178	U	0.121	0.09280		mg/Kg	☼	77	21 - 150	18	30
Styrene	0.000859	U	0.0605	0.05483		mg/Kg	☼	91	65 - 133	11	30
1,1,2,2-Tetrachloroethane	0.00105	U	0.0605	0.05422		mg/Kg	☼	90	61 - 138	7	30
Tetrachloroethene	0.000859	U	0.0605	0.06271		mg/Kg	☼	104	43 - 143	9	30
Toluene	0.00167	U	0.0605	0.05732		mg/Kg	☼	95	67 - 130	11	30
1,1,1-Trichloroethane	0.000895	U	0.0605	0.05156		mg/Kg	☼	85	59 - 130	10	30
1,1,2-Trichloroethane	0.000883	U	0.0605	0.05879		mg/Kg	☼	97	67 - 134	5	30
Trichloroethene	0.00169	U	0.0605	0.04986		mg/Kg	☼	82	63 - 135	11	30
Vinyl acetate	0.00112	U	0.121	0.1144	N2	mg/Kg	☼	95	40 - 150	134	30
Vinyl chloride	0.00109	U	0.0605	0.05417		mg/Kg	☼	90	40 - 148	6	30
o-Xylene	0.00137	U	0.0605	0.05690		mg/Kg	☼	94	62 - 130	11	30
m-Xylene & p-Xylene	0.00184	U	0.0605	0.05542		mg/Kg	☼	92	64 - 130	11	30
Xylenes, Total	0.00137	U	0.121	0.1123		mg/Kg	☼	93	63 - 130	11	30
Bromodichloromethane	0.000798	U	0.0605	0.05348		mg/Kg	☼	88	67 - 138	6	30
1,2-Dichloroethene, Total	0.00230	U	0.121	0.1057		mg/Kg	☼	87	70 - 130	8	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*89*		*50 - 130*
Dibromofluoromethane	*84*		*68 - 140*
4-Bromofluorobenzene	*97*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*74*		*61 - 130*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-131416/4
Matrix: Water
Analysis Batch: 131416

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00227	U	0.0100	0.00227	mg/L			04/07/14 13:17	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			04/07/14 13:17	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			04/07/14 13:17	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			04/07/14 13:17	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			04/07/14 13:17	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			04/07/14 13:17	1
Carbon disulfide	0.00170	U	0.00500	0.00170	mg/L			04/07/14 13:17	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			04/07/14 13:17	1
Dibromochloromethane	0.000920	U	0.00500	0.000920	mg/L			04/07/14 13:17	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			04/07/14 13:17	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			04/07/14 13:17	1
Chloroform	0.000820	U	0.00500	0.000820	mg/L			04/07/14 13:17	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			04/07/14 13:17	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			04/07/14 13:17	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			04/07/14 13:17	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			04/07/14 13:17	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			04/07/14 13:17	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			04/07/14 13:17	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			04/07/14 13:17	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			04/07/14 13:17	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			04/07/14 13:17	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			04/07/14 13:17	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			04/07/14 13:17	1
Methylene Chloride	0.00143	U	0.0100	0.00143	mg/L			04/07/14 13:17	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			04/07/14 13:17	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			04/07/14 13:17	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			04/07/14 13:17	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			04/07/14 13:17	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			04/07/14 13:17	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			04/07/14 13:17	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			04/07/14 13:17	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			04/07/14 13:17	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			04/07/14 13:17	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			04/07/14 13:17	1
o-Xylene	0.000930	U	0.00500	0.000930	mg/L			04/07/14 13:17	1
m-Xylene & p-Xylene	0.00126	U	0.0100	0.00126	mg/L			04/07/14 13:17	1
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			04/07/14 13:17	1
Bromodichloromethane	0.000760	U	0.00500	0.000760	mg/L			04/07/14 13:17	1
1,2-Dichloroethene, Total	0.000840	U	0.0100	0.000840	mg/L			04/07/14 13:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*70 - 130*		*04/07/14 13:17*	*1*
Dibromofluoromethane	*93*		*62 - 130*		*04/07/14 13:17*	*1*
4-Bromofluorobenzene	*83*		*67 - 139*		*04/07/14 13:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*50 - 134*		*04/07/14 13:17*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-131416/3
Matrix: Water
Analysis Batch: 131416

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.100	0.09311		mg/L		93	21 - 148
Benzene	0.0500	0.04911		mg/L		98	70 - 131
Chlorobromomethane	0.0500	0.05270		mg/L		105	70 - 130
Bromoform	0.0500	0.03874		mg/L		77	67 - 134
Bromomethane	0.0500	0.04676		mg/L		94	45 - 150
2-Butanone (MEK)	0.100	0.1080		mg/L		108	34 - 140
Carbon disulfide	0.0500	0.04770		mg/L		95	60 - 146
Carbon tetrachloride	0.0500	0.04610		mg/L		92	68 - 140
Dibromochloromethane	0.0500	0.04902		mg/L		98	70 - 130
Chlorobenzene	0.0500	0.04673		mg/L		93	70 - 130
Chloroethane	0.0500	0.04620		mg/L		92	65 - 138
Chloroform	0.0500	0.04906		mg/L		98	70 - 131
Chloromethane	0.0500	0.05261		mg/L		105	15 - 150
1,1-Dichloroethane	0.0500	0.04640		mg/L		93	70 - 137
1,2-Dichloroethane	0.0500	0.04939		mg/L		99	62 - 144
1,1-Dichloroethene	0.0500	0.04776		mg/L		96	67 - 134
cis-1,2-Dichloroethene	0.0500	0.04925		mg/L		99	70 - 130
trans-1,2-Dichloroethene	0.0500	0.04708		mg/L		94	70 - 130
1,2-Dichloropropane	0.0500	0.04866		mg/L		97	70 - 133
cis-1,3-Dichloropropene	0.0500	0.04612		mg/L		92	66 - 130
trans-1,3-Dichloropropene	0.0500	0.04525		mg/L		90	70 - 138
Ethylbenzene	0.0500	0.04610		mg/L		92	70 - 130
2-Hexanone	0.100	0.1021		mg/L		102	46 - 139
Methylene Chloride	0.0500	0.04731		mg/L		95	67 - 130
4-Methyl-2-pentanone (MIBK)	0.100	0.1026		mg/L		103	39 - 150
Styrene	0.0500	0.04596		mg/L		92	70 - 130
1,1,2,2-Tetrachloroethane	0.0500	0.05476		mg/L		110	62 - 130
Tetrachloroethene	0.0500	0.04229		mg/L		85	57 - 130
Toluene	0.0500	0.04587		mg/L		92	70 - 130
1,1,1-Trichloroethane	0.0500	0.04665		mg/L		93	67 - 139
1,1,2-Trichloroethane	0.0500	0.04931		mg/L		99	70 - 130
Trichloroethene	0.0500	0.04937		mg/L		99	70 - 130
Vinyl acetate	0.100	0.1047		mg/L		105	22 - 150
Vinyl chloride	0.0500	0.06024		mg/L		120	55 - 150
o-Xylene	0.0500	0.04791		mg/L		96	69 - 130
m-Xylene & p-Xylene	0.0500	0.04541		mg/L		91	70 - 130
Xylenes, Total	0.100	0.09332		mg/L		93	70 - 130
Bromodichloromethane	0.0500	0.04945		mg/L		99	70 - 130
1,2-Dichloroethene, Total	0.100	0.09633		mg/L		96	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*93*		*70 - 130*
Dibromofluoromethane	*100*		*62 - 130*
4-Bromofluorobenzene	*78*		*67 - 139*
1,2-Dichloroethane-d4 (Surr)	*98*		*50 - 134*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 600-131549/4
Matrix: Water
Analysis Batch: 131549

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	0.00227	U	0.0100	0.00227	mg/L			04/08/14 13:28	1
Benzene	0.000560	U	0.00500	0.000560	mg/L			04/08/14 13:28	1
Chlorobromomethane	0.000810	U	0.00500	0.000810	mg/L			04/08/14 13:28	1
Bromoform	0.000770	U	0.00500	0.000770	mg/L			04/08/14 13:28	1
Bromomethane	0.00215	U	0.0100	0.00215	mg/L			04/08/14 13:28	1
2-Butanone (MEK)	0.00157	U	0.0100	0.00157	mg/L			04/08/14 13:28	1
Carbon disulfide	0.00170	U	0.00500	0.00170	mg/L			04/08/14 13:28	1
Carbon tetrachloride	0.000920	U	0.00500	0.000920	mg/L			04/08/14 13:28	1
Dibromochloromethane	0.000920	U	0.00500	0.000920	mg/L			04/08/14 13:28	1
Chlorobenzene	0.000820	U	0.00500	0.000820	mg/L			04/08/14 13:28	1
Chloroethane	0.00173	U	0.0100	0.00173	mg/L			04/08/14 13:28	1
Chloroform	0.000820	U	0.00500	0.000820	mg/L			04/08/14 13:28	1
Chloromethane	0.000850	U	0.0100	0.000850	mg/L			04/08/14 13:28	1
1,1-Dichloroethane	0.000500	U	0.00500	0.000500	mg/L			04/08/14 13:28	1
1,2-Dichloroethane	0.00101	U	0.00500	0.00101	mg/L			04/08/14 13:28	1
1,1-Dichloroethene	0.000760	U	0.00500	0.000760	mg/L			04/08/14 13:28	1
cis-1,2-Dichloroethene	0.000560	U	0.00500	0.000560	mg/L			04/08/14 13:28	1
trans-1,2-Dichloroethene	0.000880	U	0.00500	0.000880	mg/L			04/08/14 13:28	1
1,2-Dichloropropane	0.00141	U	0.00500	0.00141	mg/L			04/08/14 13:28	1
cis-1,3-Dichloropropene	0.000970	U	0.00500	0.000970	mg/L			04/08/14 13:28	1
trans-1,3-Dichloropropene	0.000590	U	0.00500	0.000590	mg/L			04/08/14 13:28	1
Ethylbenzene	0.00129	U	0.00500	0.00129	mg/L			04/08/14 13:28	1
2-Hexanone	0.00142	U	0.0100	0.00142	mg/L			04/08/14 13:28	1
Methylene Chloride	0.003274	J	0.0100	0.00143	mg/L			04/08/14 13:28	1
4-Methyl-2-pentanone (MIBK)	0.00111	U	0.0100	0.00111	mg/L			04/08/14 13:28	1
Styrene	0.000560	U	0.00500	0.000560	mg/L			04/08/14 13:28	1
1,1,2,2-Tetrachloroethane	0.000800	U	0.00500	0.000800	mg/L			04/08/14 13:28	1
Tetrachloroethene	0.00124	U	0.00500	0.00124	mg/L			04/08/14 13:28	1
Toluene	0.000550	U	0.00500	0.000550	mg/L			04/08/14 13:28	1
1,1,1-Trichloroethane	0.000980	U	0.00500	0.000980	mg/L			04/08/14 13:28	1
1,1,2-Trichloroethane	0.000530	U	0.00500	0.000530	mg/L			04/08/14 13:28	1
Trichloroethene	0.00158	U	0.00500	0.00158	mg/L			04/08/14 13:28	1
Vinyl acetate	0.000600	U	0.0100	0.000600	mg/L			04/08/14 13:28	1
Vinyl chloride	0.000850	U	0.00500	0.000850	mg/L			04/08/14 13:28	1
o-Xylene	0.000930	U	0.00500	0.000930	mg/L			04/08/14 13:28	1
m-Xylene & p-Xylene	0.00126	U	0.0100	0.00126	mg/L			04/08/14 13:28	1
Xylenes, Total	0.00198	U	0.00500	0.00198	mg/L			04/08/14 13:28	1
Bromodichloromethane	0.000760	U	0.00500	0.000760	mg/L			04/08/14 13:28	1
1,2-Dichloroethene, Total	0.000840	U	0.0100	0.000840	mg/L			04/08/14 13:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*70 - 130*		*04/08/14 13:28*	*1*
Dibromofluoromethane	*91*		*62 - 130*		*04/08/14 13:28*	*1*
4-Bromofluorobenzene	*101*		*67 - 139*		*04/08/14 13:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*50 - 134*		*04/08/14 13:28*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-131549/3
Matrix: Water
Analysis Batch: 131549

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.100	0.09702		mg/L		97	21 - 148
Benzene	0.0500	0.05619		mg/L		112	70 - 131
Chlorobromomethane	0.0500	0.05121		mg/L		102	70 - 130
Bromoform	0.0500	0.04248		mg/L		85	67 - 134
Bromomethane	0.0500	0.04819		mg/L		96	45 - 150
2-Butanone (MEK)	0.100	0.09618		mg/L		96	34 - 140
Carbon disulfide	0.0500	0.05806		mg/L		116	60 - 146
Carbon tetrachloride	0.0500	0.05418		mg/L		108	68 - 140
Dibromochloromethane	0.0500	0.04037		mg/L		81	70 - 130
Chlorobenzene	0.0500	0.04124		mg/L		82	70 - 130
Chloroethane	0.0500	0.05143		mg/L		103	65 - 138
Chloroform	0.0500	0.05349		mg/L		107	70 - 131
Chloromethane	0.0500	0.04040		mg/L		81	15 - 150
1,1-Dichloroethane	0.0500	0.05792		mg/L		116	70 - 137
1,2-Dichloroethane	0.0500	0.04940		mg/L		99	62 - 144
1,1-Dichloroethene	0.0500	0.05205		mg/L		104	67 - 134
cis-1,2-Dichloroethene	0.0500	0.05367		mg/L		107	70 - 130
trans-1,2-Dichloroethene	0.0500	0.05464		mg/L		109	70 - 130
1,2-Dichloropropane	0.0500	0.05965		mg/L		119	70 - 133
cis-1,3-Dichloropropene	0.0500	0.04811		mg/L		96	66 - 130
trans-1,3-Dichloropropene	0.0500	0.04311		mg/L		86	70 - 138
Ethylbenzene	0.0500	0.04304		mg/L		86	70 - 130
2-Hexanone	0.100	0.09497		mg/L		95	46 - 139
Methylene Chloride	0.0500	0.05345		mg/L		107	67 - 130
4-Methyl-2-pentanone (MIBK)	0.100	0.1115		mg/L		112	39 - 150
Styrene	0.0500	0.03923		mg/L		78	70 - 130
1,1,2,2-Tetrachloroethane	0.0500	0.04119		mg/L		82	62 - 130
Tetrachloroethene	0.0500	0.03316		mg/L		66	57 - 130
Toluene	0.0500	0.04450		mg/L		89	70 - 130
1,1,1-Trichloroethane	0.0500	0.05115		mg/L		102	67 - 139
1,1,2-Trichloroethane	0.0500	0.04113		mg/L		82	70 - 130
Trichloroethene	0.0500	0.05024		mg/L		100	70 - 130
Vinyl acetate	0.100	0.1216		mg/L		122	22 - 150
Vinyl chloride	0.0500	0.04466		mg/L		89	55 - 150
o-Xylene	0.0500	0.04237		mg/L		85	69 - 130
m-Xylene & p-Xylene	0.0500	0.04468		mg/L		89	70 - 130
Xylenes, Total	0.100	0.08705		mg/L		87	70 - 130
Bromodichloromethane	0.0500	0.04962		mg/L		99	70 - 130
1,2-Dichloroethene, Total	0.100	0.1083		mg/L		108	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*90*		*70 - 130*
Dibromofluoromethane	*88*		*62 - 130*
4-Bromofluorobenzene	*103*		*67 - 139*
1,2-Dichloroethane-d4 (Surr)	*87*		*50 - 134*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 600-89761-A-1-D MSD
Matrix: Water
Analysis Batch: 131416

Client Sample ID: Matrix Spike Duplicate
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.0454	U	2.00	2.271		mg/L		114	21 - 148	8	25
Benzene	0.0112	U	1.00	1.187		mg/L		119	70 - 131	7	21
Chlorobromomethane	0.0162	U	1.00	1.207		mg/L		121	70 - 130	5	25
Bromoform	0.0154	U	1.00	0.8281		mg/L		83	67 - 134	2	25
Bromomethane	0.0430	U	1.00	1.143		mg/L		114	45 - 150	1	25
2-Butanone (MEK)	0.0314	U	2.00	2.462		mg/L		123	34 - 140	2	25
Carbon disulfide	0.0340	U	1.00	1.198		mg/L		120	60 - 146	7	25
Carbon tetrachloride	0.0184	U	1.00	1.155		mg/L		116	68 - 140	7	25
Dibromochloromethane	0.0184	U	1.00	1.071		mg/L		107	70 - 130	0	25
Chlorobenzene	0.0164	U	1.00	1.099		mg/L		110	70 - 130	3	21
Chloroethane	0.0346	U	1.00	1.108		mg/L		111	65 - 138	7	25
Chloroform	0.0164	U	1.00	1.159		mg/L		116	70 - 131	7	25
Chloromethane	0.0170	U	1.00	1.392		mg/L		139	15 - 150	8	25
1,1-Dichloroethane	0.0100	U	1.00	1.111		mg/L		111	70 - 137	9	25
1,2-Dichloroethane	0.0202	U	1.00	1.113		mg/L		111	62 - 144	8	25
1,1-Dichloroethene	0.0152	U	1.00	1.197		mg/L		120	67 - 134	7	22
cis-1,2-Dichloroethene	0.0112	U	1.00	1.171		mg/L		117	70 - 130	9	25
trans-1,2-Dichloroethene	0.0176	U	1.00	1.181		mg/L		118	70 - 130	8	25
1,2-Dichloropropane	0.0282	U	1.00	1.128		mg/L		113	70 - 133	8	25
cis-1,3-Dichloropropene	0.0194	U	1.00	1.015		mg/L		101	66 - 130	2	25
trans-1,3-Dichloropropene	0.0118	U	1.00	1.028		mg/L		103	70 - 138	1	25
Ethylbenzene	0.0258	U	1.00	1.115		mg/L		111	70 - 130	3	25
2-Hexanone	0.0284	U	2.00	2.151		mg/L		108	46 - 139	2	25
Methylene Chloride	0.0286	U	1.00	1.084		mg/L		108	67 - 130	8	25
4-Methyl-2-pentanone (MIBK)	0.0222	U	2.00	2.220		mg/L		111	39 - 150	6	25
Styrene	0.0112	U	1.00	1.077		mg/L		108	70 - 130	4	25
1,1,2,2-Tetrachloroethane	0.0160	U	1.00	1.176		mg/L		118	62 - 130	1	25
Tetrachloroethene	0.0248	U	1.00	1.031		mg/L		103	57 - 130	4	25
Toluene	0.0110	U	1.00	1.133		mg/L		113	70 - 130	3	21
1,1,1-Trichloroethane	0.0196	U	1.00	1.157		mg/L		116	67 - 139	8	25
1,1,2-Trichloroethane	0.0106	U	1.00	1.132		mg/L		113	70 - 130	1	25
Trichloroethene	0.0316	U	1.00	1.194		mg/L		119	70 - 130	8	24
Vinyl acetate	0.0120	U	2.00	2.241		mg/L		112	22 - 150	5	25
Vinyl chloride	0.0170	U	1.00	1.497		mg/L		150	55 - 150	5	25
o-Xylene	0.0186	U	1.00	1.137		mg/L		114	69 - 130	5	25
m-Xylene & p-Xylene	0.0252	U	1.00	1.123		mg/L		112	70 - 130	2	25
Xylenes, Total	0.0396	U	2.00	2.260		mg/L		113	70 - 130	3	25
Bromodichloromethane	0.0152	U	1.00	1.116		mg/L		112	70 - 130	7	25
1,2-Dichloroethene, Total	0.0168	U	2.00	2.352		mg/L		118	70 - 130	8	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*90*		*70 - 130*
Dibromofluoromethane	*92*		*62 - 130*
4-Bromofluorobenzene	*75*		*67 - 139*
1,2-Dichloroethane-d4 (Surr)	*84*		*50 - 134*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 600-89761-A-1-E MS
Matrix: Water
Analysis Batch: 131416

Client Sample ID: Matrix Spike
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.0454	U	2.00	2.092		mg/L		105	21 - 148
Benzene	0.0112	U	1.00	1.268		mg/L		127	70 - 131
Chlorobromomethane	0.0162	U	1.00	1.267		mg/L		127	70 - 130
Bromoform	0.0154	U	1.00	0.8439		mg/L		84	67 - 134
Bromomethane	0.0430	U	1.00	1.151		mg/L		115	45 - 150
2-Butanone (MEK)	0.0314	U	2.00	2.519		mg/L		126	34 - 140
Carbon disulfide	0.0340	U	1.00	1.278		mg/L		128	60 - 146
Carbon tetrachloride	0.0184	U	1.00	1.233		mg/L		123	68 - 140
Dibromochloromethane	0.0184	U	1.00	1.071		mg/L		107	70 - 130
Chlorobenzene	0.0164	U	1.00	1.135		mg/L		113	70 - 130
Chloroethane	0.0346	U	1.00	1.194		mg/L		119	65 - 138
Chloroform	0.0164	U	1.00	1.238		mg/L		124	70 - 131
Chloromethane	0.0170	U	1.00	1.511	N1	mg/L		151	15 - 150
1,1-Dichloroethane	0.0100	U	1.00	1.211		mg/L		121	70 - 137
1,2-Dichloroethane	0.0202	U	1.00	1.208		mg/L		121	62 - 144
1,1-Dichloroethene	0.0152	U	1.00	1.289		mg/L		129	67 - 134
cis-1,2-Dichloroethene	0.0112	U	1.00	1.283		mg/L		128	70 - 130
trans-1,2-Dichloroethene	0.0176	U	1.00	1.275		mg/L		127	70 - 130
1,2-Dichloropropane	0.0282	U	1.00	1.223		mg/L		122	70 - 133
cis-1,3-Dichloropropene	0.0194	U	1.00	1.039		mg/L		104	66 - 130
trans-1,3-Dichloropropene	0.0118	U	1.00	1.017		mg/L		102	70 - 138
Ethylbenzene	0.0258	U	1.00	1.146		mg/L		115	70 - 130
2-Hexanone	0.0284	U	2.00	2.189		mg/L		109	46 - 139
Methylene Chloride	0.0286	U	1.00	1.170		mg/L		117	67 - 130
4-Methyl-2-pentanone (MIBK)	0.0222	U	2.00	2.364		mg/L		118	39 - 150
Styrene	0.0112	U	1.00	1.115		mg/L		112	70 - 130
1,1,2,2-Tetrachloroethane	0.0160	U	1.00	1.161		mg/L		116	62 - 130
Tetrachloroethene	0.0248	U	1.00	1.071		mg/L		107	57 - 130
Toluene	0.0110	U	1.00	1.164		mg/L		116	70 - 130
1,1,1-Trichloroethane	0.0196	U	1.00	1.259		mg/L		126	67 - 139
1,1,2-Trichloroethane	0.0106	U	1.00	1.145		mg/L		114	70 - 130
Trichloroethene	0.0316	U	1.00	1.291		mg/L		129	70 - 130
Vinyl acetate	0.0120	U	2.00	2.355		mg/L		118	22 - 150
Vinyl chloride	0.0170	U	1.00	1.576	N1	mg/L		158	55 - 150
o-Xylene	0.0186	U	1.00	1.193		mg/L		119	69 - 130
m-Xylene & p-Xylene	0.0252	U	1.00	1.142		mg/L		114	70 - 130
Xylenes, Total	0.0396	U	2.00	2.335		mg/L		117	70 - 130
Bromodichloromethane	0.0152	U	1.00	1.195		mg/L		119	70 - 130
1,2-Dichloroethene, Total	0.0168	U	2.00	2.558		mg/L		128	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*70 - 130*
Dibromofluoromethane	*98*		*62 - 130*
4-Bromofluorobenzene	*81*		*67 - 139*
1,2-Dichloroethane-d4 (Surr)	*93*		*50 - 134*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 600-89841-A-1-K MSD
Matrix: Water
Analysis Batch: 131549

Client Sample ID: Matrix Spike Duplicate
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	0.421		2.00	2.274		mg/L		93	21 - 148	3	25
Benzene	0.0112	U	1.00	1.073		mg/L		107	70 - 131	10	21
Chlorobromomethane	0.0162	U	1.00	1.041		mg/L		104	70 - 130	4	25
Bromoform	0.0154	U	1.00	0.9358		mg/L		94	67 - 134	2	25
Bromomethane	0.0430	U	1.00	1.148		mg/L		115	45 - 150	3	25
2-Butanone (MEK)	0.441		2.00	2.337		mg/L		95	34 - 140	10	25
Carbon disulfide	0.0340	U	1.00	1.045		mg/L		104	60 - 146	10	25
Carbon tetrachloride	0.0184	U	1.00	0.9222		mg/L		92	68 - 140	16	25
Dibromochloromethane	0.0184	U	1.00	0.8191		mg/L		82	70 - 130	4	25
Chlorobenzene	0.0164	U	1.00	0.8338		mg/L		83	70 - 130	6	21
Chloroethane	0.0346	U	1.00	1.126		mg/L		113	65 - 138	3	25
Chloroform	0.0164	U	1.00	1.098		mg/L		110	70 - 131	2	25
Chloromethane	0.0170	U	1.00	0.7960		mg/L		80	15 - 150	4	25
1,1-Dichloroethane	0.0100	U	1.00	1.143		mg/L		114	70 - 137	2	25
1,2-Dichloroethane	0.0202	U	1.00	0.9775		mg/L		98	62 - 144	11	25
1,1-Dichloroethene	0.0152	U	1.00	0.9179		mg/L		92	67 - 134	7	22
cis-1,2-Dichloroethene	0.0112	U	1.00	1.069		mg/L		107	70 - 130	2	25
trans-1,2-Dichloroethene	0.0176	U	1.00	1.029		mg/L		103	70 - 130	11	25
1,2-Dichloropropane	0.0282	U	1.00	1.116		mg/L		112	70 - 133	4	25
cis-1,3-Dichloropropene	0.0194	U	1.00	0.9862		mg/L		99	66 - 130	1	25
trans-1,3-Dichloropropene	0.0118	U	1.00	0.9045		mg/L		90	70 - 138	5	25
Ethylbenzene	0.0258	U	1.00	0.8552		mg/L		86	70 - 130	1	25
2-Hexanone	0.0815	J	2.00	2.153		mg/L		104	46 - 139	10	25
Methylene Chloride	0.0286	U	1.00	1.016		mg/L		102	67 - 130	9	25
4-Methyl-2-pentanone (MIBK)	0.0731	J	2.00	2.318		mg/L		112	39 - 150	2	25
Styrene	0.0112	U	1.00	0.7510		mg/L		75	70 - 130	4	25
1,1,2,2-Tetrachloroethane	0.0160	U	1.00	0.8575		mg/L		86	62 - 130	8	25
Tetrachloroethene	0.0248	U	1.00	0.5595	N1	mg/L		56	57 - 130	11	25
Toluene	0.0110	U	1.00	0.9028		mg/L		90	70 - 130	4	21
1,1,1-Trichloroethane	0.0196	U	1.00	0.9138		mg/L		91	67 - 139	11	25
1,1,2-Trichloroethane	0.0106	U	1.00	0.8564		mg/L		86	70 - 130	5	25
Trichloroethene	0.0316	U	1.00	0.9143		mg/L		91	70 - 130	10	24
Vinyl acetate	0.0120	U	2.00	2.430		mg/L		122	22 - 150	6	25
Vinyl chloride	0.0170	U	1.00	0.8950		mg/L		89	55 - 150	1	25
o-Xylene	0.0186	U	1.00	0.8779		mg/L		88	69 - 130	1	25
m-Xylene & p-Xylene	0.0252	U	1.00	0.8558		mg/L		86	70 - 130	5	25
Xylenes, Total	0.0396	U	2.00	1.734		mg/L		87	70 - 130	3	25
Bromodichloromethane	0.0152	U	1.00	0.9079		mg/L		91	70 - 130	8	25
1,2-Dichloroethene, Total	0.0168	U	2.00	2.098		mg/L		105	70 - 130	5	25

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*97*		*70 - 130*
Dibromofluoromethane	*91*		*62 - 130*
4-Bromofluorobenzene	*110*		*67 - 139*
1,2-Dichloroethane-d4 (Surr)	*105*		*50 - 134*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 600-89841-A-1-L MS
Matrix: Water
Analysis Batch: 131549

Client Sample ID: Matrix Spike
Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	0.421		2.00	2.333		mg/L		96	21 - 148
Benzene	0.0112	U	1.00	1.191		mg/L		119	70 - 131
Chlorobromomethane	0.0162	U	1.00	1.084		mg/L		108	70 - 130
Bromoform	0.0154	U	1.00	0.9519		mg/L		95	67 - 134
Bromomethane	0.0430	U	1.00	1.109		mg/L		111	45 - 150
2-Butanone (MEK)	0.441		2.00	2.107		mg/L		83	34 - 140
Carbon disulfide	0.0340	U	1.00	1.150		mg/L		115	60 - 146
Carbon tetrachloride	0.0184	U	1.00	1.088		mg/L		109	68 - 140
Dibromochloromethane	0.0184	U	1.00	0.8505		mg/L		85	70 - 130
Chlorobenzene	0.0164	U	1.00	0.8811		mg/L		88	70 - 130
Chloroethane	0.0346	U	1.00	1.094		mg/L		109	65 - 138
Chloroform	0.0164	U	1.00	1.121		mg/L		112	70 - 131
Chloromethane	0.0170	U	1.00	0.8283		mg/L		83	15 - 150
1,1-Dichloroethane	0.0100	U	1.00	1.170		mg/L		117	70 - 137
1,2-Dichloroethane	0.0202	U	1.00	1.094		mg/L		109	62 - 144
1,1-Dichloroethene	0.0152	U	1.00	0.9836		mg/L		98	67 - 134
cis-1,2-Dichloroethene	0.0112	U	1.00	1.046		mg/L		105	70 - 130
trans-1,2-Dichloroethene	0.0176	U	1.00	1.150		mg/L		115	70 - 130
1,2-Dichloropropane	0.0282	U	1.00	1.161		mg/L		116	70 - 133
cis-1,3-Dichloropropene	0.0194	U	1.00	0.9803		mg/L		98	66 - 130
trans-1,3-Dichloropropene	0.0118	U	1.00	0.9472		mg/L		95	70 - 138
Ethylbenzene	0.0258	U	1.00	0.8461		mg/L		85	70 - 130
2-Hexanone	0.0815	J	2.00	1.955		mg/L		94	46 - 139
Methylene Chloride	0.0286	U	1.00	1.108		mg/L		111	67 - 130
4-Methyl-2-pentanone (MIBK)	0.0731	J	2.00	2.373		mg/L		115	39 - 150
Styrene	0.0112	U	1.00	0.7792		mg/L		78	70 - 130
1,1,2,2-Tetrachloroethane	0.0160	U	1.00	0.9322		mg/L		93	62 - 130
Tetrachloroethene	0.0248	U	1.00	0.6261		mg/L		63	57 - 130
Toluene	0.0110	U	1.00	0.9374		mg/L		94	70 - 130
1,1,1-Trichloroethane	0.0196	U	1.00	1.020		mg/L		102	67 - 139
1,1,2-Trichloroethane	0.0106	U	1.00	0.9034		mg/L		90	70 - 130
Trichloroethene	0.0316	U	1.00	1.007		mg/L		101	70 - 130
Vinyl acetate	0.0120	U	2.00	2.573		mg/L		129	22 - 150
Vinyl chloride	0.0170	U	1.00	0.9038		mg/L		90	55 - 150
o-Xylene	0.0186	U	1.00	0.8836		mg/L		88	69 - 130
m-Xylene & p-Xylene	0.0252	U	1.00	0.9028		mg/L		90	70 - 130
Xylenes, Total	0.0396	U	2.00	1.786		mg/L		89	70 - 130
Bromodichloromethane	0.0152	U	1.00	0.9853		mg/L		99	70 - 130
1,2-Dichloroethene, Total	0.0168	U	2.00	2.196		mg/L		110	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*70 - 130*
Dibromofluoromethane	*97*		*62 - 130*
4-Bromofluorobenzene	*112*		*67 - 139*
1,2-Dichloroethane-d4 (Surr)	*101*		*50 - 134*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 600-131222/1-A
Matrix: Water
Analysis Batch: 131423

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 131222

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.000160	U	0.000500	0.000160	mg/L		04/04/14 10:44	04/04/14 15:31	1
Acenaphthylene	0.000160	U	0.000500	0.000160	mg/L		04/04/14 10:44	04/04/14 15:31	1
Anthracene	0.000440	U	0.000500	0.000440	mg/L		04/04/14 10:44	04/04/14 15:31	1
Benzidine	0.0179	U	0.0500	0.0179	mg/L		04/04/14 10:44	04/04/14 15:31	1
Benzo[a]anthracene	0.000250	U	0.000500	0.000250	mg/L		04/04/14 10:44	04/04/14 15:31	1
Benzo[b]fluoranthene	0.000180	U	0.000500	0.000180	mg/L		04/04/14 10:44	04/04/14 15:31	1
Benzo[a]pyrene	0.000130	U	0.000500	0.000130	mg/L		04/04/14 10:44	04/04/14 15:31	1
Benzo[g,h,i]perylene	0.000350	U	0.000500	0.000350	mg/L		04/04/14 10:44	04/04/14 15:31	1
Benzo[k]fluoranthene	0.000160	U	0.000500	0.000160	mg/L		04/04/14 10:44	04/04/14 15:31	1
Bis(2-chloroethoxy)methane	0.000190	U	0.000500	0.000190	mg/L		04/04/14 10:44	04/04/14 15:31	1
Bis(2-chloroethyl)ether	0.000180	U	0.000500	0.000180	mg/L		04/04/14 10:44	04/04/14 15:31	1
Bis(2-ethylhexyl) phthalate	0.000590	U	0.00150	0.000590	mg/L		04/04/14 10:44	04/04/14 15:31	1
4-Bromophenyl phenyl ether	0.000250	U	0.000500	0.000250	mg/L		04/04/14 10:44	04/04/14 15:31	1
Butyl benzyl phthalate	0.000850	U	0.00250	0.000850	mg/L		04/04/14 10:44	04/04/14 15:31	1
Carbazole	0.000350	U	0.000500	0.000350	mg/L		04/04/14 10:44	04/04/14 15:31	1
4-Chloroaniline	0.000110	U	0.000500	0.000110	mg/L		04/04/14 10:44	04/04/14 15:31	1
2-Chloronaphthalene	0.000190	U	0.000500	0.000190	mg/L		04/04/14 10:44	04/04/14 15:31	1
4-Chlorophenyl phenyl ether	0.000230	U	0.000500	0.000230	mg/L		04/04/14 10:44	04/04/14 15:31	1
Chrysene	0.000240	U	0.000500	0.000240	mg/L		04/04/14 10:44	04/04/14 15:31	1
Dibenz(a,h)anthracene	0.000290	U	0.000500	0.000290	mg/L		04/04/14 10:44	04/04/14 15:31	1
Dibenzofuran	0.000160	U	0.000500	0.000160	mg/L		04/04/14 10:44	04/04/14 15:31	1
1,2-Dichlorobenzene	0.000210	U	0.000500	0.000210	mg/L		04/04/14 10:44	04/04/14 15:31	1
1,3-Dichlorobenzene	0.000100	U	0.000500	0.000100	mg/L		04/04/14 10:44	04/04/14 15:31	1
1,4-Dichlorobenzene	0.000160	U	0.000500	0.000160	mg/L		04/04/14 10:44	04/04/14 15:31	1
3,3'-Dichlorobenzidine	0.000320	U	0.000500	0.000320	mg/L		04/04/14 10:44	04/04/14 15:31	1
Diethyl phthalate	0.00419	U	0.00500	0.00419	mg/L		04/04/14 10:44	04/04/14 15:31	1
Dimethyl phthalate	0.000180	U	0.00500	0.000180	mg/L		04/04/14 10:44	04/04/14 15:31	1
Di-n-butyl phthalate	0.00187	U	0.00500	0.00187	mg/L		04/04/14 10:44	04/04/14 15:31	1
2,4-Dinitrotoluene	0.000320	U	0.000500	0.000320	mg/L		04/04/14 10:44	04/04/14 15:31	1
Di-n-octyl phthalate	0.000160	U	0.00500	0.000160	mg/L		04/04/14 10:44	04/04/14 15:31	1
Fluoranthene	0.000310	U	0.000500	0.000310	mg/L		04/04/14 10:44	04/04/14 15:31	1
Fluorene	0.000120	U	0.000500	0.000120	mg/L		04/04/14 10:44	04/04/14 15:31	1
Hexachlorobenzene	0.000250	U	0.000500	0.000250	mg/L		04/04/14 10:44	04/04/14 15:31	1
Hexachlorobutadiene	0.000190	U	0.000500	0.000190	mg/L		04/04/14 10:44	04/04/14 15:31	1
Hexachlorocyclopentadiene	0.000150	U	0.000500	0.000150	mg/L		04/04/14 10:44	04/04/14 15:31	1
Hexachloroethane	0.000170	U	0.000500	0.000170	mg/L		04/04/14 10:44	04/04/14 15:31	1
Benzyl alcohol	0.000510	U	0.000500	0.000510	mg/L		04/04/14 10:44	04/04/14 15:31	1
Indeno[1,2,3-cd]pyrene	0.000290	U	0.000500	0.000290	mg/L		04/04/14 10:44	04/04/14 15:31	1
4-Chloro-3-methylphenol	0.000250	U	0.000500	0.000250	mg/L		04/04/14 10:44	04/04/14 15:31	1
Isophorone	0.000150	U	0.000500	0.000150	mg/L		04/04/14 10:44	04/04/14 15:31	1
2-Chlorophenol	0.000220	U	0.000500	0.000220	mg/L		04/04/14 10:44	04/04/14 15:31	1
2-Methylnaphthalene	0.000140	U	0.000500	0.000140	mg/L		04/04/14 10:44	04/04/14 15:31	1
2-Methylphenol	0.000190	U	0.000500	0.000190	mg/L		04/04/14 10:44	04/04/14 15:31	1
3 & 4 Methylphenol	0.000160	U	0.00100	0.000160	mg/L		04/04/14 10:44	04/04/14 15:31	1
2,4-Dichlorophenol	0.000260	U	0.000500	0.000260	mg/L		04/04/14 10:44	04/04/14 15:31	1
Naphthalene	0.000160	U	0.000500	0.000160	mg/L		04/04/14 10:44	04/04/14 15:31	1
2,4-Dimethylphenol	0.000180	U	0.000500	0.000180	mg/L		04/04/14 10:44	04/04/14 15:31	1
2-Nitroaniline	0.000350	U	0.000500	0.000350	mg/L		04/04/14 10:44	04/04/14 15:31	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 600-131222/1-A
Matrix: Water
Analysis Batch: 131423

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 131222

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	0.000160	U	0.00100	0.000160	mg/L		04/04/14 10:44	04/04/14 15:31	1
2,4-Dinitrophenol	0.000400	U	0.00100	0.000400	mg/L		04/04/14 10:44	04/04/14 15:31	1
3-Nitroaniline	0.000130	U	0.000500	0.000130	mg/L		04/04/14 10:44	04/04/14 15:31	1
4-Nitroaniline	0.000230	U	0.000500	0.000230	mg/L		04/04/14 10:44	04/04/14 15:31	1
Nitrobenzene	0.000200	U	0.000500	0.000200	mg/L		04/04/14 10:44	04/04/14 15:31	1
2-Nitrophenol	0.000220	U	0.000500	0.000220	mg/L		04/04/14 10:44	04/04/14 15:31	1
4-Nitrophenol	0.000330	U	0.00100	0.000330	mg/L		04/04/14 10:44	04/04/14 15:31	1
N-Nitrosodimethylamine	0.000160	U	0.000500	0.000160	mg/L		04/04/14 10:44	04/04/14 15:31	1
N-Nitrosodi-n-propylamine	0.000240	U	0.000500	0.000240	mg/L		04/04/14 10:44	04/04/14 15:31	1
N-Nitrosodiphenylamine	0.000330	U	0.000500	0.000330	mg/L		04/04/14 10:44	04/04/14 15:31	1
Pentachlorophenol	0.000960	U	0.00100	0.000960	mg/L		04/04/14 10:44	04/04/14 15:31	1
Phenanthrene	0.000290	U	0.000500	0.000290	mg/L		04/04/14 10:44	04/04/14 15:31	1
Phenol	0.000140	U	0.000500	0.000140	mg/L		04/04/14 10:44	04/04/14 15:31	1
Pyrene	0.000330	U	0.000500	0.000330	mg/L		04/04/14 10:44	04/04/14 15:31	1
1,2,4-Trichlorobenzene	0.000160	U	0.000500	0.000160	mg/L		04/04/14 10:44	04/04/14 15:31	1
2,6-Dinitrotoluene	0.000290	U	0.000500	0.000290	mg/L		04/04/14 10:44	04/04/14 15:31	1
2,4,5-Trichlorophenol	0.000290	U	0.000500	0.000290	mg/L		04/04/14 10:44	04/04/14 15:31	1
bis (2-Chloroisopropyl) ether	0.000180	U	0.000500	0.000180	mg/L		04/04/14 10:44	04/04/14 15:31	1
2,4,6-Trichlorophenol	0.000330	U	0.000500	0.000330	mg/L		04/04/14 10:44	04/04/14 15:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*78*		*40 - 130*	*04/04/14 10:44*	*04/04/14 15:31*	*1*
2-Fluorophenol	*45*		*12 - 130*	*04/04/14 10:44*	*04/04/14 15:31*	*1*
2-Fluorobiphenyl	*81*		*36 - 130*	*04/04/14 10:44*	*04/04/14 15:31*	*1*
Terphenyl-d14	*109*		*52 - 130*	*04/04/14 10:44*	*04/04/14 15:31*	*1*
2,4,6-Tribromophenol	*96*		*17 - 137*	*04/04/14 10:44*	*04/04/14 15:31*	*1*
Phenol-d5 (Surr)	*25*		*10 - 130*	*04/04/14 10:44*	*04/04/14 15:31*	*1*

Lab Sample ID: LCS 600-131222/2-A
Matrix: Water
Analysis Batch: 131423

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 131222

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.00800	0.006259		mg/L		78	53 - 130
Acenaphthylene	0.00800	0.006302		mg/L		79	55 - 130
Anthracene	0.00800	0.006800		mg/L		85	52 - 130
Benzidine	0.0417	0.0179	U	mg/L		23	10 - 130
Benzo[a]anthracene	0.00800	0.006926		mg/L		87	56 - 130
Benzo[b]fluoranthene	0.00800	0.007079		mg/L		88	58 - 130
Benzo[a]pyrene	0.00800	0.006914		mg/L		86	58 - 130
Benzo[g,h,i]perylene	0.00800	0.006328		mg/L		79	59 - 130
Benzo[k]fluoranthene	0.00800	0.006464		mg/L		81	50 - 135
Bis(2-chloroethoxy)methane	0.00800	0.006331		mg/L		79	53 - 130
Bis(2-chloroethyl)ether	0.00800	0.005791		mg/L		72	44 - 130
Bis(2-ethylhexyl) phthalate	0.00800	0.007934		mg/L		99	61 - 130
4-Bromophenyl phenyl ether	0.00800	0.006422		mg/L		80	58 - 130
Butyl benzyl phthalate	0.00800	0.007081		mg/L		89	58 - 130
Carbazole	0.00800	0.005705		mg/L		71	32 - 133

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 600-131222/2-A
Matrix: Water
Analysis Batch: 131423

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 131222

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chloroaniline	0.00800	0.007207		mg/L		90	10 - 150
2-Chloronaphthalene	0.00800	0.005354		mg/L		67	50 - 130
4-Chlorophenyl phenyl ether	0.00800	0.006846		mg/L		86	55 - 130
Chrysene	0.00800	0.006595		mg/L		82	52 - 130
Dibenz(a,h)anthracene	0.00800	0.006023		mg/L		75	60 - 130
Dibenzofuran	0.00800	0.006535		mg/L		82	53 - 130
1,2-Dichlorobenzene	0.00800	0.004694		mg/L		59	45 - 130
1,3-Dichlorobenzene	0.00800	0.004393		mg/L		55	40 - 130
1,4-Dichlorobenzene	0.00800	0.004460		mg/L		56	40 - 130
3,3'-Dichlorobenzidine	0.00800	0.005762		mg/L		72	10 - 150
Diethyl phthalate	0.00800	0.008670		mg/L		108	61 - 130
Dimethyl phthalate	0.00800	0.008116		mg/L		101	57 - 130
Di-n-butyl phthalate	0.00800	0.006974		mg/L		87	57 - 130
2,4-Dinitrotoluene	0.00800	0.007956		mg/L		99	55 - 130
Di-n-octyl phthalate	0.00800	0.006574		mg/L		82	61 - 130
Fluoranthene	0.00800	0.006714		mg/L		84	59 - 130
Fluorene	0.00800	0.007347		mg/L		92	56 - 130
Hexachlorobenzene	0.00800	0.006175		mg/L		77	51 - 130
Hexachlorobutadiene	0.00800	0.004322		mg/L		54	31 - 130
Hexachlorocyclopentadiene	0.00800	0.003389		mg/L		42	10 - 130
Hexachloroethane	0.00800	0.004014		mg/L		50	34 - 130
Benzyl alcohol	0.00800	0.004629		mg/L		58	27 - 130
Indeno[1,2,3-cd]pyrene	0.00800	0.007107		mg/L		89	52 - 130
4-Chloro-3-methylphenol	0.00800	0.006978		mg/L		87	46 - 130
Isophorone	0.00800	0.006565		mg/L		82	51 - 108
2-Chlorophenol	0.00800	0.005408		mg/L		68	52 - 130
2-Methylnaphthalene	0.00800	0.005939		mg/L		74	52 - 130
2-Methylphenol	0.00800	0.005099		mg/L		64	36 - 130
3 & 4 Methylphenol	0.00800	0.004085		mg/L		51	37 - 130
2,4-Dichlorophenol	0.00800	0.006003		mg/L		75	44 - 130
Naphthalene	0.00800	0.005597		mg/L		70	51 - 130
2,4-Dimethylphenol	0.00800	0.006956		mg/L		87	36 - 130
2-Nitroaniline	0.00800	0.006905		mg/L		86	55 - 130
4,6-Dinitro-2-methylphenol	0.0160	0.01115		mg/L		70	21 - 130
2,4-Dinitrophenol	0.0160	0.01108		mg/L		69	10 - 130
3-Nitroaniline	0.00800	0.007332		mg/L		92	10 - 150
4-Nitroaniline	0.00800	0.006994		mg/L		87	24 - 130
Nitrobenzene	0.00800	0.006002		mg/L		75	55 - 130
2-Nitrophenol	0.00800	0.005554		mg/L		69	56 - 130
4-Nitrophenol	0.0160	0.005825		mg/L		36	10 - 130
N-Nitrosodimethylamine	0.00800	0.004071		mg/L		51	24 - 130
N-Nitrosodi-n-propylamine	0.00800	0.006066		mg/L		76	47 - 130
N-Nitrosodiphenylamine	0.00800	0.006513		mg/L		81	42 - 130
Pentachlorophenol	0.0160	0.01209		mg/L		76	10 - 130
Phenanthrene	0.00800	0.006500		mg/L		81	52 - 130
Phenol	0.00800	0.001975		mg/L		25	10 - 130
Pyrene	0.00800	0.007110		mg/L		89	55 - 130
1,2,4-Trichlorobenzene	0.00800	0.004824		mg/L		60	41 - 130

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 600-131222/2-A
Matrix: Water
Analysis Batch: 131423

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 131222

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,6-Dinitrotoluene	0.00800	0.007916		mg/L		99	55 - 130
2,4,5-Trichlorophenol	0.00800	0.005844		mg/L		73	46 - 131
bis (2-Chloroisopropyl) ether	0.00800	0.006053		mg/L		76	44 - 130
2,4,6-Trichlorophenol	0.00800	0.005516		mg/L		69	42 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*75*		*40 - 130*
2-Fluorophenol	*37*		*12 - 130*
2-Fluorobiphenyl	*61*		*36 - 130*
Terphenyl-d14	*85*		*52 - 130*
2,4,6-Tribromophenol	*92*		*17 - 137*
Phenol-d5 (Surr)	*25*		*10 - 130*

Lab Sample ID: 600-89799-21 MS
Matrix: Water
Analysis Batch: 131423

Client Sample ID: Rinse Blank-Geo
Prep Type: Total/NA
Prep Batch: 131222

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.000160	U	0.00800	0.006214		mg/L		78	53 - 130
Acenaphthylene	0.000160	U	0.00800	0.006082		mg/L		76	55 - 130
Anthracene	0.000440	U	0.00800	0.006662		mg/L		83	52 - 130
Benzidine	0.0179	U	0.0417	0.0179	U N1	mg/L		0	10 - 130
Benzo[a]anthracene	0.000250	U	0.00800	0.006857		mg/L		86	56 - 130
Benzo[b]fluoranthene	0.000180	U	0.00800	0.007262		mg/L		91	58 - 130
Benzo[a]pyrene	0.000130	U	0.00800	0.006973		mg/L		87	58 - 130
Benzo[g,h,i]perylene	0.000350	U	0.00800	0.005344		mg/L		67	59 - 130
Benzo[k]fluoranthene	0.000160	U	0.00800	0.006665		mg/L		83	50 - 135
Bis(2-chloroethoxy)methane	0.000190	U	0.00800	0.006523		mg/L		82	53 - 130
Bis(2-chloroethyl)ether	0.000180	U	0.00800	0.005878		mg/L		73	44 - 130
Bis(2-ethylhexyl) phthalate	0.000590	U	0.00800	0.007899		mg/L		99	61 - 130
4-Bromophenyl phenyl ether	0.000250	U	0.00800	0.006232		mg/L		78	58 - 130
Butyl benzyl phthalate	0.000850	U	0.00800	0.007029		mg/L		88	58 - 130
Carbazole	0.000350	U	0.00800	0.007461		mg/L		93	32 - 133
4-Chloroaniline	0.000110	U	0.00800	0.006418		mg/L		80	10 - 150
2-Chloronaphthalene	0.000190	U	0.00800	0.005835		mg/L		73	50 - 130
4-Chlorophenyl phenyl ether	0.000230	U	0.00800	0.006221		mg/L		78	55 - 130
Chrysene	0.000240	U	0.00800	0.006574		mg/L		82	52 - 130
Dibenz(a,h)anthracene	0.000290	U	0.00800	0.005274		mg/L		66	60 - 130
Dibenzofuran	0.000160	U	0.00800	0.006203		mg/L		78	53 - 130
1,2-Dichlorobenzene	0.000292	J	0.00800	0.02645	N1	mg/L		327	45 - 130
1,3-Dichlorobenzene	0.000100	U	0.00800	0.003855		mg/L		48	40 - 130
1,4-Dichlorobenzene	0.000160	U	0.00800	0.003998		mg/L		50	40 - 130
3,3'-Dichlorobenzidine	0.000320	U	0.00800	0.005543		mg/L		69	10 - 150
Diethyl phthalate	0.00419	U	0.00800	0.007399		mg/L		92	61 - 130
Dimethyl phthalate	0.000180	U	0.00800	0.007099		mg/L		89	57 - 130
Di-n-butyl phthalate	0.00187	U	0.00800	0.006695		mg/L		84	57 - 130
2,4-Dinitrotoluene	0.000320	U	0.00800	0.006639		mg/L		83	55 - 130
Di-n-octyl phthalate	0.000311	J	0.00800	0.007199		mg/L		86	61 - 130

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: 600-89799-21 MS
Matrix: Water
Analysis Batch: 131423

Client Sample ID: Rinse Blank-Geo
Prep Type: Total/NA
Prep Batch: 131222

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoranthene	0.000310	U	0.00800	0.006312		mg/L		79	59 - 130
Fluorene	0.000120	U	0.00800	0.006452		mg/L		81	56 - 130
Hexachlorobenzene	0.000250	U	0.00800	0.006093		mg/L		76	51 - 130
Hexachlorobutadiene	0.000190	U	0.00800	0.003438		mg/L		43	31 - 130
Hexachlorocyclopentadiene	0.000150	U	0.00800	0.002380		mg/L		30	10 - 130
Hexachloroethane	0.000170	U	0.00800	0.003247		mg/L		41	34 - 130
Benzyl alcohol	0.000510	U	0.00800	0.005310		mg/L		66	27 - 130
Indeno[1,2,3-cd]pyrene	0.000290	U	0.00800	0.006520		mg/L		82	52 - 130
4-Chloro-3-methylphenol	0.000250	U	0.00800	0.006543		mg/L		82	46 - 130
Isophorone	0.000150	U	0.00800	0.006282		mg/L		79	51 - 108
2-Chlorophenol	0.000220	U	0.00800	0.005325		mg/L		67	52 - 130
2-Methylnaphthalene	0.000140	U	0.00800	0.005520		mg/L		69	52 - 130
2-Methylphenol	0.000190	U	0.00800	0.005060		mg/L		63	36 - 130
3 & 4 Methylphenol	0.000160	U	0.00800	0.004386		mg/L		55	37 - 130
2,4-Dichlorophenol	0.000260	U	0.00800	0.006393		mg/L		80	44 - 130
Naphthalene	0.000160	U	0.00800	0.005369		mg/L		67	51 - 130
2,4-Dimethylphenol	0.000180	U	0.00800	0.006657		mg/L		83	36 - 130
2-Nitroaniline	0.000350	U	0.00800	0.005953		mg/L		74	55 - 130
4,6-Dinitro-2-methylphenol	0.000160	U	0.0160	0.006958		mg/L		43	21 - 130
2,4-Dinitrophenol	0.000400	U	0.0160	0.001826		mg/L		11	10 - 130
3-Nitroaniline	0.000130	U	0.00800	0.005981		mg/L		75	10 - 150
4-Nitroaniline	0.000230	U	0.00800	0.006803		mg/L		85	24 - 130
Nitrobenzene	0.000200	U	0.00800	0.006396		mg/L		80	55 - 130
2-Nitrophenol	0.000220	U	0.00800	0.006132		mg/L		77	56 - 130
4-Nitrophenol	0.000330	U	0.0160	0.004468		mg/L		28	10 - 130
N-Nitrosodimethylamine	0.000160	U	0.00800	0.004066		mg/L		51	24 - 130
N-Nitrosodi-n-propylamine	0.000240	U	0.00800	0.006348		mg/L		79	47 - 130
N-Nitrosodiphenylamine	0.000330	U	0.00800	0.006573		mg/L		82	42 - 130
Pentachlorophenol	0.000960	U	0.0160	0.008051		mg/L		50	10 - 130
Phenanthrene	0.000290	U	0.00800	0.006644		mg/L		83	52 - 130
Phenol	0.000140	U	0.00800	0.002217		mg/L		28	10 - 130
Pyrene	0.000330	U	0.00800	0.007461		mg/L		93	55 - 130
1,2,4-Trichlorobenzene	0.000160	U	0.00800	0.004525		mg/L		57	41 - 130
2,6-Dinitrotoluene	0.000290	U	0.00800	0.007100		mg/L		89	55 - 130
2,4,5-Trichlorophenol	0.000290	U	0.00800	0.005765		mg/L		72	46 - 131
bis (2-Chloroisopropyl) ether	0.000180	U	0.00800	0.006158		mg/L		77	44 - 130
2,4,6-Trichlorophenol	0.000330	U	0.00800	0.006153		mg/L		77	42 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Nitrobenzene-d5	*70*		*40 - 130*
2-Fluorophenol	*46*		*12 - 130*
2-Fluorobiphenyl	*82*		*36 - 130*
Terphenyl-d14	*93*		*52 - 130*
2,4,6-Tribromophenol	*88*		*17 - 137*
Phenol-d5 (Surr)	*30*		*10 - 130*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: 600-89799-21 MSD
Matrix: Water
Analysis Batch: 131423

Client Sample ID: Rinse Blank-Geo
Prep Type: Total/NA
Prep Batch: 131222

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	0.000160	U	0.00800	0.006794		mg/L		85	53 - 130	9	20
Acenaphthylene	0.000160	U	0.00800	0.006534		mg/L		82	55 - 130	7	20
Anthracene	0.000440	U	0.00800	0.006924		mg/L		87	52 - 130	4	20
Benzidine	0.0179	U	0.0417	0.0179	U N1	mg/L		0	10 - 130	NC	40
Benzo[a]anthracene	0.000250	U	0.00800	0.007267		mg/L		91	56 - 130	6	20
Benzo[b]fluoranthene	0.000180	U	0.00800	0.007693		mg/L		96	58 - 130	6	20
Benzo[a]pyrene	0.000130	U	0.00800	0.007300		mg/L		91	58 - 130	5	20
Benzo[g,h,i]perylene	0.000350	U	0.00800	0.004877		mg/L		61	59 - 130	9	20
Benzo[k]fluoranthene	0.000160	U	0.00800	0.007111		mg/L		89	50 - 135	6	20
Bis(2-chloroethoxy)methane	0.000190	U	0.00800	0.006876		mg/L		86	53 - 130	5	20
Bis(2-chloroethyl)ether	0.000180	U	0.00800	0.005701		mg/L		71	44 - 130	3	20
Bis(2-ethylhexyl) phthalate	0.000590	U	0.00800	0.008914		mg/L		111	61 - 130	12	20
4-Bromophenyl phenyl ether	0.000250	U	0.00800	0.006929		mg/L		87	58 - 130	11	20
Butyl benzyl phthalate	0.000850	U	0.00800	0.008195		mg/L		102	58 - 130	15	20
Carbazole	0.000350	U	0.00800	0.006205		mg/L		78	32 - 133	18	20
4-Chloroaniline	0.000110	U	0.00800	0.007590		mg/L		95	10 - 150	17	20
2-Chloronaphthalene	0.000190	U	0.00800	0.005628		mg/L		70	50 - 130	4	20
4-Chlorophenyl phenyl ether	0.000230	U	0.00800	0.007739	N2	mg/L		97	55 - 130	22	20
Chrysene	0.000240	U	0.00800	0.007303		mg/L		91	52 - 130	11	20
Dibenz(a,h)anthracene	0.000290	U	0.00800	0.004419	N1	mg/L		55	60 - 130	18	20
Dibenzofuran	0.000160	U	0.00800	0.007012		mg/L		88	53 - 130	12	20
1,2-Dichlorobenzene	0.000292	J	0.00800	0.007398	N2	mg/L		89	45 - 130	113	20
1,3-Dichlorobenzene	0.000100	U	0.00800	0.004480		mg/L		56	40 - 130	15	20
1,4-Dichlorobenzene	0.000160	U	0.00800	0.004462		mg/L		56	40 - 130	11	20
3,3'-Dichlorobenzidine	0.000320	U	0.00800	0.004202		mg/L		53	10 - 150	28	40
Diethyl phthalate	0.00419	U	0.00800	0.009503	N2	mg/L		119	61 - 130	25	20
Dimethyl phthalate	0.000180	U	0.00800	0.009008	N2	mg/L		113	57 - 130	24	20
Di-n-butyl phthalate	0.00187	U	0.00800	0.006962		mg/L		87	57 - 130	4	20
2,4-Dinitrotoluene	0.000320	U	0.00800	0.008265	N2	mg/L		103	55 - 130	22	20
Di-n-octyl phthalate	0.000311	J	0.00800	0.008224		mg/L		99	61 - 130	13	20
Fluoranthene	0.000310	U	0.00800	0.006537		mg/L		82	59 - 130	4	20
Fluorene	0.000120	U	0.00800	0.008010	N2	mg/L		100	56 - 130	22	20
Hexachlorobenzene	0.000250	U	0.00800	0.006222		mg/L		78	51 - 130	2	20
Hexachlorobutadiene	0.000190	U	0.00800	0.004769	N2	mg/L		60	31 - 130	32	20
Hexachlorocyclopentadiene	0.000150	U	0.00800	0.002331		mg/L		29	10 - 130	2	20
Hexachloroethane	0.000170	U	0.00800	0.004301	N2	mg/L		54	34 - 130	28	20
Benzyl alcohol	0.000510	U	0.00800	0.005409		mg/L		68	27 - 130	2	40
Indeno[1,2,3-cd]pyrene	0.000290	U	0.00800	0.005616		mg/L		70	52 - 130	15	20
4-Chloro-3-methylphenol	0.000250	U	0.00800	0.007939		mg/L		99	46 - 130	19	20
Isophorone	0.000150	U	0.00800	0.007362		mg/L		92	51 - 108	16	20
2-Chlorophenol	0.000220	U	0.00800	0.005531		mg/L		69	52 - 130	4	20
2-Methylnaphthalene	0.000140	U	0.00800	0.006521		mg/L		82	52 - 130	17	20
2-Methylphenol	0.000190	U	0.00800	0.005636		mg/L		70	36 - 130	11	20
3 & 4 Methylphenol	0.000160	U	0.00800	0.004935		mg/L		62	37 - 130	12	20
2,4-Dichlorophenol	0.000260	U	0.00800	0.006741		mg/L		84	44 - 130	5	20
Naphthalene	0.000160	U	0.00800	0.005633		mg/L		70	51 - 130	5	20
2,4-Dimethylphenol	0.000180	U	0.00800	0.007887		mg/L		99	36 - 130	17	20
2-Nitroaniline	0.000350	U	0.00800	0.007649	N2	mg/L		96	55 - 130	25	20

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: 600-89799-21 MSD
Matrix: Water
Analysis Batch: 131423

Client Sample ID: Rinse Blank-Geo
Prep Type: Total/NA
Prep Batch: 131222

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
4,6-Dinitro-2-methylphenol	0.000160	U	0.0160	0.007803		mg/L		49	21 - 130	11	20
2,4-Dinitrophenol	0.000400	U	0.0160	0.004278	N2	mg/L		27	10 - 130	80	20
3-Nitroaniline	0.000130	U	0.00800	0.006419		mg/L		80	10 - 150	7	20
4-Nitroaniline	0.000230	U	0.00800	0.006907		mg/L		86	24 - 130	2	20
Nitrobenzene	0.000200	U	0.00800	0.006293		mg/L		79	55 - 130	2	20
2-Nitrophenol	0.000220	U	0.00800	0.006482		mg/L		81	56 - 130	6	20
4-Nitrophenol	0.000330	U	0.0160	0.006411	N2	mg/L		40	10 - 130	36	20
N-Nitrosodimethylamine	0.000160	U	0.00800	0.004031		mg/L		50	24 - 130	1	20
N-Nitrosodi-n-propylamine	0.000240	U	0.00800	0.006813		mg/L		85	47 - 130	7	20
N-Nitrosodiphenylamine	0.000330	U	0.00800	0.007016		mg/L		88	42 - 130	7	20
Pentachlorophenol	0.000960	U	0.0160	0.009046		mg/L		57	10 - 130	12	20
Phenanthrene	0.000290	U	0.00800	0.006953		mg/L		87	52 - 130	5	20
Phenol	0.000140	U	0.00800	0.002749	N2	mg/L		34	10 - 130	21	20
Pyrene	0.000330	U	0.00800	0.008014		mg/L		100	55 - 130	7	40
1,2,4-Trichlorobenzene	0.000160	U	0.00800	0.005174		mg/L		65	41 - 130	13	20
2,6-Dinitrotoluene	0.000290	U	0.00800	0.009036	N2	mg/L		113	55 - 130	24	20
2,4,5-Trichlorophenol	0.000290	U	0.00800	0.006942		mg/L		87	46 - 131	19	20
bis (2-Chloroisopropyl) ether	0.000180	U	0.00800	0.006344		mg/L		79	44 - 130	3	20
2,4,6-Trichlorophenol	0.000330	U	0.00800	0.005995		mg/L		75	42 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Nitrobenzene-d5	*69*		*40 - 130*
2-Fluorophenol	*46*		*12 - 130*
2-Fluorobiphenyl	*68*		*36 - 130*
Terphenyl-d14	*93*		*52 - 130*
2,4,6-Tribromophenol	*94*		*17 - 137*
Phenol-d5 (Surr)	*33*		*10 - 130*

Lab Sample ID: MB 600-131363/1-A
Matrix: Solid
Analysis Batch: 131598

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 131363

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.00144	U	0.0166	0.00144	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Acenaphthylene	0.000997	U	0.0166	0.000997	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Anthracene	0.00128	U	0.0166	0.00128	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Benzidine	0.00899	U	0.0831	0.00899	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Benzo[a]anthracene	0.00138	U	0.0166	0.00138	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Benzo[b]fluoranthene	0.00171	U	0.0166	0.00171	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Benzo[a]pyrene	0.00160	U	0.0166	0.00160	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Benzo[g,h,i]perylene	0.00505	U	0.0166	0.00505	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Benzo[k]fluoranthene	0.00149	U	0.0166	0.00149	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Bis(2-chloroethoxy)methane	0.00142	U	0.0166	0.00142	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Bis(2-chloroethyl)ether	0.00164	U	0.0166	0.00164	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Bis(2-ethylhexyl) phthalate	0.00535	U	0.0665	0.00535	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
4-Bromophenyl phenyl ether	0.00283	U	0.0166	0.00283	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Butyl benzyl phthalate	0.00617	U	0.0665	0.00617	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Carbazole	0.00311	U	0.0166	0.00311	mg/Kg		04/07/14 11:29	04/08/14 12:27	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 600-131363/1-A
Matrix: Solid
Analysis Batch: 131598

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 131363

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	0.00580	U	0.0166	0.00580	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
2-Chloronaphthalene	0.00121	U	0.0166	0.00121	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
4-Chlorophenyl phenyl ether	0.00179	U	0.0166	0.00179	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Chrysene	0.00102	U	0.0166	0.00102	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Dibenz(a,h)anthracene	0.00362	U	0.0166	0.00362	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Dibenzofuran	0.00177	U	0.0166	0.00177	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
1,2-Dichlorobenzene	0.00301	U	0.0166	0.00301	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
1,3-Dichlorobenzene	0.00153	U	0.0166	0.00153	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
1,4-Dichlorobenzene	0.00224	U	0.0166	0.00224	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
3,3'-Dichlorobenzidine	0.0101	U	0.0166	0.0101	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Diethyl phthalate	0.00840	U	0.0665	0.00840	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Dimethyl phthalate	0.00487	U	0.0665	0.00487	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Di-n-butyl phthalate	0.00258	U	0.0665	0.00258	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
2,4-Dinitrotoluene	0.00360	U	0.0166	0.00360	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Di-n-octyl phthalate	0.00189	U	0.0665	0.00189	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Fluoranthene	0.00310	U	0.0166	0.00310	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Fluorene	0.00235	U	0.0166	0.00235	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Hexachlorobenzene	0.00151	U	0.0166	0.00151	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Hexachlorobutadiene	0.00191	U	0.0166	0.00191	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Hexachlorocyclopentadiene	0.00459	U	0.0166	0.00459	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Hexachloroethane	0.00230	U	0.0166	0.00230	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Benzyl alcohol	0.00581	U	0.0166	0.00581	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Indeno[1,2,3-cd]pyrene	0.00349	U	0.0166	0.00349	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
4-Chloro-3-methylphenol	0.0155	U	0.0166	0.0155	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Isophorone	0.000997	U	0.0166	0.000997	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
2-Chlorophenol	0.00196	U	0.0166	0.00196	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
2-Methylnaphthalene	0.00273	U	0.0166	0.00273	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
2-Methylphenol	0.00322	U	0.0166	0.00322	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
3 & 4 Methylphenol	0.00278	U	0.0332	0.00278	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
2,4-Dichlorophenol	0.00386	U	0.0166	0.00386	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Naphthalene	0.00135	U	0.0166	0.00135	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
2,4-Dimethylphenol	0.00855	U	0.0166	0.00855	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
2-Nitroaniline	0.00487	U	0.0166	0.00487	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
4,6-Dinitro-2-methylphenol	0.00496	U	0.0166	0.00496	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
2,4-Dinitrophenol	0.00470	U	0.0997	0.00470	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
3-Nitroaniline	0.00713	U	0.0166	0.00713	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
4-Nitroaniline	0.0111	U	0.0166	0.0111	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Nitrobenzene	0.00295	U	0.0166	0.00295	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
2-Nitrophenol	0.00388	U	0.0166	0.00388	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
4-Nitrophenol	0.00506	U	0.0166	0.00506	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
N-Nitrosodimethylamine	0.00418	U	0.0166	0.00418	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
N-Nitrosodi-n-propylamine	0.00221	U	0.0166	0.00221	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
N-Nitrosodiphenylamine	0.00188	U	0.0166	0.00188	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Pentachlorophenol	0.00399	U	0.166	0.00399	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Phenanthrene	0.00493	U	0.0166	0.00493	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Phenol	0.00423	U	0.0166	0.00423	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
Pyrene	0.00182	U	0.0166	0.00182	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
1,2,4-Trichlorobenzene	0.00209	U	0.0166	0.00209	mg/Kg		04/07/14 11:29	04/08/14 12:27	1

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: MB 600-131363/1-A
Matrix: Solid
Analysis Batch: 131598

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 131363

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	0.00294	U	0.0166	0.00294	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
2,4,5-Trichlorophenol	0.00998	U	0.0166	0.00998	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
bis (2-Chloroisopropyl) ether	0.00881	U	0.0166	0.00881	mg/Kg		04/07/14 11:29	04/08/14 12:27	1
2,4,6-Trichlorophenol	0.00267	U	0.0166	0.00267	mg/Kg		04/07/14 11:29	04/08/14 12:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*74*		*10 - 155*	*04/07/14 11:29*	*04/08/14 12:27*	*1*
2-Fluorophenol	*73*		*25 - 132*	*04/07/14 11:29*	*04/08/14 12:27*	*1*
2-Fluorobiphenyl	*82*		*38 - 130*	*04/07/14 11:29*	*04/08/14 12:27*	*1*
Terphenyl-d14	*94*		*53 - 134*	*04/07/14 11:29*	*04/08/14 12:27*	*1*
2,4,6-Tribromophenol	*54*		*10 - 148*	*04/07/14 11:29*	*04/08/14 12:27*	*1*
Phenol-d5 (Surr)	*72*		*27 - 130*	*04/07/14 11:29*	*04/08/14 12:27*	*1*

Lab Sample ID: LCS 600-131363/2-A
Matrix: Solid
Analysis Batch: 131634

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 131363

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.667	0.6479		mg/Kg		97	58 - 130
Acenaphthylene	0.667	0.6401		mg/Kg		96	57 - 130
Anthracene	0.667	0.6588		mg/Kg		99	58 - 130
Benzidine	3.47	2.056		mg/Kg		59	10 - 145
Benzo[a]anthracene	0.667	0.7049		mg/Kg		106	61 - 132
Benzo[b]fluoranthene	0.667	0.6843		mg/Kg		103	54 - 130
Benzo[a]pyrene	0.667	0.7434		mg/Kg		112	59 - 130
Benzo[g,h,i]perylene	0.667	0.8097		mg/Kg		121	58 - 150
Benzo[k]fluoranthene	0.667	0.7749		mg/Kg		116	56 - 136
Bis(2-chloroethoxy)methane	0.667	0.6392		mg/Kg		96	42 - 139
Bis(2-chloroethyl)ether	0.667	0.5876		mg/Kg		88	68 - 130
Bis(2-ethylhexyl) phthalate	0.667	0.8657		mg/Kg		130	68 - 133
4-Bromophenyl phenyl ether	0.667	0.6173		mg/Kg		93	69 - 130
Butyl benzyl phthalate	0.667	0.7930		mg/Kg		119	70 - 130
Carbazole	0.667	0.6989		mg/Kg		105	61 - 149
4-Chloroaniline	0.667	0.5798		mg/Kg		87	18 - 130
2-Chloronaphthalene	0.667	0.6260		mg/Kg		94	62 - 130
4-Chlorophenyl phenyl ether	0.667	0.6054		mg/Kg		91	46 - 130
Chrysene	0.667	0.6934		mg/Kg		104	64 - 130
Dibenz(a,h)anthracene	0.667	0.7950		mg/Kg		119	58 - 138
Dibenzofuran	0.667	0.6356		mg/Kg		95	51 - 130
1,2-Dichlorobenzene	0.667	0.5802		mg/Kg		87	55 - 130
1,3-Dichlorobenzene	0.667	0.5726		mg/Kg		86	57 - 130
1,4-Dichlorobenzene	0.667	0.5618		mg/Kg		84	58 - 130
3,3'-Dichlorobenzidine	0.667	0.5441		mg/Kg		82	10 - 150
Diethyl phthalate	0.667	0.6344		mg/Kg		95	59 - 130
Dimethyl phthalate	0.667	0.6494		mg/Kg		97	68 - 130
Di-n-butyl phthalate	0.667	0.7107		mg/Kg		107	70 - 130
2,4-Dinitrotoluene	0.667	0.7075		mg/Kg		106	51 - 150
Di-n-octyl phthalate	0.667	0.7850		mg/Kg		118	68 - 131

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 600-131363/2-A
Matrix: Solid
Analysis Batch: 131634

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 131363

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoranthene	0.667	0.6272		mg/Kg		94	63 - 130
Fluorene	0.667	0.6481		mg/Kg		97	52 - 130
Hexachlorobenzene	0.667	0.5998		mg/Kg		90	66 - 130
Hexachlorobutadiene	0.667	0.5500		mg/Kg		82	62 - 130
Hexachlorocyclopentadiene	0.667	0.5467		mg/Kg		82	24 - 130
Hexachloroethane	0.667	0.5902		mg/Kg		89	68 - 130
Benzyl alcohol	0.667	0.6396		mg/Kg		96	31 - 137
Indeno[1,2,3-cd]pyrene	0.667	0.8108		mg/Kg		122	56 - 150
4-Chloro-3-methylphenol	0.667	0.6736		mg/Kg		101	51 - 130
Isophorone	0.667	0.6044		mg/Kg		91	67 - 130
2-Chlorophenol	0.667	0.6444		mg/Kg		97	63 - 130
2-Methylnaphthalene	0.667	0.6172		mg/Kg		93	51 - 130
2-Methylphenol	0.667	0.7287		mg/Kg		109	57 - 130
3 & 4 Methylphenol	0.667	0.7381		mg/Kg		111	46 - 130
2,4-Dichlorophenol	0.667	0.6586		mg/Kg		99	38 - 130
Naphthalene	0.667	0.6003		mg/Kg		90	59 - 130
2,4-Dimethylphenol	0.667	0.6743		mg/Kg		101	55 - 130
2-Nitroaniline	0.667	0.7003		mg/Kg		105	67 - 150
4,6-Dinitro-2-methylphenol	1.33	1.191		mg/Kg		89	10 - 130
2,4-Dinitrophenol	1.33	1.176		mg/Kg		88	24 - 143
3-Nitroaniline	0.667	0.6249		mg/Kg		94	24 - 150
4-Nitroaniline	0.667	0.7082		mg/Kg		106	45 - 160
Nitrobenzene	0.667	0.5622		mg/Kg		84	60 - 130
2-Nitrophenol	0.667	0.6674		mg/Kg		100	54 - 130
4-Nitrophenol	1.33	1.370		mg/Kg		103	36 - 149
N-Nitrosodimethylamine	0.667	0.5938		mg/Kg		89	54 - 130
N-Nitrosodi-n-propylamine	0.667	0.6719		mg/Kg		101	70 - 130
N-Nitrosodiphenylamine	0.667	0.6874		mg/Kg		103	70 - 130
Pentachlorophenol	1.33	1.215		mg/Kg		91	43 - 130
Phenanthrene	0.667	0.6346		mg/Kg		95	57 - 130
Phenol	0.667	0.6507		mg/Kg		98	56 - 130
Pyrene	0.667	0.6859		mg/Kg		103	60 - 135
1,2,4-Trichlorobenzene	0.667	0.5570		mg/Kg		84	55 - 130
2,6-Dinitrotoluene	0.667	0.6651		mg/Kg		100	47 - 130
2,4,5-Trichlorophenol	0.667	0.6330		mg/Kg		95	56 - 130
bis (2-Chloroisopropyl) ether	0.667	0.6250		mg/Kg		94	63 - 142
2,4,6-Trichlorophenol	0.667	0.6998		mg/Kg		105	45 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*51*		*10 - 155*
2-Fluorophenol	*51*		*25 - 132*
2-Fluorobiphenyl	*54*		*38 - 130*
Terphenyl-d14	*67*		*53 - 134*
2,4,6-Tribromophenol	*59*		*10 - 148*
Phenol-d5 (Surr)	*57*		*27 - 130*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: 600-89799-1MS
Matrix: Solid
Analysis Batch: 131598

Client Sample ID: 2014-NDA-7 (0-0.5)
Prep Type: Total/NA
Prep Batch: 131363

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	0.0173	U	0.805	0.6000		mg/Kg	☼	75	25 - 134
Acenaphthylene	0.0120	U	0.805	0.5582		mg/Kg	☼	69	32 - 137
Anthracene	0.0154	U	0.805	0.6279		mg/Kg	☼	78	35 - 115
Benzidine	0.109	U	4.19	0.109	U	mg/Kg	☼	0	0 - 150
Benzo[a]anthracene	0.0166	U	0.805	0.6154		mg/Kg	☼	76	38 - 128
Benzo[a]pyrene	0.0194	U	0.805	0.6480		mg/Kg	☼	80	30 - 130
Benzo[b]fluoranthene	0.0207	U	0.805	0.5706		mg/Kg	☼	71	40 - 131
Benzo[g,h,i]perylene	0.0611	U	0.805	0.7093		mg/Kg	☼	88	34 - 110
Benzo[k]fluoranthene	0.0179	U	0.805	0.7464		mg/Kg	☼	93	33 - 137
Benzyl alcohol	0.0702	U	0.805	0.0704	U N1	mg/Kg	☼	0	27 - 128
Bis(2-chloroethoxy)methane	0.0171	U	0.805	0.6152		mg/Kg	☼	76	33 - 119
Bis(2-chloroethyl)ether	0.0199	U	0.805	0.5345		mg/Kg	☼	66	28 - 120
bis (2-Chloroisopropyl) ether	0.106	U	0.805	0.5360		mg/Kg	☼	67	50 - 130
Bis(2-ethylhexyl) phthalate	0.0647	U	0.805	0.9892		mg/Kg	☼	123	44 - 139
4-Bromophenyl phenyl ether	0.0342	U	0.805	0.6545		mg/Kg	☼	81	41 - 123
Butyl benzyl phthalate	0.0746	U	0.805	0.7687	J	mg/Kg	☼	95	41 - 139
Carbazole	0.0376	U	0.805	0.6301		mg/Kg	☼	78	7 - 163
4-Chloroaniline	0.0701	U	0.805	0.3797		mg/Kg	☼	47	15 - 112
4-Chloro-3-methylphenol	0.188	U	0.805	0.5383		mg/Kg	☼	67	26 - 132
2-Chloronaphthalene	0.0146	U	0.805	0.5528		mg/Kg	☼	69	34 - 126
2-Chlorophenol	0.0237	U	0.805	0.5732		mg/Kg	☼	71	21 - 130
4-Chlorophenyl phenyl ether	0.0217	U	0.805	0.5890		mg/Kg	☼	73	32 - 132
Chrysene	0.0123	U	0.805	0.6815		mg/Kg	☼	85	36 - 130
Dibenz(a,h)anthracene	0.0437	U	0.805	0.5635		mg/Kg	☼	70	19 - 125
Dibenzofuran	0.0214	U	0.805	0.5829		mg/Kg	☼	72	35 - 125
1,2-Dichlorobenzene	0.0364	U	0.805	0.5155		mg/Kg	☼	64	30 - 130
1,3-Dichlorobenzene	0.0186	U	0.805	0.4982		mg/Kg	☼	62	30 - 130
1,4-Dichlorobenzene	0.0271	U	0.805	0.4562		mg/Kg	☼	57	30 - 130
3,3'-Dichlorobenzidine	0.122	U	0.805	0.123	U N1	mg/Kg	☼	0	14 - 132
2,4-Dichlorophenol	0.0466	U	0.805	0.6355		mg/Kg	☼	79	35 - 121
Diethyl phthalate	0.102	U	0.805	0.6445	J	mg/Kg	☼	80	41 - 129
2,4-Dimethylphenol	0.103	U	0.805	0.7251		mg/Kg	☼	90	29 - 122
Dimethyl phthalate	0.0589	U	0.805	0.6039	J	mg/Kg	☼	75	40 - 130
Di-n-butyl phthalate	0.0312	U	0.805	0.6274	J	mg/Kg	☼	78	41 - 126
4,6-Dinitro-2-methylphenol	0.0600	U	1.61	1.081		mg/Kg	☼	67	10 - 104
2,4-Dinitrophenol	0.0569	U	1.61	1.512		mg/Kg	☼	94	10 - 121
2,4-Dinitrotoluene	0.0435	U	0.805	0.4556		mg/Kg	☼	57	10 - 129
2,6-Dinitrotoluene	0.0355	U	0.805	0.5049		mg/Kg	☼	63	30 - 124
Di-n-octyl phthalate	0.0229	U	0.805	0.8823		mg/Kg	☼	110	36 - 152
Fluoranthene	0.0375	U	0.805	0.5685		mg/Kg	☼	71	37 - 132
Fluorene	0.0284	U	0.805	0.5926		mg/Kg	☼	74	36 - 122
Hexachlorobenzene	0.0183	U	0.805	0.5968		mg/Kg	☼	74	40 - 123
Hexachlorobutadiene	0.0231	U	0.805	0.4735		mg/Kg	☼	59	32 - 124
Hexachlorocyclopentadiene	0.0555	U	0.805	0.0557	U N1	mg/Kg	☼	0	10 - 118
Hexachloroethane	0.0278	U	0.805	0.5303		mg/Kg	☼	66	31 - 113
Indeno[1,2,3-cd]pyrene	0.0422	U	0.805	0.5818		mg/Kg	☼	72	30 - 112
Isophorone	0.0120	U	0.805	0.5540		mg/Kg	☼	69	33 - 125
2-Methylnaphthalene	0.0330	U	0.805	0.6433		mg/Kg	☼	80	32 - 136

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: 600-89799-1MS
Matrix: Solid
Analysis Batch: 131598

Client Sample ID: 2014-NDA-7 (0-0.5)
Prep Type: Total/NA
Prep Batch: 131363

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylphenol	0.0389	U	0.805	0.5146		mg/Kg	☼	64	26 - 125
3 & 4 Methylphenol	0.0336	U	0.805	0.6277		mg/Kg	☼	78	30 - 130
Naphthalene	0.0163	U	0.805	0.5285		mg/Kg	☼	66	30 - 112
2-Nitroaniline	0.0589	U	0.805	0.4836		mg/Kg	☼	60	38 - 130
3-Nitroaniline	0.0861	U	0.805	0.4055		mg/Kg	☼	50	22 - 124
4-Nitroaniline	0.134	U	0.805	0.5489		mg/Kg	☼	68	21 - 122
Nitrobenzene	0.0357	U	0.805	0.4997		mg/Kg	☼	62	29 - 118
2-Nitrophenol	0.0469	U	0.805	0.5120		mg/Kg	☼	64	30 - 130
4-Nitrophenol	0.0612	U	1.61	1.414		mg/Kg	☼	88	25 - 122
N-Nitrosodimethylamine	0.0505	U	0.805	0.4521		mg/Kg	☼	56	30 - 130
N-Nitrosodi-n-propylamine	0.0267	U	0.805	0.5604		mg/Kg	☼	70	34 - 115
N-Nitrosodiphenylamine	0.0228	U	0.805	0.5659		mg/Kg	☼	70	28 - 106
Pentachlorophenol	0.0482	U	1.61	1.666	J	mg/Kg	☼	103	25 - 124
Phenanthrene	0.0596	U	0.805	0.6559		mg/Kg	☼	81	26 - 126
Phenol	0.0511	U	0.805	0.5383		mg/Kg	☼	67	31 - 121
Pyrene	0.0220	U	0.805	0.6886		mg/Kg	☼	86	28 - 138
1,2,4-Trichlorobenzene	0.0253	U	0.805	0.5151		mg/Kg	☼	64	38 - 107
2,4,5-Trichlorophenol	0.121	U	0.805	0.5868		mg/Kg	☼	73	30 - 130
2,4,6-Trichlorophenol	0.0323	U	0.805	0.4896		mg/Kg	☼	61	30 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*38 - 130*
2-Fluorophenol	*54*		*25 - 132*
Nitrobenzene-d5	*62*		*10 - 155*
Phenol-d5 (Surr)	*56*		*27 - 130*
Terphenyl-d14	*89*		*53 - 134*
2,4,6-Tribromophenol	*59*		*10 - 148*

Lab Sample ID: 600-89799-1MSD
Matrix: Solid
Analysis Batch: 131598

Client Sample ID: 2014-NDA-7 (0-0.5)
Prep Type: Total/NA
Prep Batch: 131363

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	0.0173	U	0.803	0.6222		mg/Kg	☼	77	25 - 134	4	30
Acenaphthylene	0.0120	U	0.803	0.5502		mg/Kg	☼	69	32 - 137	1	30
Anthracene	0.0154	U	0.803	0.6480		mg/Kg	☼	81	35 - 115	3	30
Benzidine	0.109	U	4.18	0.109	U	mg/Kg	☼	0	0 - 150	NC	40
Benzo[a]anthracene	0.0166	U	0.803	0.6450		mg/Kg	☼	80	38 - 128	5	30
Benzo[a]pyrene	0.0194	U	0.803	0.6128		mg/Kg	☼	76	30 - 130	6	30
Benzo[b]fluoranthene	0.0207	U	0.803	0.5744		mg/Kg	☼	72	40 - 131	1	30
Benzo[g,h,i]perylene	0.0611	U	0.803	0.7277		mg/Kg	☼	91	34 - 110	3	30
Benzo[k]fluoranthene	0.0179	U	0.803	0.7500		mg/Kg	☼	93	33 - 137	0	30
Benzyl alcohol	0.0702	U	0.803	0.0702	U N1	mg/Kg	☼	0	27 - 128	NC	30
Bis(2-chloroethoxy)methane	0.0171	U	0.803	0.5564		mg/Kg	☼	69	33 - 119	10	30
Bis(2-chloroethyl)ether	0.0199	U	0.803	0.5118		mg/Kg	☼	64	28 - 120	4	30
bis (2-Chloroisopropyl) ether	0.106	U	0.803	0.5868		mg/Kg	☼	73	50 - 130	9	30
Bis(2-ethylhexyl) phthalate	0.0647	U	0.803	1.096		mg/Kg	☼	137	44 - 139	10	30
4-Bromophenyl phenyl ether	0.0342	U	0.803	0.5135		mg/Kg	☼	64	41 - 123	24	30

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: 600-89799-1MSD
Matrix: Solid
Analysis Batch: 131598

Client Sample ID: 2014-NDA-7 (0-0.5)
Prep Type: Total/NA
Prep Batch: 131363

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Butyl benzyl phthalate	0.0746	U	0.803	0.7655	J	mg/Kg	☼	95	41 - 139	0	30
Carbazole	0.0376	U	0.803	0.5881		mg/Kg	☼	73	7 - 163	7	30
4-Chloroaniline	0.0701	U	0.803	0.3208		mg/Kg	☼	40	15 - 112	17	30
4-Chloro-3-methylphenol	0.188	U	0.803	0.4526		mg/Kg	☼	56	26 - 132	17	30
2-Chloronaphthalene	0.0146	U	0.803	0.5810		mg/Kg	☼	72	34 - 126	5	30
2-Chlorophenol	0.0237	U	0.803	0.4942		mg/Kg	☼	62	21 - 130	15	30
4-Chlorophenyl phenyl ether	0.0217	U	0.803	0.6476		mg/Kg	☼	81	32 - 132	9	30
Chrysene	0.0123	U	0.803	0.6859		mg/Kg	☼	85	36 - 130	1	30
Dibenz(a,h)anthracene	0.0437	U	0.803	0.5491		mg/Kg	☼	68	19 - 125	3	30
Dibenzofuran	0.0214	U	0.803	0.5745		mg/Kg	☼	72	35 - 125	1	30
1,2-Dichlorobenzene	0.0364	U	0.803	0.5034		mg/Kg	☼	63	30 - 130	2	30
1,3-Dichlorobenzene	0.0186	U	0.803	0.4700		mg/Kg	☼	59	30 - 130	6	30
1,4-Dichlorobenzene	0.0271	U	0.803	0.4744		mg/Kg	☼	59	30 - 130	4	30
3,3'-Dichlorobenzidine	0.122	U	0.803	0.122	U N1	mg/Kg	☼	0	14 - 132	NC	30
2,4-Dichlorophenol	0.0466	U	0.803	0.6767		mg/Kg	☼	84	35 - 121	6	30
Diethyl phthalate	0.102	U	0.803	0.6386	J	mg/Kg	☼	80	41 - 129	1	30
2,4-Dimethylphenol	0.103	U	0.803	0.8102		mg/Kg	☼	101	29 - 122	11	30
Dimethyl phthalate	0.0589	U	0.803	0.5757	J	mg/Kg	☼	72	40 - 130	5	30
Di-n-butyl phthalate	0.0312	U	0.803	0.6069	J	mg/Kg	☼	76	41 - 126	3	30
4,6-Dinitro-2-methylphenol	0.0600	U	1.61	0.9780		mg/Kg	☼	61	10 - 104	10	30
2,4-Dinitrophenol	0.0569	U	1.61	1.433		mg/Kg	☼	89	10 - 121	5	30
2,4-Dinitrotoluene	0.0435	U	0.803	0.4255		mg/Kg	☼	53	10 - 129	7	30
2,6-Dinitrotoluene	0.0355	U	0.803	0.6047		mg/Kg	☼	75	30 - 124	18	30
Di-n-octyl phthalate	0.0229	U	0.803	0.9442		mg/Kg	☼	118	36 - 152	7	30
Fluoranthene	0.0375	U	0.803	0.5659		mg/Kg	☼	70	37 - 132	0	30
Fluorene	0.0284	U	0.803	0.5593		mg/Kg	☼	70	36 - 122	6	30
Hexachlorobenzene	0.0183	U	0.803	0.5634		mg/Kg	☼	70	40 - 123	6	30
Hexachlorobutadiene	0.0231	U	0.803	0.5221		mg/Kg	☼	65	32 - 124	10	30
Hexachlorocyclopentadiene	0.0555	U	0.803	0.0555	U N1	mg/Kg	☼	0	10 - 118	NC	30
Hexachloroethane	0.0278	U	0.803	0.5062		mg/Kg	☼	63	31 - 113	5	30
Indeno[1,2,3-cd]pyrene	0.0422	U	0.803	0.5969		mg/Kg	☼	74	30 - 112	3	30
Isophorone	0.0120	U	0.803	0.5159		mg/Kg	☼	64	33 - 125	7	30
2-Methylnaphthalene	0.0330	U	0.803	0.5273		mg/Kg	☼	66	32 - 136	20	30
2-Methylphenol	0.0389	U	0.803	0.5315		mg/Kg	☼	66	26 - 125	3	30
3 & 4 Methylphenol	0.0336	U	0.803	0.5071		mg/Kg	☼	63	30 - 130	21	30
Naphthalene	0.0163	U	0.803	0.5288		mg/Kg	☼	66	30 - 112	0	30
2-Nitroaniline	0.0589	U	0.803	0.4735		mg/Kg	☼	59	38 - 130	2	30
3-Nitroaniline	0.0861	U	0.803	0.5153		mg/Kg	☼	64	22 - 124	24	30
4-Nitroaniline	0.134	U	0.803	0.5518		mg/Kg	☼	69	21 - 122	1	30
Nitrobenzene	0.0357	U	0.803	0.4578		mg/Kg	☼	57	29 - 118	9	30
2-Nitrophenol	0.0469	U	0.803	0.5084		mg/Kg	☼	63	30 - 130	1	30
4-Nitrophenol	0.0612	U	1.61	1.612		mg/Kg	☼	100	25 - 122	13	30
N-Nitrosodimethylamine	0.0505	U	0.803	0.4453		mg/Kg	☼	55	30 - 130	2	30
N-Nitrosodi-n-propylamine	0.0267	U	0.803	0.5901		mg/Kg	☼	73	34 - 115	5	30
N-Nitrosodiphenylamine	0.0228	U	0.803	0.6017		mg/Kg	☼	75	28 - 106	6	30
Pentachlorophenol	0.0482	U	1.61	1.747	J	mg/Kg	☼	109	25 - 124	5	30
Phenanthrene	0.0596	U	0.803	0.6257		mg/Kg	☼	78	26 - 126	5	30
Phenol	0.0511	U	0.803	0.4203		mg/Kg	☼	52	31 - 121	25	30

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: 600-89799-1MSD — **Client Sample ID: 2014-NDA-7 (0-0.5)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 131598 — **Prep Batch: 131363**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Pyrene	0.0220	U	0.803	0.7280		mg/Kg	☼	91	28 - 138	6	30
1,2,4-Trichlorobenzene	0.0253	U	0.803	0.4805		mg/Kg	☼	60	38 - 107	7	30
2,4,5-Trichlorophenol	0.121	U	0.803	0.5544		mg/Kg	☼	69	30 - 130	6	30
2,4,6-Trichlorophenol	0.0323	U	0.803	0.5626		mg/Kg	☼	70	30 - 130	14	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl	*63*		*38 - 130*
2-Fluorophenol	*53*		*25 - 132*
Nitrobenzene-d5	*52*		*10 - 155*
Phenol-d5 (Surr)	*57*		*27 - 130*
Terphenyl-d14	*98*		*53 - 134*
2,4,6-Tribromophenol	*57*		*10 - 148*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-131236/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131372 — **Prep Batch: 131236**

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.00630	U	0.0500	0.00630	mg/L		04/04/14 11:38	04/07/14 10:06	1
Arsenic	0.00328	U	0.0100	0.00328	mg/L		04/04/14 11:38	04/07/14 10:06	1
Cadmium	0.000350	U	0.00500	0.000350	mg/L		04/04/14 11:38	04/07/14 10:06	1
Lead	0.00290	U	0.0100	0.00290	mg/L		04/04/14 11:38	04/07/14 10:06	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		04/04/14 11:38	04/07/14 10:06	1

Lab Sample ID: LCS 600-131236/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131372 — **Prep Batch: 131236**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.00	1.050		mg/L		105	80 - 120
Arsenic	1.00	1.056		mg/L		106	80 - 120
Cadmium	0.500	0.5343		mg/L		107	80 - 120
Lead	1.00	1.036		mg/L		104	80 - 120
Selenium	1.00	1.063		mg/L		106	80 - 120

Lab Sample ID: 600-89799-21 MS — **Client Sample ID: Rinse Blank-Geo**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 131372 — **Prep Batch: 131236**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.00630	U	1.00	1.047		mg/L		105	75 - 125
Arsenic	0.00328	U	1.00	1.077		mg/L		108	75 - 125
Cadmium	0.000350	U	0.500	0.5614		mg/L		112	75 - 125
Lead	0.00290	U	1.00	1.043		mg/L		104	75 - 125
Selenium	0.00417	U	1.00	1.091		mg/L		109	75 - 125

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

Lab Sample ID: 600-89799-21 MSD
Matrix: Water
Analysis Batch: 131372

Client Sample ID: Rinse Blank-Geo
Prep Type: Total/NA
Prep Batch: 131236

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.00630	U	1.00	1.047		mg/L		105	75 - 125	0	20
Arsenic	0.00328	U	1.00	1.056		mg/L		106	75 - 125	2	20
Cadmium	0.000350	U	0.500	0.5497		mg/L		110	75 - 125	2	20
Lead	0.00290	U	1.00	1.020		mg/L		102	75 - 125	2	20
Selenium	0.00417	U	1.00	1.075		mg/L		108	75 - 125	1	20

Lab Sample ID: 600-89799-21 DU
Matrix: Water
Analysis Batch: 131372

Client Sample ID: Rinse Blank-Geo
Prep Type: Total/NA
Prep Batch: 131236

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.00630	U	0.00630	U	mg/L		NC	20
Arsenic	0.00328	U	0.00328	U	mg/L		NC	20
Cadmium	0.000350	U	0.000350	U	mg/L		NC	20
Lead	0.00290	U	0.00290	U	mg/L		NC	20
Selenium	0.00417	U	0.00417	U	mg/L		NC	20

Lab Sample ID: MB 600-131489/1-A
Matrix: Solid
Analysis Batch: 131531

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 131489

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		04/08/14 12:20	04/08/14 16:36	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/08/14 12:20	04/08/14 16:36	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		04/08/14 12:20	04/08/14 16:36	1
Lead	0.105	U	0.500	0.105	mg/Kg		04/08/14 12:20	04/08/14 16:36	1
Selenium	0.259	U	2.00	0.259	mg/Kg		04/08/14 12:20	04/08/14 16:36	1

Lab Sample ID: LCSSRM 600-131489/2-A
Matrix: Solid
Analysis Batch: 131531

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 131489

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	72.15		mg/Kg		81.8	45.4 - 231.3
Arsenic	99.6	105.5		mg/Kg		105.9	80.8 - 119.5
Cadmium	182	187.0		mg/Kg		102.7	81.9 - 118.1
Lead	115	130.7		mg/Kg		113.7	81.8 - 119.1
Selenium	150	155.4		mg/Kg		103.6	77.3 - 122.7

Lab Sample ID: 600-89799-1MS
Matrix: Solid
Analysis Batch: 131531

Client Sample ID: 2014-NDA-7 (0-0.5)
Prep Type: Total/NA
Prep Batch: 131489

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	1.98	J	59.3	22.75	N1	mg/Kg	☼	35	75 - 125

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

Lab Sample ID: 600-89799-1MS
Matrix: Solid
Analysis Batch: 131531

Client Sample ID: 2014-NDA-7 (0-0.5)
Prep Type: Total/NA
Prep Batch: 131489

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	14.3		59.3	67.82		mg/Kg	☼	90	75 - 125
Cadmium	4.17		29.6	31.89		mg/Kg	☼	94	75 - 125
Lead	633		59.3	576.9	4	mg/Kg	☼	-95	75 - 125
Selenium	0.659	J	59.3	51.82		mg/Kg	☼	86	75 - 125

Lab Sample ID: 600-89799-1MSD
Matrix: Solid
Analysis Batch: 131531

Client Sample ID: 2014-NDA-7 (0-0.5)
Prep Type: Total/NA
Prep Batch: 131489

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	1.98	J	58.7	28.69	N1 N2	mg/Kg	☼	46	75 - 125	23	20
Arsenic	14.3		58.7	70.03		mg/Kg	☼	95	75 - 125	3	20
Cadmium	4.17		29.4	33.16		mg/Kg	☼	99	75 - 125	4	20
Lead	633		58.7	974.5	4 N2	mg/Kg	☼	581	75 - 125	51	20
Selenium	0.659	J	58.7	51.64		mg/Kg	☼	87	75 - 125	0	20

Lab Sample ID: 600-89799-1 DU
Matrix: Solid
Analysis Batch: 131531

Client Sample ID: 2014-NDA-7 (0-0.5)
Prep Type: Total/NA
Prep Batch: 131489

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	1.98	J	2.020	J	mg/Kg	☼	2	20
Arsenic	14.3		13.23		mg/Kg	☼	8	20
Cadmium	4.17		4.262		mg/Kg	☼	2	20
Lead	633		609.4		mg/Kg	☼	4	20
Selenium	0.659	J	0.6341	J	mg/Kg	☼	4	20

Method: Moisture - Percent Moisture

Lab Sample ID: 600-89799-1 DU
Matrix: Solid
Analysis Batch: 131137

Client Sample ID: 2014-NDA-7 (0-0.5)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	17		15		%		16	20
Percent Solids	83		85		%		3	20

Lab Sample ID: 600-88229-A-11 DU
Matrix: Solid
Analysis Batch: 131207

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	16		16		%		0.9	20
Percent Solids	84		84		%		0.2	20

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	MQL	MDL	Units	Method
1,1,1-Trichloroethane	0.00500	0.000740	mg/Kg	8260B
1,1,1-Trichloroethane	0.00500	0.000980	mg/L	8260B
1,1,2,2-Tetrachloroethane	0.00500	0.000870	mg/Kg	8260B
1,1,2,2-Tetrachloroethane	0.00500	0.000800	mg/L	8260B
1,1,2-Trichloroethane	0.00500	0.000730	mg/Kg	8260B
1,1,2-Trichloroethane	0.00500	0.000530	mg/L	8260B
1,1-Dichloroethane	0.00500	0.000870	mg/Kg	8260B
1,1-Dichloroethane	0.00500	0.000500	mg/L	8260B
1,1-Dichloroethene	0.00500	0.00122	mg/Kg	8260B
1,1-Dichloroethene	0.00500	0.000760	mg/L	8260B
1,2-Dichloroethane	0.00500	0.000900	mg/Kg	8260B
1,2-Dichloroethane	0.00500	0.00101	mg/L	8260B
1,2-Dichloroethene, Total	0.0100	0.00190	mg/Kg	8260B
1,2-Dichloroethene, Total	0.0100	0.000840	mg/L	8260B
1,2-Dichloropropane	0.00500	0.000710	mg/Kg	8260B
1,2-Dichloropropane	0.00500	0.00141	mg/L	8260B
2-Butanone (MEK)	0.0100	0.00190	mg/Kg	8260B
2-Butanone (MEK)	0.0100	0.00157	mg/L	8260B
2-Hexanone	0.0100	0.00101	mg/Kg	8260B
2-Hexanone	0.0100	0.00142	mg/L	8260B
4-Methyl-2-pentanone (MIBK)	0.0100	0.00147	mg/Kg	8260B
4-Methyl-2-pentanone (MIBK)	0.0100	0.00111	mg/L	8260B
Acetone	0.0100	0.00166	mg/Kg	8260B
Acetone	0.0100	0.00227	mg/L	8260B
Benzene	0.00500	0.000630	mg/Kg	8260B
Benzene	0.00500	0.000560	mg/L	8260B
Bromodichloromethane	0.00500	0.000660	mg/Kg	8260B
Bromodichloromethane	0.00500	0.000760	mg/L	8260B
Bromoform	0.00500	0.00137	mg/Kg	8260B
Bromoform	0.00500	0.000770	mg/L	8260B
Bromomethane	0.0100	0.000830	mg/Kg	8260B
Bromomethane	0.0100	0.00215	mg/L	8260B
Carbon disulfide	0.0100	0.000550	mg/Kg	8260B
Carbon disulfide	0.00500	0.00170	mg/L	8260B
Carbon tetrachloride	0.00500	0.00113	mg/Kg	8260B
Carbon tetrachloride	0.00500	0.000920	mg/L	8260B
Chlorobenzene	0.00500	0.000960	mg/Kg	8260B
Chlorobenzene	0.00500	0.000820	mg/L	8260B
Chlorobromomethane	0.00500	0.00178	mg/Kg	8260B
Chlorobromomethane	0.00500	0.000810	mg/L	8260B
Chloroethane	0.0100	0.00140	mg/Kg	8260B
Chloroethane	0.0100	0.00173	mg/L	8260B
Chloroform	0.00500	0.000660	mg/Kg	8260B
Chloroform	0.00500	0.000820	mg/L	8260B
Chloromethane	0.0100	0.00166	mg/Kg	8260B
Chloromethane	0.0100	0.000850	mg/L	8260B
cis-1,2-Dichloroethene	0.00500	0.000830	mg/Kg	8260B
cis-1,2-Dichloroethene	0.00500	0.000560	mg/L	8260B
cis-1,3-Dichloropropene	0.00500	0.000540	mg/Kg	8260B
cis-1,3-Dichloropropene	0.00500	0.000970	mg/L	8260B
Dibromochloromethane	0.00500	0.000940	mg/Kg	8260B
Dibromochloromethane	0.00500	0.000920	mg/L	8260B

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	MQL	MDL	Units	Method
Ethylbenzene	0.00500	0.00102	mg/Kg	8260B
Ethylbenzene	0.00500	0.00129	mg/L	8260B
Methylene Chloride	0.0100	0.00219	mg/Kg	8260B
Methylene Chloride	0.0100	0.00143	mg/L	8260B
m-Xylene & p-Xylene	0.0100	0.00152	mg/Kg	8260B
m-Xylene & p-Xylene	0.0100	0.00126	mg/L	8260B
o-Xylene	0.00500	0.00113	mg/Kg	8260B
o-Xylene	0.00500	0.000930	mg/L	8260B
Styrene	0.00500	0.000710	mg/Kg	8260B
Styrene	0.00500	0.000560	mg/L	8260B
Tetrachloroethene	0.00500	0.000710	mg/Kg	8260B
Tetrachloroethene	0.00500	0.00124	mg/L	8260B
Toluene	0.00500	0.00138	mg/Kg	8260B
Toluene	0.00500	0.000550	mg/L	8260B
trans-1,2-Dichloroethene	0.00500	0.00114	mg/Kg	8260B
trans-1,2-Dichloroethene	0.00500	0.000880	mg/L	8260B
trans-1,3-Dichloropropene	0.00500	0.000580	mg/Kg	8260B
trans-1,3-Dichloropropene	0.00500	0.000590	mg/L	8260B
Trichloroethene	0.00500	0.00140	mg/Kg	8260B
Trichloroethene	0.00500	0.00158	mg/L	8260B
Vinyl acetate	0.00500	0.000930	mg/Kg	8260B
Vinyl acetate	0.0100	0.000600	mg/L	8260B
Vinyl chloride	0.0100	0.000900	mg/Kg	8260B
Vinyl chloride	0.00500	0.000850	mg/L	8260B
Xylenes, Total	0.00500	0.00113	mg/Kg	8260B
Xylenes, Total	0.00500	0.00198	mg/L	8260B

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	MQL	MDL	Units	Method
1,2,4-Trichlorobenzene	0.0167	0.00210	mg/Kg	8270C LL
1,2,4-Trichlorobenzene	0.000500	0.000160	mg/L	8270C LL
1,2-Dichlorobenzene	0.0167	0.00302	mg/Kg	8270C LL
1,2-Dichlorobenzene	0.000500	0.000210	mg/L	8270C LL
1,3-Dichlorobenzene	0.0167	0.00154	mg/Kg	8270C LL
1,3-Dichlorobenzene	0.000500	0.000100	mg/L	8270C LL
1,4-Dichlorobenzene	0.0167	0.00225	mg/Kg	8270C LL
1,4-Dichlorobenzene	0.000500	0.000160	mg/L	8270C LL
2,4,5-Trichlorophenol	0.0167	0.0100	mg/Kg	8270C LL
2,4,5-Trichlorophenol	0.000500	0.000290	mg/L	8270C LL
2,4,6-Trichlorophenol	0.0167	0.00268	mg/Kg	8270C LL
2,4,6-Trichlorophenol	0.000500	0.000330	mg/L	8270C LL
2,4-Dichlorophenol	0.0167	0.00387	mg/Kg	8270C LL
2,4-Dichlorophenol	0.000500	0.000260	mg/L	8270C LL
2,4-Dimethylphenol	0.0167	0.00858	mg/Kg	8270C LL
2,4-Dimethylphenol	0.000500	0.000180	mg/L	8270C LL
2,4-Dinitrophenol	0.100	0.00472	mg/Kg	8270C LL
2,4-Dinitrophenol	0.00100	0.000400	mg/L	8270C LL
2,4-Dinitrotoluene	0.0167	0.00361	mg/Kg	8270C LL
2,4-Dinitrotoluene	0.000500	0.000320	mg/L	8270C LL
2,6-Dinitrotoluene	0.0167	0.00295	mg/Kg	8270C LL
2,6-Dinitrotoluene	0.000500	0.000290	mg/L	8270C LL

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	MQL	MDL	Units	Method
2-Chloronaphthalene	0.0167	0.00121	mg/Kg	8270C LL
2-Chloronaphthalene	0.000500	0.000190	mg/L	8270C LL
2-Chlorophenol	0.0167	0.00197	mg/Kg	8270C LL
2-Chlorophenol	0.000500	0.000220	mg/L	8270C LL
2-Methylnaphthalene	0.0167	0.00274	mg/Kg	8270C LL
2-Methylnaphthalene	0.000500	0.000140	mg/L	8270C LL
2-Methylphenol	0.0167	0.00323	mg/Kg	8270C LL
2-Methylphenol	0.000500	0.000190	mg/L	8270C LL
2-Nitroaniline	0.0167	0.00489	mg/Kg	8270C LL
2-Nitroaniline	0.000500	0.000350	mg/L	8270C LL
2-Nitrophenol	0.0167	0.00389	mg/Kg	8270C LL
2-Nitrophenol	0.000500	0.000220	mg/L	8270C LL
3 & 4 Methylphenol	0.0333	0.00279	mg/Kg	8270C LL
3 & 4 Methylphenol	0.00100	0.000160	mg/L	8270C LL
3,3'-Dichlorobenzidine	0.0167	0.0102	mg/Kg	8270C LL
3,3'-Dichlorobenzidine	0.000500	0.000320	mg/L	8270C LL
3-Nitroaniline	0.0167	0.00715	mg/Kg	8270C LL
3-Nitroaniline	0.000500	0.000130	mg/L	8270C LL
4,6-Dinitro-2-methylphenol	0.0167	0.00498	mg/Kg	8270C LL
4,6-Dinitro-2-methylphenol	0.00100	0.000160	mg/L	8270C LL
4-Bromophenyl phenyl ether	0.0167	0.00284	mg/Kg	8270C LL
4-Bromophenyl phenyl ether	0.000500	0.000250	mg/L	8270C LL
4-Chloro-3-methylphenol	0.0167	0.0156	mg/Kg	8270C LL
4-Chloro-3-methylphenol	0.000500	0.000250	mg/L	8270C LL
4-Chloroaniline	0.0167	0.00582	mg/Kg	8270C LL
4-Chloroaniline	0.000500	0.000110	mg/L	8270C LL
4-Chlorophenyl phenyl ether	0.0167	0.00180	mg/Kg	8270C LL
4-Chlorophenyl phenyl ether	0.000500	0.000230	mg/L	8270C LL
4-Nitroaniline	0.0167	0.0112	mg/Kg	8270C LL
4-Nitroaniline	0.000500	0.000230	mg/L	8270C LL
4-Nitrophenol	0.0167	0.00508	mg/Kg	8270C LL
4-Nitrophenol	0.00100	0.000330	mg/L	8270C LL
Acenaphthene	0.0167	0.00144	mg/Kg	8270C LL
Acenaphthene	0.000500	0.000160	mg/L	8270C LL
Acenaphthylene	0.0167	0.00100	mg/Kg	8270C LL
Acenaphthylene	0.000500	0.000160	mg/L	8270C LL
Anthracene	0.0167	0.00128	mg/Kg	8270C LL
Anthracene	0.000500	0.000440	mg/L	8270C LL
Benzidine	0.0833	0.00902	mg/Kg	8270C LL
Benzidine	0.0500	0.0179	mg/L	8270C LL
Benzo[a]anthracene	0.0167	0.00138	mg/Kg	8270C LL
Benzo[a]anthracene	0.000500	0.000250	mg/L	8270C LL
Benzo[a]pyrene	0.0167	0.00161	mg/Kg	8270C LL
Benzo[a]pyrene	0.000500	0.000130	mg/L	8270C LL
Benzo[b]fluoranthene	0.0167	0.00172	mg/Kg	8270C LL
Benzo[b]fluoranthene	0.000500	0.000180	mg/L	8270C LL
Benzo[g,h,i]perylene	0.0167	0.00507	mg/Kg	8270C LL
Benzo[g,h,i]perylene	0.000500	0.000350	mg/L	8270C LL
Benzo[k]fluoranthene	0.0167	0.00149	mg/Kg	8270C LL
Benzo[k]fluoranthene	0.000500	0.000160	mg/L	8270C LL
Benzyl alcohol	0.0167	0.00583	mg/Kg	8270C LL
Benzyl alcohol	0.000500	0.000510	mg/L	8270C LL

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	MQL	MDL	Units	Method
bis (2-Chloroisopropyl) ether	0.0167	0.00884	mg/Kg	8270C LL
bis (2-Chloroisopropyl) ether	0.000500	0.000180	mg/L	8270C LL
Bis(2-chloroethoxy)methane	0.0167	0.00142	mg/Kg	8270C LL
Bis(2-chloroethoxy)methane	0.000500	0.000190	mg/L	8270C LL
Bis(2-chloroethyl)ether	0.0167	0.00165	mg/Kg	8270C LL
Bis(2-chloroethyl)ether	0.000500	0.000180	mg/L	8270C LL
Bis(2-ethylhexyl) phthalate	0.0667	0.00537	mg/Kg	8270C LL
Bis(2-ethylhexyl) phthalate	0.00150	0.000590	mg/L	8270C LL
Butyl benzyl phthalate	0.0667	0.00619	mg/Kg	8270C LL
Butyl benzyl phthalate	0.00250	0.000850	mg/L	8270C LL
Carbazole	0.0167	0.00312	mg/Kg	8270C LL
Carbazole	0.000500	0.000350	mg/L	8270C LL
Chrysene	0.0167	0.00102	mg/Kg	8270C LL
Chrysene	0.000500	0.000240	mg/L	8270C LL
Dibenz(a,h)anthracene	0.0167	0.00363	mg/Kg	8270C LL
Dibenz(a,h)anthracene	0.000500	0.000290	mg/L	8270C LL
Dibenzofuran	0.0167	0.00178	mg/Kg	8270C LL
Dibenzofuran	0.000500	0.000160	mg/L	8270C LL
Diethyl phthalate	0.0667	0.00843	mg/Kg	8270C LL
Diethyl phthalate	0.00500	0.00419	mg/L	8270C LL
Dimethyl phthalate	0.0667	0.00489	mg/Kg	8270C LL
Dimethyl phthalate	0.00500	0.000180	mg/L	8270C LL
Di-n-butyl phthalate	0.0667	0.00259	mg/Kg	8270C LL
Di-n-butyl phthalate	0.00500	0.00187	mg/L	8270C LL
Di-n-octyl phthalate	0.0667	0.00190	mg/Kg	8270C LL
Di-n-octyl phthalate	0.00500	0.000160	mg/L	8270C LL
Fluoranthene	0.0167	0.00311	mg/Kg	8270C LL
Fluoranthene	0.000500	0.000310	mg/L	8270C LL
Fluorene	0.0167	0.00236	mg/Kg	8270C LL
Fluorene	0.000500	0.000120	mg/L	8270C LL
Hexachlorobenzene	0.0167	0.00152	mg/Kg	8270C LL
Hexachlorobenzene	0.000500	0.000250	mg/L	8270C LL
Hexachlorobutadiene	0.0167	0.00192	mg/Kg	8270C LL
Hexachlorobutadiene	0.000500	0.000190	mg/L	8270C LL
Hexachlorocyclopentadiene	0.0167	0.00461	mg/Kg	8270C LL
Hexachlorocyclopentadiene	0.000500	0.000150	mg/L	8270C LL
Hexachloroethane	0.0167	0.00231	mg/Kg	8270C LL
Hexachloroethane	0.000500	0.000170	mg/L	8270C LL
Indeno[1,2,3-cd]pyrene	0.0167	0.00350	mg/Kg	8270C LL
Indeno[1,2,3-cd]pyrene	0.000500	0.000290	mg/L	8270C LL
Isophorone	0.0167	0.00100	mg/Kg	8270C LL
Isophorone	0.000500	0.000150	mg/L	8270C LL
Naphthalene	0.0167	0.00135	mg/Kg	8270C LL
Naphthalene	0.000500	0.000160	mg/L	8270C LL
Nitrobenzene	0.0167	0.00296	mg/Kg	8270C LL
Nitrobenzene	0.000500	0.000200	mg/L	8270C LL
N-Nitrosodimethylamine	0.0167	0.00419	mg/Kg	8270C LL
N-Nitrosodimethylamine	0.000500	0.000160	mg/L	8270C LL
N-Nitrosodi-n-propylamine	0.0167	0.00222	mg/Kg	8270C LL
N-Nitrosodi-n-propylamine	0.000500	0.000240	mg/L	8270C LL
N-Nitrosodiphenylamine	0.0167	0.00189	mg/Kg	8270C LL
N-Nitrosodiphenylamine	0.000500	0.000330	mg/L	8270C LL

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Analyte	MQL	MDL	Units	Method
Pentachlorophenol	0.167	0.00400	mg/Kg	8270C LL
Pentachlorophenol	0.00100	0.000960	mg/L	8270C LL
Phenanthrene	0.0167	0.00495	mg/Kg	8270C LL
Phenanthrene	0.000500	0.000290	mg/L	8270C LL
Phenol	0.0167	0.00424	mg/Kg	8270C LL
Phenol	0.000500	0.000140	mg/L	8270C LL
Pyrene	0.0167	0.00183	mg/Kg	8270C LL
Pyrene	0.000500	0.000330	mg/L	8270C LL

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Antimony	2.50	0.232	mg/Kg	6010B
Antimony	0.0500	0.00630	mg/L	6010B
Arsenic	1.00	0.218	mg/Kg	6010B
Arsenic	0.0100	0.00328	mg/L	6010B
Cadmium	0.250	0.0256	mg/Kg	6010B
Cadmium	0.00500	0.000350	mg/L	6010B
Lead	0.500	0.105	mg/Kg	6010B
Lead	0.0100	0.00290	mg/L	6010B
Selenium	2.00	0.259	mg/Kg	6010B
Selenium	0.0400	0.00417	mg/L	6010B

General Chemistry

Analyte	MQL	MDL	Units	Method
Percent Moisture	1.0	1.0	%	Moisture
Percent Solids	1.0	1.0	%	Moisture

GC/MS VOA

Leach Batch: 131238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89761-A-1-D MSD	Matrix Spike Duplicate	TCLP	Water	1311	
600-89761-A-1-E MS	Matrix Spike	TCLP	Water	1311	

Analysis Batch: 131319

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89799-1	2014-NDA-7 (0-0.5)	Total/NA	Solid	8260B	
600-89799-1MS	2014-NDA-7 (0-0.5)	Total/NA	Solid	8260B	
600-89799-1MSD	2014-NDA-7 (0-0.5)	Total/NA	Solid	8260B	
600-89799-4	DUP-4	Total/NA	Solid	8260B	
600-89799-5	2014-FFTA-07 (0-0.5)	Total/NA	Solid	8260B	
600-89799-8	2014-FFTA-08 (0-0.5)	Total/NA	Solid	8260B	
600-89799-11	2014-FFTA-06 (0.-0.5)	Total/NA	Solid	8260B	
LCS 600-131319/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-131319/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 600-131319/5	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 131416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89761-A-1-D MSD	Matrix Spike Duplicate	TCLP	Water	8260B	131238
600-89761-A-1-E MS	Matrix Spike	TCLP	Water	8260B	131238
600-89799-20	Field Blank	Total/NA	Water	8260B	
600-89799-21	Rinse Blank-Geo	Total/NA	Water	8260B	
LCS 600-131416/3	Lab Control Sample	Total/NA	Water	8260B	
MB 600-131416/4	Method Blank	Total/NA	Water	8260B	

Leach Batch: 131493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89841-A-1-K MSD	Matrix Spike Duplicate	TCLP	Water	1311	
600-89841-A-1-L MS	Matrix Spike	TCLP	Water	1311	

Analysis Batch: 131549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89799-22	Trip Blank	Total/NA	Water	8260B	
600-89841-A-1-K MSD	Matrix Spike Duplicate	TCLP	Water	8260B	131493
600-89841-A-1-L MS	Matrix Spike	TCLP	Water	8260B	131493
LCS 600-131549/3	Lab Control Sample	Total/NA	Water	8260B	
MB 600-131549/4	Method Blank	Total/NA	Water	8260B	

GC/MS Semi VOA

Prep Batch: 131222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89799-21	Rinse Blank-Geo	Total/NA	Water	3510C	
600-89799-21 MS	Rinse Blank-Geo	Total/NA	Water	3510C	
600-89799-21 MSD	Rinse Blank-Geo	Total/NA	Water	3510C	
LCS 600-131222/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 600-131222/1-A	Method Blank	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 131363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89799-1	2014-NDA-7 (0-0.5)	Total/NA	Solid	3546	
600-89799-1MS	2014-NDA-7 (0-0.5)	Total/NA	Solid	3546	
600-89799-1MSD	2014-NDA-7 (0-0.5)	Total/NA	Solid	3546	
600-89799-4	DUP-4	Total/NA	Solid	3546	
600-89799-5	2014-FFTA-07 (0-0.5)	Total/NA	Solid	3546	
600-89799-8	2014-FFTA-08 (0-0.5)	Total/NA	Solid	3546	
600-89799-11	2014-FFTA-06 (0.-0.5)	Total/NA	Solid	3546	
LCS 600-131363/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 600-131363/1-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 131423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89799-21	Rinse Blank-Geo	Total/NA	Water	8270C LL	131222
600-89799-21 MS	Rinse Blank-Geo	Total/NA	Water	8270C LL	131222
600-89799-21 MSD	Rinse Blank-Geo	Total/NA	Water	8270C LL	131222
LCS 600-131222/2-A	Lab Control Sample	Total/NA	Water	8270C LL	131222
MB 600-131222/1-A	Method Blank	Total/NA	Water	8270C LL	131222

Analysis Batch: 131598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89799-1	2014-NDA-7 (0-0.5)	Total/NA	Solid	8270C LL	131363
600-89799-1MS	2014-NDA-7 (0-0.5)	Total/NA	Solid	8270C LL	131363
600-89799-1MSD	2014-NDA-7 (0-0.5)	Total/NA	Solid	8270C LL	131363
600-89799-4	DUP-4	Total/NA	Solid	8270C LL	131363
600-89799-5	2014-FFTA-07 (0-0.5)	Total/NA	Solid	8270C LL	131363
600-89799-8	2014-FFTA-08 (0-0.5)	Total/NA	Solid	8270C LL	131363
600-89799-11	2014-FFTA-06 (0.-0.5)	Total/NA	Solid	8270C LL	131363
MB 600-131363/1-A	Method Blank	Total/NA	Solid	8270C LL	131363

Analysis Batch: 131634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 600-131363/2-A	Lab Control Sample	Total/NA	Solid	8270C LL	131363

Metals

Prep Batch: 131236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89799-21	Rinse Blank-Geo	Total/NA	Water	3010A	
600-89799-21 DU	Rinse Blank-Geo	Total/NA	Water	3010A	
600-89799-21 MS	Rinse Blank-Geo	Total/NA	Water	3010A	
600-89799-21 MSD	Rinse Blank-Geo	Total/NA	Water	3010A	
LCS 600-131236/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-131236/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 131372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89799-21	Rinse Blank-Geo	Total/NA	Water	6010B	131236
600-89799-21 DU	Rinse Blank-Geo	Total/NA	Water	6010B	131236
600-89799-21 MS	Rinse Blank-Geo	Total/NA	Water	6010B	131236
600-89799-21 MSD	Rinse Blank-Geo	Total/NA	Water	6010B	131236

Metals (Continued)

Analysis Batch: 131372 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 600-131236/2-A	Lab Control Sample	Total/NA	Water	6010B	131236
MB 600-131236/1-A	Method Blank	Total/NA	Water	6010B	131236

Prep Batch: 131489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89799-1	2014-NDA-7 (0-0.5)	Total/NA	Solid	3050B	
600-89799-1 DU	2014-NDA-7 (0-0.5)	Total/NA	Solid	3050B	
600-89799-1MS	2014-NDA-7 (0-0.5)	Total/NA	Solid	3050B	
600-89799-1MSD	2014-NDA-7 (0-0.5)	Total/NA	Solid	3050B	
600-89799-4	DUP-4	Total/NA	Solid	3050B	
600-89799-5	2014-FFTA-07 (0-0.5)	Total/NA	Solid	3050B	
600-89799-8	2014-FFTA-08 (0-0.5)	Total/NA	Solid	3050B	
600-89799-11	2014-FFTA-06 (0.-0.5)	Total/NA	Solid	3050B	
600-89799-14	2014-NDA-9 (0-0.5)	Total/NA	Solid	3050B	
600-89799-17	2014-NDA-8 (0-0.5)	Total/NA	Solid	3050B	
LCSSRM 600-131489/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-131489/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 131531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89799-1	2014-NDA-7 (0-0.5)	Total/NA	Solid	6010B	131489
600-89799-1 DU	2014-NDA-7 (0-0.5)	Total/NA	Solid	6010B	131489
600-89799-1MS	2014-NDA-7 (0-0.5)	Total/NA	Solid	6010B	131489
600-89799-1MSD	2014-NDA-7 (0-0.5)	Total/NA	Solid	6010B	131489
600-89799-4	DUP-4	Total/NA	Solid	6010B	131489
600-89799-5	2014-FFTA-07 (0-0.5)	Total/NA	Solid	6010B	131489
600-89799-8	2014-FFTA-08 (0-0.5)	Total/NA	Solid	6010B	131489
600-89799-11	2014-FFTA-06 (0.-0.5)	Total/NA	Solid	6010B	131489
600-89799-14	2014-NDA-9 (0-0.5)	Total/NA	Solid	6010B	131489
600-89799-17	2014-NDA-8 (0-0.5)	Total/NA	Solid	6010B	131489
LCSSRM 600-131489/2-A	Lab Control Sample	Total/NA	Solid	6010B	131489
MB 600-131489/1-A	Method Blank	Total/NA	Solid	6010B	131489

General Chemistry

Analysis Batch: 131137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89799-1	2014-NDA-7 (0-0.5)	Total/NA	Solid	Moisture	
600-89799-1 DU	2014-NDA-7 (0-0.5)	Total/NA	Solid	Moisture	
600-89799-4	DUP-4	Total/NA	Solid	Moisture	
600-89799-5	2014-FFTA-07 (0-0.5)	Total/NA	Solid	Moisture	
600-89799-8	2014-FFTA-08 (0-0.5)	Total/NA	Solid	Moisture	
600-89799-11	2014-FFTA-06 (0.-0.5)	Total/NA	Solid	Moisture	

Analysis Batch: 131207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-88229-A-11 DU	Duplicate	Total/NA	Solid	Moisture	
600-89799-1MS	2014-NDA-7 (0-0.5)	Total/NA	Solid	Moisture	
600-89799-1MSD	2014-NDA-7 (0-0.5)	Total/NA	Solid	Moisture	
600-89799-14	2014-NDA-9 (0-0.5)	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 131207 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89799-17	2014-NDA-8 (0-0.5)	Total/NA	Solid	Moisture	

Client Sample ID: 2014-NDA-7 (0-0.5)

Lab Sample ID: 600-89799-1

Date Collected: 04/01/14 10:01

Matrix: Solid

Date Received: 04/02/14 10:22

Percent Solids: 82.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	131319	04/06/14 17:39	WS1	TAL HOU
Total/NA	Prep	3546			15.06 g	1.0 mL	131363	04/07/14 11:29	FNC	TAL HOU
Total/NA	Analysis	8270C LL		10	15.06 g	1.0 mL	131598	04/08/14 13:22	MBB	TAL HOU
Total/NA	Prep	3050B			1.00 g	50 mL	131489	04/08/14 12:20	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	131531	04/08/14 17:12	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131137	04/03/14 13:28	AYS	TAL HOU

Client Sample ID: DUP-4

Lab Sample ID: 600-89799-4

Date Collected: 04/01/14 00:00

Matrix: Solid

Date Received: 04/02/14 10:22

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	131319	04/06/14 18:52	WS1	TAL HOU
Total/NA	Prep	3546			15.09 g	1.0 mL	131363	04/07/14 11:29	FNC	TAL HOU
Total/NA	Analysis	8270C LL		1	15.09 g	1.0 mL	131598	04/08/14 14:45	MBB	TAL HOU
Total/NA	Prep	3050B			1.06 g	50 mL	131489	04/08/14 12:20	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	131531	04/08/14 17:23	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131137	04/03/14 13:28	AYS	TAL HOU

Client Sample ID: 2014-FFTA-07 (0-0.5)

Lab Sample ID: 600-89799-5

Date Collected: 04/01/14 10:55

Matrix: Solid

Date Received: 04/02/14 10:22

Percent Solids: 82.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 mL	131319	04/06/14 19:17	WS1	TAL HOU
Total/NA	Prep	3546			15.11 g	1.0 mL	131363	04/07/14 11:29	FNC	TAL HOU
Total/NA	Analysis	8270C LL		5	15.11 g	1.0 mL	131598	04/08/14 15:13	MBB	TAL HOU
Total/NA	Prep	3050B			1.01 g	50 mL	131489	04/08/14 12:20	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	131531	04/08/14 17:25	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131137	04/03/14 13:28	AYS	TAL HOU

Client Sample ID: 2014-FFTA-08 (0-0.5)

Lab Sample ID: 600-89799-8

Date Collected: 04/01/14 11:32

Matrix: Solid

Date Received: 04/02/14 10:22

Percent Solids: 89.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	131319	04/06/14 19:41	WS1	TAL HOU
Total/NA	Prep	3546			15.13 g	1.0 mL	131363	04/07/14 11:29	FNC	TAL HOU
Total/NA	Analysis	8270C LL		1	15.13 g	1.0 mL	131598	04/08/14 15:41	MBB	TAL HOU
Total/NA	Prep	3050B			1.05 g	50 mL	131489	04/08/14 12:20	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	131531	04/08/14 17:28	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131137	04/03/14 13:28	AYS	TAL HOU

Client Sample ID: 2014-FFTA-06 (0.-0.5)

Lab Sample ID: 600-89799-11

Date Collected: 04/01/14 12:10
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 83.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	131319	04/06/14 20:05	WS1	TAL HOU
Total/NA	Prep	3546			15.05 g	1.0 mL	131363	04/07/14 11:29	FNC	TAL HOU
Total/NA	Analysis	8270C LL		1	15.05 g	1.0 mL	131598	04/08/14 16:09	MBB	TAL HOU
Total/NA	Prep	3050B			1.05 g	50 mL	131489	04/08/14 12:20	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	131531	04/08/14 17:30	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131137	04/03/14 13:28	AYS	TAL HOU

Client Sample ID: 2014-NDA-9 (0-0.5)

Lab Sample ID: 600-89799-14

Date Collected: 04/01/14 14:15
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 74.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	131489	04/08/14 12:20	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	131531	04/08/14 17:40	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131207	04/04/14 09:45	AYS	TAL HOU

Client Sample ID: 2014-NDA-8 (0-0.5)

Lab Sample ID: 600-89799-17

Date Collected: 04/01/14 14:46
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 77.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.07 g	50 mL	131489	04/08/14 12:20	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	131531	04/08/14 17:43	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131207	04/04/14 09:45	AYS	TAL HOU

Client Sample ID: Field Blank

Lab Sample ID: 600-89799-20

Date Collected: 04/01/14 15:25
Matrix: Water
Date Received: 04/02/14 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	131416	04/07/14 20:03	DT1	TAL HOU

Client Sample ID: Rinse Blank-Geo

Lab Sample ID: 600-89799-21

Date Collected: 04/01/14 15:30
Matrix: Water
Date Received: 04/02/14 10:22

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	131416	04/07/14 20:27	DT1	TAL HOU
Total/NA	Prep	3510C			250 mL	1.00 mL	131222	04/04/14 10:44	MRA	TAL HOU
Total/NA	Analysis	8270C LL		1	250 mL	1.00 mL	131423	04/04/14 21:35	MBB	TAL HOU
Total/NA	Prep	3010A			50 mL	50 mL	131236	04/04/14 11:38	NER	TAL HOU
Total/NA	Analysis	6010B		1	50 mL	50 mL	131372	04/07/14 10:39	DCL	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89799-1

Client Sample ID: Trip Blank
Date Collected: 04/01/14 00:00
Date Received: 04/02/14 10:22

Lab Sample ID: 600-89799-22
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	131549	04/08/14 19:57	KLV	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89799-1

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Texas	NELAP	6	T104704223	10-31-14

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260B		Solid	1,2-Dichloroethene, Total
8260B		Water	1,2-Dichloroethene, Total
8270C LL	3510C	Water	3 & 4 Methylphenol
8270C LL	3546	Solid	3 & 4 Methylphenol
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Chain of Custody Record

600-89799 Chain of Custody

Receipt _____ Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates Inc.	Dean Joiner		255288
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 of 2
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Project Name and Location (State) Exide Frisco	**Carrier/Waybill Number**		
Contract/Purchase Order/Quote No. 1302086			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: 8260 VOCs	8270 SVOCs	8270 PAHs	Gold Metals (Calc)	In Acc w/ MSA	Special Instructions/ Conditions of Receipt
2014-NDA-7 (0-0.5)	4/1/14	1001				X	X						X	X	X	X		
2014-NDA-7 (0.5-2)		1002																Hold
2014-NDA-7 (2-4)		1003																Hold
2014-NDA-7 (0-0.5) MS		1001																
2014-NDA-7 (0-0.5) MSD		1001																
DUP-4		-																
2014-FFTA-07 (0-0.5)		1055																
2014-FFTA-07 (0.5-2)		1056																Hold
2014-FFTA-07 (2-4)		1057																Hold
2014-FFTA-08 (0-0.5)		1132																
2014-FFTA-08 (0.5-2)		1133																Hold
2014-FFTA-08 (2-4)		1134																Hold

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time
1. Relinquished By: Jing Song Xi	4/1/14	1600
2. Relinquished By:		
3. Relinquished By:		
1. Received By:		
2. Received By:		
3. Received By:	4/2/14	10:22

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

4/11/2014

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates, Inc.	Dean Jansen		255289
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 2 of 2
City / State / Zip Code	Site Contact	Lab Contact	
Project Name and Location (State): Eagle Ford	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.: 1302086			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8260 VOCs	8270 SVOCs	8270 PAHs	Gold Metals	Special Instructions/ Conditions of Receipt
2014-FFTA-06 (0-0.5)	4/1/14	1210				X	X						X	X	X	X	
2014-FFTA-06 (0.5-2)		1211											X	X	X	X	Hold
2014-FFTA-06 (2-4)		1212											X	X	X	X	
2014-NDA-9 (0-0.5)		1415														X	
2014-NDA-9 (0.5-2)		1416														X	Hold
2014-NDA-9 (2-4)		1417														X	Hold
2014-NDA-8 (0-0.5)		1446														X	
2014-NDA-8 (0.5-2)		1447														X	Hold
2014-NDA-8 (2-4)		1448														X	Hold
Field Blank		1525		X						X			X				
Rinse Blank - Geo		1530		X						X			X	X	X	X	
Trip Blank				X						X			X				

In Acc w/ MSA

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Jing Song Xi	4/1/14	1600	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By	4/2/14	10:22

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

4/11/2014

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-89799-1

Login Number: 89799

List Source: TestAmerica Houston

List Number: 1

Creator: Lopez, Sandro R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	2.5
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.	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	Check done at department level as required.

TestAmerica

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ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-89799-2
Client Project/Site: Exide Recycling Center, Frisco TX

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
5/8/2014 3:05:30 PM
Cathy Upton, Project Management Assistant II
(713)690-4444
cathy.upton@testamericainc.com

Designee for

Dean Joiner, Project Manager II
(713)690-4444
dean.joiner@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: 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.

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-89799-2 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
    a. Items consistent with NELAC Chapter 5,
    b. dilution factors,
    c. preparation methods,
    d. cleanup methods, and
    e. if required for the project, tentatively identified compounds (TICs).
- ☑ R4 - Surrogate recovery data including:
    a. Calculated recovery (%R), and
    b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
    a. LCS spiking amounts,
    b. Calculated %R for each analyte, and
    c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
    a. Samples associated with the MS/MSD clearly identified,
    b. MS/MSD spiking amounts,
    c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
    d. Calculated %Rs and relative percent differences (RPDs), and
    e. The laboratory's MS/MSD QC limits
- ☑ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
    a. The amount of analyte measured in the duplicate,
    b. The calculated RPD, and
    c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton		5/8/2014
Name (printed)	Signature	Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	5/5/2014
Project Name:	Exide Recycling Center, Frisco TX	Laboratory Job Number:	600-89799-2
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?		X			R03A
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?	X				
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?	X				
		Were surrogate percent recoveries in all samples within the laboratory QC limits?		X			R04B
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				R05D
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			R07C
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				R10A
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	5/5/2014
Project Name:	Exide Recycling Center, Frisco TX	Laboratory Job Number:	600-89799-2
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?	X				
		Were ion abundance data within the method-required QC limits?	X				
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?	X				
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			S09A
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
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5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	5/5/2014
Project Name:	Exide Recycling Center, Frisco TX	Laboratory Job Number:	600-89799-2
Reviewer Name:	Dean A Joiner		

ER #[1]	Description
R10A	The following sample(s) was activated for Metals, SV and/or VOA analysis by the client on 04/16/14: 2014-FFTA-06 (0.5-2) (600-89799-12), 2014-FFTA-07 (0.5-2) (600-89799-6), 2014-FFTA-08 (0.5-2) (600-89799-9), 2014-NDA-7 (0.5-2) (600-89799-2), 2014-NDA-8 (0.5-2) (600-89799-18), 2014-NDA-9 (0.5-2) (600-89799-15). These samples were originally on Hold on the chain-of-custody (COC). Please see attached email.
R03A	The request for analyses for the following sample(s) for volatiles and semivolatiles was received one day past the the holding time: 2014-FFTA-08 (0.5-2) (600-89799-9), 2014-NDA-7 (0.5-2) (600-89799-2). The client was contacted and requested that the samples be analyzed and the results narrated. DAJ 04/16/14
R04B	Method 8270C LL: The surrogate recovery for 2,4,6-Tribromophenol for the laboratory control sample (LCS) associated with batch <<132311>> was outside the upper control limits. All associated sample surrogates and method blank (MB) fell within acceptance criteria; therefore, the data have been reported.
R05D	Method 6010B: The CCBs (CCB 600-132626/17 and CCB 600-132626/30)for batch 132626 contained arsenic above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed. Method 6010B: The method blank for batch 132552 contained lead above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.
R07C	Method 6010B: 600-89701-A-58-C MS failed the recovery criteria for the following analyte(s): Antimony, Arsenic. Matrix interference is suspected. Method 6010B: 600-89701-A-58-D MSD failed the recovery criteria for the following analyte(s): Antimony. Matrix interference is suspected.
S09A	Method 6010B: The serial dilution performed for the following sample(s) associated with batch 132572 was outside control limits for arsenic: 600-89701-58 SD.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Detection Check Standard

Matrix:	Soil
Method:	6010B
Preparation:	3050
Date Analyzed:	3/28/2014
Date Prepared:	3/27/2014
Instrument:	Thermo 6500
TALS Batches:	130577p, 130672
Prep/Reagent Factor =	50
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.299654	0.5	0.36	25
Antimony	0.231553	0.45	0.31	2.5
Arsenic	0.217923	0.5	0.57	1
Barium	0.011322	0.03	0.03	1
Beryllium	0.014513	0.02	0.02	0.25
Boron	0.385535	0.6	0.49	20
Cadmium	0.025642	0.05	0.045	0.25
Calcium	0.86399	1.5	2.07	100
Chromium	0.050606	0.1	0.11	0.5
Cobalt	0.067622	0.1	0.105	0.5
Copper	0.173703	0.5	0.535	0.5
Iron	2.534007	4	4.035	20
Lead	0.104832	0.2	0.18	0.5
Selenium	0.258884	0.5	0.505	2
Manganese	0.038111	0.05	0.05	1.5
Molybdenum	0.136448	0.35	0.325	0.5
Nickel	0.116599	0.15	0.145	1
Silver	0.118848	0.2	0.22	0.5
Sodium	0.885548	2.4	2.13	100
Thallium	0.276988	0.7	0.615	1.5
Tin	0.08729	0.15	0.13	1
Titanium	0.014529	0.03	0.035	0.5
Vanadium	0.079068	0.15	0.165	0.5
Zinc	0.108432	0.2	0.285	1.5

Matrix: Solid
Method: 8260B
Prep Method: No Prep
Date Analyzed: 3/21/2014
Job #: 600-88537
TALS Batch: 130190
Units: ug/Kg

Analyte	Instrument #	MDL	DCS Spike	Measured Result	MQL
1,1,1,2-Tetrachloroethane	VOAMS09	1.400	5.000	4.935	5
1,1,1-Trichloroethane	VOAMS09	0.740	2.500	2.631	5
1,1,2,2-Tetrachloroethane	VOAMS09	0.870	2.500	3.401	5
1,1,2-Trichloro-1,2,2-trifluoroethane	VOAMS09	1.440	5.000	3.870	5
1,1,2-Trichloroethane	VOAMS09	0.730	2.500	3.098	40
1,1-Dichloroethane	VOAMS09	0.870	2.500	2.576	5
1,1-Dichloroethene	VOAMS09	1.220	2.500	2.817	5
1,1-Dichloropropene	VOAMS09	0.650	2.500	2.393	5
1,2,3-Trichlorobenzene	VOAMS09	0.620	2.500	3.456	5
1,2,3-Trichloropropane	VOAMS09	1.310	5.000	5.608	5
1,2,3-Trimethylbenzene	VOAMS09	1.820	5.000	4.815	5
1,2,4-Trichlorobenzene	VOAMS09	1.970	5.000	5.000	5
1,2,4-Trimethylbenzene	VOAMS09	0.920	2.500	3.023	5
1,2-Dibromo-3-Chloropropane	VOAMS09	2.440	5.000	5.298	5
1,2-Dichlorobenzene	VOAMS09	0.800	2.500	3.526	5
1,2-Dichloroethane	VOAMS09	0.900	2.500	2.524	5
1,2-Dichloroethene, Total	VOAMS09	1.900	5.000	5.400	10
1,2-Dichloropropane	VOAMS09	0.710	2.500	2.474	5
1,3,5-Trichlorobenzene	VOAMS09	10.000	2.500	3.327	5
1,3,5-Trimethylbenzene	VOAMS09	1.600	5.000	4.673	5
1,3-Dichlorobenzene	VOAMS09	0.710	2.500	3.357	5
1,3-Dichloropropane	VOAMS09	0.630	2.500	3.250	5
1,4-Dichlorobenzene	VOAMS09	0.660	2.500	3.463	5
1,4-Dioxane	VOAMS09	62.070	100.000	91.825	500
2,2-Dichloropropane	VOAMS09	1.820	5.000	5.323	5
2-Butanone (MEK)	VOAMS09	1.900	5.000	7.184	10
2-Chloro-1,3-butadiene	VOAMS09	2.710	5.000	3.762	5
2-Chloroethyl vinyl ether	VOAMS09	0.980	5.000	5.535	10
2-Chlorotoluene	VOAMS09	0.680	2.500	3.335	5
2-Hexanone	VOAMS09	1.010	5.000	6.150	10
2-Methyl-2-propanol	VOAMS09	10.000	25.000	81.862	50
2-Nitropropane	VOAMS09	24.290	5.000	5.192	5
3-Chloro-1-propene	VOAMS09	1.390	5.000	3.826	5
4-Chlorotoluene	VOAMS09	0.830	2.500	3.101	5
4-Isopropyltoluene	VOAMS09	1.020	2.500	3.093	5
4-Methyl-2-pentanone (MIBK)	VOAMS09	1.470	5.000	4.944	10
Acetone	VOAMS09	1.660	5.000	10.353	10
Acetonitrile	VOAMS09	1.390	25.000	21.812	10
Acrolein	VOAMS09	6.230	12.500	13.159	25
Acrylonitrile	VOAMS09	5.820	25.000	27.062	25
Benzene	VOAMS09	0.630	2.500	2.585	5
Benzyl chloride	VOAMS09	2.140	5.000	4.456	5
Bromobenzene	VOAMS09	0.990	2.500	3.328	5
Bromoform	VOAMS09	1.370	5.000	4.937	5
Bromomethane	VOAMS09	0.830	2.500	2.396	10
Butadiene	VOAMS09	1.250	5.000	2.328	5
Carbon disulfide	VOAMS09	0.550	2.500	2.522	10
Carbon tetrachloride	VOAMS09	1.130	2.500	2.365	5
Chlorobenzene	VOAMS09	0.960	2.500	3.162	5
Chlorobromomethane	VOAMS09	1.780	5.000	4.698	5
Chlorodibromomethane	VOAMS09	0.940	2.500	3.030	5

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Matrix: Solid
Method: 8260B
Prep Method: No Prep
Date Analyzed: 3/21/2014
Job #: 600-88537
TALS Batch: 130190
Units: ug/Kg

Analyte	Instrument #	MDL	DCS Spike	Measured Result	MQL
Chloroethane	VOAMS09	1.400	5.000	3.451	10
Chloroform	VOAMS09	0.660	2.500	2.970	5
Chloromethane	VOAMS09	1.660	5.000	2.349	10
cis-1,2-Dichloroethene	VOAMS09	0.830	2.500	2.738	5
cis-1,3-Dichloropropene	VOAMS09	0.540	2.500	2.896	5
Cyclohexane	VOAMS09	1.920	5.000	3.814	5
Cyclohexanone	VOAMS09	134.780	250.000	269.241	250
Dibromomethane	VOAMS09	0.750	2.500	2.652	5
Dichlorobromomethane	VOAMS09	0.660	2.500	2.450	5
Dichlorodifluoromethane	VOAMS09	1.540	5.000	1.560	5
Ethyl acetate	VOAMS09	2.810	10.000	6.673	5
Ethyl acrylate	VOAMS09	10.660	2.500	2.216	10
Ethyl ether	VOAMS09	1.950	5.000	4.119	5
Ethyl methacrylate	VOAMS09	1.660	5.000	4.617	5
Ethylbenzene	VOAMS09	1.020	2.500	3.066	5
Ethylene Dibromide	VOAMS09	1.020	2.500	3.098	5
Hexachlorobutadiene	VOAMS09	1.130	2.500	3.317	5
Hexane	VOAMS09	1.230	2.500	5.564	5
Iodomethane	VOAMS09	2.500	5.000	4.528	5
Isobutyl alcohol	VOAMS09	17.160	62.500	87.299	50
Isooctane	VOAMS09	10.000	2.500	2.367	5
Isopropyl alcohol	VOAMS09	27.470	50.000	54.421	100
Isopropyl ether	VOAMS09	1.760	5.000	3.602	5
Isopropylbenzene	VOAMS09	0.920	2.500	3.078	5
Methacrylonitrile	VOAMS09	5.000	25.000	25.095	5
Methyl acetate	VOAMS09	2.910	12.500	12.907	5
Methyl methacrylate	VOAMS09	2.860	10.000	6.888	10
Methyl tert-butyl ether	VOAMS09	1.830	5.000	4.082	5
Methylcyclohexane	VOAMS09	1.460	5.000	3.885	5
Methylene Chloride	VOAMS09	2.190	5.000	12.713	10
m-Xylene & p-Xylene	VOAMS09	1.520	5.000	4.840	10
Naphthalene	VOAMS09	2.370	5.000	5.154	10
n-Butyl acetate	VOAMS09	2.370	5.000	4.374	5
n-Butylbenzene	VOAMS09	0.580	2.500	2.983	5
n-Heptane	VOAMS09	10.000	2.500	2.148	5
N-Propylbenzene	VOAMS09	0.950	2.500	3.017	5
o-Xylene	VOAMS09	1.130	2.500	3.088	5
Pentachloroethane	VOAMS09	5.000	5.000	6.191	5
Propionitrile	VOAMS09	2.360	25.000	37.976	5
sec-Butylbenzene	VOAMS09	0.700	2.500	3.030	5
Styrene	VOAMS09	0.710	2.500	2.834	5
tert-Butylbenzene	VOAMS09	0.950	2.500	3.037	5
Tetrachloroethene	VOAMS09	0.710	2.500	2.844	5
Tetrahydrofuran	VOAMS09	5.390	10.000	8.465	5
Toluene	VOAMS09	1.380	5.000	4.790	5
trans-1,2-Dichloroethene	VOAMS09	1.140	2.500	2.656	5
trans-1,3-Dichloropropene	VOAMS09	0.580	2.500	2.817	5
trans-1,4-Dichloro-2-butene	VOAMS09	1.900	5.000	4.482	5
Trichloroethene	VOAMS09	1.400	5.000	4.274	5
Trichlorofluoromethane	VOAMS09	0.660	2.500	2.364	10
Vinyl acetate	VOAMS09	0.930	5.000	4.327	10

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Matrix: Solid
Method: 8260B
Prep Method: No Prep
Date Analyzed: 3/21/2014
Job #: 600-88537
TALS Batch: 130190
Units: ug/Kg

Analyte	Instrument #	MDL	DCS Spike	Measured Result	MQL
Vinyl chloride	VOAMS09	0.900	2.500	1.861	10
Xylenes, Total	VOAMS09	1.130	5.000	6.100	5

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Matrix: Solid
Method: 8270C
Prep Method: 3550B
Date Analyzed: 3/17/2014
Job #: 600-87830
TALS Batch: 129651
Units: ug/Kg

Analyte	Instrument #	MDL	DCS Spike	Measured Result	MQL
1,1'-Biphenyl	SVMS05	41.470	166.445	139.727	330
1,2,4,5-Tetrachlorobenzene	SVMS05	21.060	166.445	129.435	330
1,2,4-Trichlorobenzene	SVMS05	210.610	332.668	270.205	330
1,2-Dichlorobenzene	SVMS05	26.290	166.445	153.300	330
1,2-Dinitrobenzene	SVMS05	55.050	166.445	143.344	330
1,2-Diphenylhydrazine	SVMS05	240.820	332.668	265.939	330
1,3,5-Trinitrobenzene	SVMS05	37.680	166.667	122.437	3300
1,3-Dichlorobenzene	SVMS05	178.130	332.668	298.976	330
1,3-Dinitrobenzene	SVMS05	216.410	332.668	294.911	330
1,4-Dichlorobenzene	SVMS05	23.060	166.445	148.945	330
1,4-Dinitrobenzene	SVMS05	194.440	332.889	261.728	330
1,4-Naphthoquinone	SVMS05	36.410	166.667	0.000	330
1-Chloronaphthalene	SVMS05	330.000	332.889	291.608	330
1-Methylnaphthalene	SVMS05	191.680	332.668	294.164	330
1-Naphthylamine	SVMS05	36.480	166.667	53.940	330
2,2'-oxybis[1-chloropropane]	SVMS05	34.630	166.445	156.717	330
2,3,4,6-Tetrachlorophenol	SVMS05	34.700	166.445	93.957	330
2,3,5,6-Tetrachlorophenol	SVMS05	27.830	166.445	75.308	330
2,4,5-Trichlorophenol	SVMS05	62.080	166.445	106.969	330
2,4,6-Trichlorophenol	SVMS05	180.120	332.668	251.903	330
2,4-Dichlorophenol	SVMS05	182.650	332.668	267.062	330
2,4-Dimethylphenol	SVMS05	63.610	166.445	125.659	330
2,4-Dinitrophenol	SVMS05	127.960	332.889	372.450	1600
2,4-Dinitrotoluene	SVMS05	32.910	166.445	116.143	330
2,6-Dichlorophenol	SVMS05	53.530	166.667	135.601	330
2,6-Dimethylphenol	SVMS05	80.180	166.445	142.651	330
2,6-Dinitrotoluene	SVMS05	209.650	332.668	282.571	330
2-Acetylaminofluorene	SVMS05	35.250	166.667	110.654	330
2-Chloronaphthalene	SVMS05	214.830	332.668	291.535	330
2-Chlorophenol	SVMS05	23.300	166.445	153.915	330
2-Methylnaphthalene	SVMS05	189.050	332.668	293.840	330
2-Methylphenol	SVMS05	37.860	166.445	144.112	330
2-Naphthylamine	SVMS05	32.370	166.445	90.986	330
2-Nitroaniline	SVMS05	194.600	332.668	229.767	330
2-Nitrophenol	SVMS05	179.910	332.668	296.210	330
2-Picoline	SVMS05	62.490	166.667	71.746	330
2-Toluidine	SVMS05	41.830	166.667	124.786	330
3 & 4 Methylphenol	SVMS05	30.070	166.445	139.268	330
3,3'-Dichlorobenzidine	SVMS05	63.590	166.445	114.378	330
3-Methylcholanthrene	SVMS05	30.320	166.445	234.776	330
3-Nitroaniline	SVMS05	211.640	332.668	294.926	330
4,6-Dinitro-2-methylphenol	SVMS05	206.630	332.889	352.498	330
4-Aminobiphenyl	SVMS05	44.000	166.667	117.796	330
4-Bromophenyl phenyl ether	SVMS05	200.010	332.668	256.741	330
4-Chloro-3-methylphenol	SVMS05	192.060	332.668	236.520	330
4-Chloroaniline	SVMS05	65.990	166.445	135.114	330
4-Chlorophenyl phenyl ether	SVMS05	198.440	332.668	265.667	330
4-Nitroaniline	SVMS05	180.420	332.668	307.694	330
4-Nitrophenol	SVMS05	179.910	332.889	239.870	330
4-Nitroquinoline-1-oxide	SVMS05	24.98	166.667	168.3	330
6-Methylchrysene	SVMS05	40.23	166.667	295.802	330

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Matrix: Solid
Method: 8270C
Prep Method: 3550B
Date Analyzed: 3/17/2014
Job #: 600-87830
TALS Batch: 129651
Units: ug/Kg

Analyte	Instrument #	MDL	DCS Spike	Measured Result	MQL
7,12-Dimethylbenz(a)anthracene	SVMS05	21.78	166.667	75.102	330
Acenaphthene	SVMS05	189.090	332.668	296.277	330
Acenaphthylene	SVMS05	192.510	332.668	289.414	330
Acetophenone	SVMS05	38.34	166.445	125.415	330
Aniline	SVMS05	51.040	166.445	145.608	330
Anthracene	SVMS05	207.360	332.668	290.877	330
Azobenzene	SVMS05	30.26	166.445	131.86	330
Benzidine	SVMS05	9.02	832.224	477.381	1600
Benzo[a]anthracene	SVMS05	207.300	332.668	302.636	330
Benzo[a]pyrene	SVMS05	185.110	332.668	279.491	330
Benzo[b]fluoranthene	SVMS05	19.34	166.445	118.752	330
Benzo[g,h,i]perylene	SVMS05	175.300	332.668	270.262	330
Benzo[k]fluoranthene	SVMS05	29.41	166.445	151.476	330
Benzoic acid	SVMS05	127.260	332.668	311.603	330
Benzyl alcohol	SVMS05	62.360	166.445	128.035	330
Bis(2-chloroethoxy)methane	SVMS05	186.190	332.668	287.430	330
Bis(2-chloroethyl)ether	SVMS05	32.98	166.445	152.171	330
Bis(2-ethylhexyl) phthalate	SVMS05	200.040	332.668	295.020	330
Butyl benzyl phthalate	SVMS05	200.700	332.668	307.233	330
Caprolactam	SVMS05	140.200	166.445	117.203	330
Carbazole	SVMS05	203.770	332.668	291.912	330
Chlorobenzilate	SVMS05	31.36	166.667	150.252	330
Chrysene	SVMS05	201.730	332.668	315.609	330
Diallate	SVMS05	54.210	166.667	161.964	330
Dibenz(a,h)anthracene	SVMS05	189.830	332.668	271.167	330
Dibenz[a,h]acridine	SVMS05	38.06	166.667	112.634	330
Dibenzofuran	SVMS05	196.690	332.668	278.451	330
Diethyl phthalate	SVMS05	204.130	332.668	267.100	330
Dimethoate	SVMS05	29.4	166.667	137.206	330
Dimethyl phthalate	SVMS05	199.720	332.668	277.474	330
Di-n-butyl phthalate	SVMS05	212.970	332.668	284.826	330
Di-n-octyl phthalate	SVMS05	213.570	332.668	297.603	330
Diphenylamine	SVMS05	48.710	166.667	140.639	330
Disulfoton	SVMS05	43.830	166.667	170.971	330
Ethyl methanesulfonate	SVMS05	66.830	166.667	138.308	330
Ethyl Parathion	SVMS05	43.580	166.667	142.385	330
Fluoranthene	SVMS05	210.820	332.668	276.317	330
Fluorene	SVMS05	203.190	332.668	275.322	330
Hexachlorobenzene	SVMS05	208.120	332.668	258.828	330
Hexachlorobutadiene	SVMS05	33.92	166.445	122.443	330
Hexachlorocyclopentadiene	SVMS05	22.27	332.668	232.142	330
Hexachloroethane	SVMS05	29.91	166.445	137.235	330
Hexachloropropene	SVMS05	42.720	166.667	119.871	330
Indene	SVMS05	71.330	166.667	120.371	330
Indeno[1,2,3-cd]pyrene	SVMS05	181.040	332.668	268.019	330
Isodrin	SVMS05	22.34	166.667	151.536	330
Isophorone	SVMS05	193.870	332.668	258.518	330
Isosafrole	SVMS05	23.53	166.667	106.447	330
Methyl methanesulfonate	SVMS05	29.4	166.667	119.115	330
Methyl parathion	SVMS05	30.27	166.667	138.517	330
n,n'-Dimethylaniline	SVMS05	330.000	332.889	258.884	330

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Matrix: Solid
Method: 8270C
Prep Method: 3550B
Date Analyzed: 3/17/2014
Job #: 600-87830
TALS Batch: 129651
Units: ug/Kg

Analyte	Instrument #	MDL	DCS Spike	Measured Result	MQL
Naphthalene	SVMS05	19.3	166.445	146.642	330
Nitrobenzene	SVMS05	47.400	166.445	137.808	330
N-Nitro-o-toluidine	SVMS05	66.360	166.667	127.251	330
N-Nitrosodiethylamine	SVMS05	59.350	166.667	147.940	330
N-Nitrosodimethylamine	SVMS05	95.470	166.445	162.816	330
N-Nitrosodi-n-butylamine	SVMS05	47.850	166.667	116.706	330
N-Nitrosodi-n-propylamine	SVMS05	28.59	166.667	133.158	330
N-Nitrosodiphenylamine	SVMS05	31.53	166.667	140.85	330
N-Nitrosomethylethylamine	SVMS05	54.210	166.667	142.230	330
N-Nitrosomorpholine	SVMS05	37.28	166.667	143.692	330
N-Nitrosopiperidine	SVMS05	54.030	166.667	155.459	330
N-Nitrosopyrrolidine	SVMS05	55.850	166.667	134.609	330
o,o',o''-Triethylphosphorothioate	SVMS05	22.2	166.667	149.408	330
p-Dimethylamino azobenzene	SVMS05	35.270	166.667	138.935	330
Pentachlorobenzene	SVMS05	38.090	166.667	144.155	330
Pentachloroethane	SVMS05	40.870	166.667	142.166	330
Pentachloronitrobenzene	SVMS05	96.660	166.667	150.048	330
Pentachlorophenol	SVMS05	22.120	332.889	505.737	330
Phenacetin	SVMS05	27.400	166.667	123.154	330
Phenanthrene	SVMS05	203.000	332.668	298.543	330
Phenol	SVMS05	37.360	166.445	143.934	330
Phenyl ether	SVMS05	670.000	166.667	130.212	330
Phenylmercaptan	SVMS05	666.700	332.889	0.000	670
Phorate	SVMS05	40.480	166.667	133.362	330
p-Phenylene diamine	SVMS05	330.000	332.889	19.591	1600
Pronamide	SVMS05	39.860	166.667	151.826	330
Pyrene	SVMS05	220.850	332.668	318.483	330
Pyridine	SVMS05	65.260	166.445	88.802	330
Quinoline	SVMS05	58.300	166.667	120.221	330
Safrole, Total	SVMS05	41.220	166.667	137.779	330
Thionazin	SVMS05	17.010	166.667	148.991	330
Total Cresols	SVMS05	30.030	332.889	280.000	330
Total Cresols, TCEQ Definition	SVMS05	39.700	665.779	490.000	330

DCS = Detection Check Standard
MQL = Method Quantitation Limit

Job ID: 600-89799-2

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-89799-2

Comments
No additional comments.

Receipt
The samples were received on 4/2/2014 10:22 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.5º C.

Except:

One or more containers for the following sample(s) was received broken or leaking: Rinse Blank-Geo (600-89799-21).

The request for analyses for the following sample(s) for volatiles and semivolatiles was received one day past the the holding time: 2014-FFTA-08 (0.5-2) (600-89799-9), 2014-NDA-7 (0.5-2) (600-89799-2). The client was contacted and requested that the samples be analyzed and the results narrated. DAJ 04/16/14

The following sample(s) was activated for Metals, SV and/or VOA analysis by the client on 04/16/14: 2014-FFTA-06 (0.5-2) (600-89799-12), 2014-FFTA-07 (0.5-2) (600-89799-6), 2014-FFTA-08 (0.5-2) (600-89799-9), 2014-NDA-7 (0.5-2) (600-89799-2), 2014-NDA-8 (0.5-2) (600-89799-18), 2014-NDA-9 (0.5-2) (600-89799-15). These samples were originally on Hold on the chain-of-custody (COC). Please see attached email.

Organic Prep
Method(s) 3546: The following sample was prepared outside of preparation holding time due to PM request : 2014-FFTA-08 (0.5-2) (600-89799-9).

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89799-2

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL HOU
8270C LL	Semivolatile Organic Compounds by GCMS - Low Levels	SW846	TAL HOU
6010B	Metals (ICP)	SW846	TAL HOU
Moisture	Percent Moisture	EPA	TAL HOU

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 HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89799-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-89799-2	2014-NDA-7 (0.5-2)	Solid	04/01/14 10:02	04/02/14 10:22
600-89799-6	2014-FFTA-07 (0.5-2)	Solid	04/01/14 10:56	04/02/14 10:22
600-89799-9	2014-FFTA-08 (0.5-2)	Solid	04/01/14 11:33	04/02/14 10:22
600-89799-12	2014-FFTA-06 (0.5-2)	Solid	04/01/14 12:11	04/02/14 10:22
600-89799-15	2014-NDA-9 (0.5-2)	Solid	04/01/14 14:16	04/02/14 10:22
600-89799-18	2014-NDA-8 (0.5-2)	Solid	04/01/14 14:47	04/02/14 10:22

Client Sample ID: 2014-NDA-7 (0.5-2)

Lab Sample ID: 600-89799-2

Date Collected: 04/01/14 10:02
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 79.9

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.00274	U H	0.0125	0.00274	mg/Kg	☼		04/17/14 12:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*81*		*50 - 130*		*04/17/14 12:38*	*1*
Dibromofluoromethane	*91*		*68 - 140*		*04/17/14 12:38*	*1*
4-Bromofluorobenzene	*96*		*57 - 140*		*04/17/14 12:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*61 - 130*		*04/17/14 12:38*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.276	U	2.98	0.276	mg/Kg	☼	04/21/14 13:54	04/22/14 11:41	1
Lead	**27.9**	**b**	0.596	0.125	mg/Kg	☼	04/21/14 13:54	04/22/14 11:41	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**20**		1.0	1.0	%			04/17/14 14:26	1
Percent Solids	**80**		1.0	1.0	%			04/17/14 14:26	1

Client Sample ID: 2014-FFTA-07 (0.5-2)

Lab Sample ID: 600-89799-6

Date Collected: 04/01/14 10:56
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 90.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.11**		1.10	0.239	mg/Kg	☼	04/21/14 13:54	04/22/14 11:43	1
Lead	**815**	**b**	0.549	0.115	mg/Kg	☼	04/21/14 13:54	04/22/14 11:43	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**9.8**		1.0	1.0	%			04/17/14 14:26	1
Percent Solids	**90**		1.0	1.0	%			04/17/14 14:26	1

Client Sample ID: 2014-FFTA-08 (0.5-2)

Lab Sample ID: 600-89799-9

Date Collected: 04/01/14 11:33
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 90.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	0.00180	U H *	0.0182	0.00180	mg/Kg	☼	04/17/14 11:41	05/02/14 13:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*72*		*38 - 130*	*04/17/14 11:41*	*05/02/14 13:26*	*1*
2-Fluorophenol	*68*		*25 - 132*	*04/17/14 11:41*	*05/02/14 13:26*	*1*
Nitrobenzene-d5	*69*		*10 - 155*	*04/17/14 11:41*	*05/02/14 13:26*	*1*
Phenol-d5 (Surr)	*61*		*27 - 130*	*04/17/14 11:41*	*05/02/14 13:26*	*1*
Terphenyl-d14	*107*		*53 - 134*	*04/17/14 11:41*	*05/02/14 13:26*	*1*
2,4,6-Tribromophenol	*24*		*10 - 148*	*04/17/14 11:41*	*05/02/14 13:26*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**11.4**		1.03	0.225	mg/Kg	☼	04/21/14 13:54	04/22/14 11:45	1

Client Sample ID: 2014-FFTA-08 (0.5-2)

Lab Sample ID: 600-89799-9

Date Collected: 04/01/14 11:33
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 90.4

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

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	108	b	0.517	0.108	mg/Kg	☼	04/21/14 13:54	04/22/14 11:45	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	9.6		1.0	1.0	%			04/17/14 14:26	1
Percent Solids	90		1.0	1.0	%			04/17/14 14:26	1

Client Sample ID: 2014-FFTA-06 (0.5-2)

Lab Sample ID: 600-89799-12

Date Collected: 04/01/14 12:11
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 85.8

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.00756	J H	0.0117	0.00255	mg/Kg	☼		05/07/14 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*66*		*50 - 130*		*05/07/14 13:55*	*1*
Dibromofluoromethane	*77*		*68 - 140*		*05/07/14 13:55*	*1*
4-Bromofluorobenzene	*96*		*57 - 140*		*05/07/14 13:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*73*		*61 - 130*		*05/07/14 13:55*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	13.5		1.07	0.233	mg/Kg	☼	04/21/14 13:54	04/22/14 11:48	1
Lead	171	b	0.535	0.112	mg/Kg	☼	04/21/14 13:54	04/22/14 11:48	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	14		1.0	1.0	%			04/17/14 14:26	1
Percent Solids	86		1.0	1.0	%			04/17/14 14:26	1

Client Sample ID: 2014-NDA-9 (0.5-2)

Lab Sample ID: 600-89799-15

Date Collected: 04/01/14 14:16
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 78.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	130	b	0.612	0.128	mg/Kg	☼	04/21/14 13:54	04/22/14 11:51	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			04/17/14 14:26	1
Percent Solids	79		1.0	1.0	%			04/17/14 14:26	1

Client Sample ID: 2014-NDA-8 (0.5-2)

Lab Sample ID: 600-89799-18

Date Collected: 04/01/14 14:47
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 85.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.116	U	0.554	0.116	mg/Kg	☼	04/21/14 13:54	04/22/14 11:53	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89799-2

Client Sample ID: 2014-NDA-8 (0.5-2)
Date Collected: 04/01/14 14:47
Date Received: 04/02/14 10:22

Lab Sample ID: 600-89799-18
Matrix: Solid

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15		1.0	1.0	%			04/17/14 14:26	1
Percent Solids	85		1.0	1.0	%			04/17/14 14:26	1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
U	Analyte was not detected at or above the SDL.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
H	Sample was prepped or analyzed beyond the specified holding time
U	Analyte was not detected at or above the SDL.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
b	The compound was found in the blank and sample
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
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)

Surrogate Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89799-2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	12DCE
Lab Sample ID	Client Sample ID	(50-130)	(68-140)	(57-140)	(61-130)
600-89799-2	2014-NDA-7 (0.5-2)	81	91	96	92
600-89799-12	2014-FFTA-06 (0.5-2)	66	77	96	73
LCS 600-132353/3	Lab Control Sample	83	90	84	77
LCS 600-133809/3	Lab Control Sample	70	78	93	66
LCSD 600-132353/4	Lab Control Sample Dup	79	87	82	82
LCSD 600-133809/4	Lab Control Sample Dup	66	73	89	62
MB 600-132353/5	Method Blank	78	85	92	81
MB 600-133809/5	Method Blank	67	74	95	66

Surrogate Legend

TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane
BFB = 4-Bromofluorobenzene
12DCE = 1,2-Dichloroethane-d4 (Surr)

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPH	TBP
Lab Sample ID	Client Sample ID	(38-130)	(25-132)	(10-155)	(27-130)	(53-134)	(10-148)
600-89799-9	2014-FFTA-08 (0.5-2)	72	68	69	61	107	24
LCS 600-132311/2-A	Lab Control Sample	68	50	65	57	94	0 X
MB 600-132311/1-A	Method Blank	67	68	69	70	82	43

Surrogate Legend

FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5 (Surr)
TPH = Terphenyl-d14
TBP = 2,4,6-Tribromophenol

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 600-132353/5
Matrix: Solid
Analysis Batch: 132353

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.00219	U	0.0100	0.00219	mg/Kg			04/17/14 11:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*78*		*50 - 130*		*04/17/14 11:41*	*1*
Dibromofluoromethane	*85*		*68 - 140*		*04/17/14 11:41*	*1*
4-Bromofluorobenzene	*92*		*57 - 140*		*04/17/14 11:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*81*		*61 - 130*		*04/17/14 11:41*	*1*

Lab Sample ID: LCS 600-132353/3
Matrix: Solid
Analysis Batch: 132353

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methylene Chloride			0.0500	0.04736		mg/Kg		95	61 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*83*		*50 - 130*
Dibromofluoromethane	*90*		*68 - 140*
4-Bromofluorobenzene	*84*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*77*		*61 - 130*

Lab Sample ID: LCSD 600-132353/4
Matrix: Solid
Analysis Batch: 132353

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylene Chloride			0.0500	0.05381		mg/Kg		108	61 - 150	13	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*79*		*50 - 130*
Dibromofluoromethane	*87*		*68 - 140*
4-Bromofluorobenzene	*82*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*82*		*61 - 130*

Lab Sample ID: MB 600-133809/5
Matrix: Solid
Analysis Batch: 133809

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

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	0.00219	U	0.0100	0.00219	mg/Kg			05/07/14 13:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*67*		*50 - 130*		*05/07/14 13:30*	*1*
Dibromofluoromethane	*74*		*68 - 140*		*05/07/14 13:30*	*1*
4-Bromofluorobenzene	*95*		*57 - 140*		*05/07/14 13:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*66*		*61 - 130*		*05/07/14 13:30*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 600-133809/3
Matrix: Solid
Analysis Batch: 133809

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methylene Chloride			0.0500	0.04656		mg/Kg		93	61 - 150		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*70*		*50 - 130*
Dibromofluoromethane	*78*		*68 - 140*
4-Bromofluorobenzene	*93*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*66*		*61 - 130*

Lab Sample ID: LCSD 600-133809/4
Matrix: Solid
Analysis Batch: 133809

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylene Chloride			0.0500	0.04448		mg/Kg		89	61 - 150	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*66*		*50 - 130*
Dibromofluoromethane	*73*		*68 - 140*
4-Bromofluorobenzene	*89*		*57 - 140*
1,2-Dichloroethane-d4 (Surr)	*62*		*61 - 130*

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Lab Sample ID: MB 600-132311/1-A
Matrix: Solid
Analysis Batch: 133475

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 132311

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethyl)ether	0.4907		0.0167	0.00165	mg/Kg		04/17/14 11:38	05/02/14 12:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*67*		*38 - 130*	*04/17/14 11:38*	*05/02/14 12:29*	*1*
2-Fluorophenol	*68*		*25 - 132*	*04/17/14 11:38*	*05/02/14 12:29*	*1*
Nitrobenzene-d5	*69*		*10 - 155*	*04/17/14 11:38*	*05/02/14 12:29*	*1*
Phenol-d5 (Surr)	*70*		*27 - 130*	*04/17/14 11:38*	*05/02/14 12:29*	*1*
Terphenyl-d14	*82*		*53 - 134*	*04/17/14 11:38*	*05/02/14 12:29*	*1*
2,4,6-Tribromophenol	*43*		*10 - 148*	*04/17/14 11:38*	*05/02/14 12:29*	*1*

Lab Sample ID: LCS 600-132311/2-A
Matrix: Solid
Analysis Batch: 133475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 132311

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Bis(2-chloroethyl)ether			0.667	0.00165	U *	mg/Kg		0	68 - 130		

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels (Continued)

Lab Sample ID: LCS 600-132311/2-A
Matrix: Solid
Analysis Batch: 133475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 132311

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl	*68*		*38 - 130*
2-Fluorophenol	*50*		*25 - 132*
Nitrobenzene-d5	*65*		*10 - 155*
Phenol-d5 (Surr)	*57*		*27 - 130*
Terphenyl-d14	*94*		*53 - 134*
2,4,6-Tribromophenol	*0*	*X*	*10 - 148*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-132552/1-A
Matrix: Solid
Analysis Batch: 132626

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 132552

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		04/21/14 13:54	04/22/14 11:05	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/21/14 13:54	04/22/14 11:05	1
Lead	0.2300	J	0.500	0.105	mg/Kg		04/21/14 13:54	04/22/14 11:05	1

Lab Sample ID: LCSSRM 600-132552/2-A
Matrix: Solid
Analysis Batch: 132626

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 132552

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	72.10		mg/Kg		81.7	45.4 - 231.3
Arsenic	99.6	105.7		mg/Kg		106.1	80.8 - 119.5
Lead	115	126.4		mg/Kg		109.9	81.8 - 119.1

Lab Sample ID: 600-89701-A-58-C MS
Matrix: Solid
Analysis Batch: 132626

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 132552

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.245	U	53.9	9.738	N1	mg/Kg	☼	18	75 - 125
Arsenic	40.0		53.9	111.4	N1	mg/Kg	☼	133	75 - 125
Lead	12.2	b	53.9	70.34		mg/Kg	☼	108	75 - 125

Lab Sample ID: 600-89701-A-58-D MSD
Matrix: Solid
Analysis Batch: 132626

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 132552

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.245	U	54.4	10.22	N1	mg/Kg	☼	19	75 - 125	5	20
Arsenic	40.0		54.4	92.55		mg/Kg	☼	97	75 - 125	19	20
Lead	12.2	b	54.4	71.67		mg/Kg	☼	109	75 - 125	2	20

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

Lab Sample ID: 600-89701-A-58-B DU
Matrix: Solid
Analysis Batch: 132626

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 132552

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.245	U	0.245	U	mg/Kg	☼	NC	20
Arsenic	40.0		35.01		mg/Kg	☼	13	20
Lead	12.2	b	12.34		mg/Kg	☼	1	20

Method: Moisture - Percent Moisture

Lab Sample ID: 600-89799-2 DU
Matrix: Solid
Analysis Batch: 132331

Client Sample ID: 2014-NDA-7 (0.5-2)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	20		21		%		2	20
Percent Solids	80		79		%		0.5	20

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89799-2

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	MQL	MDL	Units	Method
Methylene Chloride	0.0100	0.00219	mg/Kg	8260B

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	MQL	MDL	Units	Method
Bis(2-chloroethyl)ether	0.0167	0.00165	mg/Kg	8270C LL

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Antimony	2.50	0.232	mg/Kg	6010B
Arsenic	1.00	0.218	mg/Kg	6010B
Lead	0.500	0.105	mg/Kg	6010B

General Chemistry

Analyte	MQL	MDL	Units	Method
Percent Moisture	1.0	1.0	%	Moisture
Percent Solids	1.0	1.0	%	Moisture

GC/MS VOA

Analysis Batch: 132353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89799-2	2014-NDA-7 (0.5-2)	Total/NA	Solid	8260B	
LCS 600-132353/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-132353/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 600-132353/5	Method Blank	Total/NA	Solid	8260B	

Analysis Batch: 133809

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89799-12	2014-FFTA-06 (0.5-2)	Total/NA	Solid	8260B	
LCS 600-133809/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 600-133809/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 600-133809/5	Method Blank	Total/NA	Solid	8260B	

GC/MS Semi VOA

Prep Batch: 132311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89799-9	2014-FFTA-08 (0.5-2)	Total/NA	Solid	3546	
LCS 600-132311/2-A	Lab Control Sample	Total/NA	Solid	3546	
MB 600-132311/1-A	Method Blank	Total/NA	Solid	3546	

Analysis Batch: 133475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89799-9	2014-FFTA-08 (0.5-2)	Total/NA	Solid	8270C LL	132311
LCS 600-132311/2-A	Lab Control Sample	Total/NA	Solid	8270C LL	132311
MB 600-132311/1-A	Method Blank	Total/NA	Solid	8270C LL	132311

Metals

Prep Batch: 132552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-A-58-B DU	Duplicate	Total/NA	Solid	3050B	
600-89701-A-58-C MS	Matrix Spike	Total/NA	Solid	3050B	
600-89701-A-58-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	
600-89799-2	2014-NDA-7 (0.5-2)	Total/NA	Solid	3050B	
600-89799-6	2014-FFTA-07 (0.5-2)	Total/NA	Solid	3050B	
600-89799-9	2014-FFTA-08 (0.5-2)	Total/NA	Solid	3050B	
600-89799-12	2014-FFTA-06 (0.5-2)	Total/NA	Solid	3050B	
600-89799-15	2014-NDA-9 (0.5-2)	Total/NA	Solid	3050B	
600-89799-18	2014-NDA-8 (0.5-2)	Total/NA	Solid	3050B	
LCSSRM 600-132552/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-132552/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 132626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89701-A-58-B DU	Duplicate	Total/NA	Solid	6010B	132552
600-89701-A-58-C MS	Matrix Spike	Total/NA	Solid	6010B	132552
600-89701-A-58-D MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	132552
600-89799-2	2014-NDA-7 (0.5-2)	Total/NA	Solid	6010B	132552
600-89799-6	2014-FFTA-07 (0.5-2)	Total/NA	Solid	6010B	132552
600-89799-9	2014-FFTA-08 (0.5-2)	Total/NA	Solid	6010B	132552

Metals (Continued)

Analysis Batch: 132626 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89799-12	2014-FFTA-06 (0.5-2)	Total/NA	Solid	6010B	132552
600-89799-15	2014-NDA-9 (0.5-2)	Total/NA	Solid	6010B	132552
600-89799-18	2014-NDA-8 (0.5-2)	Total/NA	Solid	6010B	132552
LCSSRM 600-132552/2-A	Lab Control Sample	Total/NA	Solid	6010B	132552
MB 600-132552/1-A	Method Blank	Total/NA	Solid	6010B	132552

General Chemistry

Analysis Batch: 132331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89799-2	2014-NDA-7 (0.5-2)	Total/NA	Solid	Moisture	
600-89799-2 DU	2014-NDA-7 (0.5-2)	Total/NA	Solid	Moisture	
600-89799-6	2014-FFTA-07 (0.5-2)	Total/NA	Solid	Moisture	
600-89799-9	2014-FFTA-08 (0.5-2)	Total/NA	Solid	Moisture	
600-89799-12	2014-FFTA-06 (0.5-2)	Total/NA	Solid	Moisture	
600-89799-15	2014-NDA-9 (0.5-2)	Total/NA	Solid	Moisture	
600-89799-18	2014-NDA-8 (0.5-2)	Total/NA	Solid	Moisture	
600-90579-B-6 MS	Matrix Spike	Total/NA	Solid	Moisture	
600-90579-B-6 MSD	Matrix Spike Duplicate	Total/NA	Solid	Moisture	

Client Sample ID: 2014-NDA-7 (0.5-2)

Lab Sample ID: 600-89799-2

Date Collected: 04/01/14 10:02
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	132353	04/17/14 12:38	WS1	TAL HOU
Total/NA	Prep	3050B			1.05 g	50 mL	132552	04/21/14 13:54	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	132626	04/22/14 11:41	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			132331	04/17/14 14:26	AYS	TAL HOU

Client Sample ID: 2014-FFTA-07 (0.5-2)

Lab Sample ID: 600-89799-6

Date Collected: 04/01/14 10:56
Matrix: Solid
Date Received: 04/02/14 10:22
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			1.01 g	50 mL	132552	04/21/14 13:54	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	132626	04/22/14 11:43	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			132331	04/17/14 14:26	AYS	TAL HOU

Client Sample ID: 2014-FFTA-08 (0.5-2)

Lab Sample ID: 600-89799-9

Date Collected: 04/01/14 11:33
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 90.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			15.18 g	1.0 mL	132311	04/17/14 11:41	RLK	TAL HOU
Total/NA	Analysis	8270C LL		1	15.18 g	1.0 mL	133475	05/02/14 13:26	TTD	TAL HOU
Total/NA	Prep	3050B			1.07 g	50 mL	132552	04/21/14 13:54	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	132626	04/22/14 11:45	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			132331	04/17/14 14:26	AYS	TAL HOU

Client Sample ID: 2014-FFTA-06 (0.5-2)

Lab Sample ID: 600-89799-12

Date Collected: 04/01/14 12:11
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 g	5 g	133809	05/07/14 13:55	WS1	TAL HOU
Total/NA	Prep	3050B			1.09 g	50 mL	132552	04/21/14 13:54	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	132626	04/22/14 11:48	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			132331	04/17/14 14:26	AYS	TAL HOU

Client Sample ID: 2014-NDA-9 (0.5-2)

Lab Sample ID: 600-89799-15

Date Collected: 04/01/14 14:16
Matrix: Solid
Date Received: 04/02/14 10:22
Percent Solids: 78.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	50 mL	132552	04/21/14 13:54	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	132626	04/22/14 11:51	DCL	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89799-2

Client Sample ID: 2014-NDA-9 (0.5-2)

Lab Sample ID: 600-89799-15

Date Collected: 04/01/14 14:16

Matrix: Solid

Date Received: 04/02/14 10:22

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			132331	04/17/14 14:26	AYS	TAL HOU

Client Sample ID: 2014-NDA-8 (0.5-2)

Lab Sample ID: 600-89799-18

Date Collected: 04/01/14 14:47

Matrix: Solid

Date Received: 04/02/14 10:22

Percent Solids: 85.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	132552	04/21/14 13:54	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	132626	04/22/14 11:53	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			132331	04/17/14 14:26	AYS	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX

TestAmerica Job ID: 600-89799-2

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0759	08-04-14
Louisiana	NELAP	6	30643	06-30-14
Oklahoma	State Program	6	1309	08-31-14
Texas	NELAP	6	T104704223	10-31-14
USDA	Federal		P330-08-00217	04-01-14 *
Utah	NELAP	8	TX00083	10-31-14

* Expired certification is currently pending renewal and is considered valid.

Chain of Custody Record

600-89799 Chain of Custody

Receipt _____ Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates Inc.	Dean Joiner		255288
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 of 2
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Project Name and Location (State) Exide Frisco	**Carrier/Waybill Number**		
Contract/Purchase Order/Quote No. 1302086			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: 8260 VOCs	8270 SVOCs	8270 PAHs	Gold Metals (Calc)	In Acc w/ MSA	Special Instructions/ Conditions of Receipt
2014-NDA-7 (0-0.5)	4/1/14	1001				X	X						X	X	X	X		
2014-NDA-7 (0.5-2)		1002																Hold
2014-NDA-7 (2-4)		1003																Hold
2014-NDA-7 (0-0.5) MS		1001																
2014-NDA-7 (0-0.5) MSD		1001																
DUP-4		-																
2014-FFTA-07 (0-0.5)		1055																
2014-FFTA-07 (0.5-2)		1056																Hold
2014-FFTA-07 (2-4)		1057																Hold
2014-FFTA-08 (0-0.5)		1132																
2014-FFTA-08 (0.5-2)		1133																Hold
2014-FFTA-08 (2-4)		1134																Hold

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time
1. Relinquished By: JING SONG XI	4/1/14	1600
2. Relinquished By:		
3. Relinquished By:		

	Date	Time
1. Received By:		
2. Received By:		
3. Received By:	4/2/14	10:22

Comments

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

5/8/2014

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☐

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Golder Associates, Inc.	Dean Jones		255289
Address	Telephone Number (Area Code)/Fax Number	Lab Number	Page 2 of 2
City / State / Zip Code	Site Contact	Lab Contact	
Project Name and Location (State): Eagle Ford	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.: 1302086			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: 8260 VOCs	8270 SVOCs	8270 PAHs	Gold Metals	Special Instructions/ Conditions of Receipt
2014-FFTA-06 (0-0.5)	4/1/14	1210				X	X						X	X	X	X	
2014-FFTA-06 (0.5-2)		1211											X	X	X	X	Hold
2014-FFTA-06 (2-4)		1212											X	X	X	X	
2014-NDA-9 (0-0.5)		1415														X	
2014-NDA-9 (0.5-2)		1416														X	Hold
2014-NDA-9 (2-4)		1417														X	Hold
2014-NDA-8 (0-0.5)		1446														X	
2014-NDA-8 (0.5-2)		1447														X	Hold
2014-NDA-8 (2-4)		1448														X	Hold
Field Blank		1525		X						X			X				
Rinse Blank - Geo		1530		X						X			X	X	X	X	
Trip Blank				X						X			X				

In Acc w/ MSA

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☒ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other _____

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: Jing Song Xi	4/1/14	1600	1. Received By		
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By	4/2/14	10:22

Comments

DISTRIBUTION: *WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy*

5/8/2014

Upton, Cathy

From: Higginbotham, Christina [Christina_Higginbotham@golder.com]
Sent: Wednesday, April 16, 2014 1:05 PM
To: Upton, Cathy; Joiner, Dean
Cc: Faeth-Boyd, Anne; Xi, Jing Song; Forthaus, Brett; Thomas, Jim; Janzen, Joshua
Subject: Hold Samples to Analyze - 89701, 89799, 89971
Follow Up Flag: Follow up
Flag Status: Completed

Cathy and Dean,

Please log in the following hold samples for analysis as follows:

Lab Package	J 89701-1	Final	
Location	**Depth to Analyze**	**Analytes**	**Notes**
2014-C2L-06A	0.5-2	Lead, Selenium	
2014-C2L-06C	0.5-2	Antimony, Arsenic, Lead, Selenium	
D-11B	0.5-2	Arsenic	
2014-NT-3	0.5-2	Lead	
2014-SL-5	0.5-2	Lead	
2014-TS-3	0.5-2	Lead	
2014-SDA-7	0.5-2	Antimony, Arsenic, Lead	
SRB-VS-11B	2-4	Antimony	
B3RA	0.5-2	Arsenic, Lead	
ECO 8B	0.5-2	Antimony, Arsenic, Lead	

Lab Package	J 89799-1	Final	
Location	**Depth to Analyze**	**Analytes**	**Notes**
2014-NDA-7	0.5-2	Lead, Antimony, methylene chloride	dup exceedence for shallow interval (and mc
2014-FFTA-07	0.5-2	Arsenic, Lead	
2014-FFTA-08	0.5-2	Bis(2-chloroethyl)ether, Arsenic, Lead	
2014-FFTA-06	0.5-2	Arsenic, Lead, Methylene Chloride	
2014-NDA-9	0.5-2	Lead	
2014-NDA-8	0.5-2	Lead	

Lab Package	J 89971-1	Final	
Location	**Depth to Analyze**	**Analytes**	**Notes**
2014-CUFT-5B-A	2-4	Lead	
2014-CUFT-15	0.5-2	Lead	
2014-CUFT-16	0.5-2	Lead	

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Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-89799-2

Login Number: 89799

List Source: TestAmerica Houston

List Number: 1

Creator: Lopez, Sandro R

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	2.5
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.	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	Check done at department level as required.

Data Usability Summary
Test America Work Orders: 600-89971-1, 600-89971-2

Sample Dates:	April 4, 2014	**Project No.:**	1302086
Laboratory:	Test America (TLAP Certification T104704223)	**Client:**	Exide Technologies Inc.
Work Orders:	Work Orders: 600-89971-1, 600-89971-2		
Intended Use	Affected Property Assessment Report (APAR)		
Site:	Exide Former Operating Plant (FOP), 7471 5th Street, Frisco, TX		

1.0 TESTS/ METHODS

Total Metals by SW-846 6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP)
Sulfate by SW-846 9056 – Ion Chromatography

2.0 SAMPLES

23 soil samples, one field duplicate, and one field MS/MSD pair. See Table 1 for a complete cross-referenced listing of samples.

Golder completed a review of the above chemical analysis data for conformance with the requirements of the Texas Risk Reduction Program (TRRP) guidance document, Review and Reporting of COC Concentration Data (RGG-366/TRRP-13 Revised May 2010) and for adherence to project objectives. The results of the review are discussed in this data usability summary (DUS).

Golder completed the review using the following laboratory and project submittals:

- Laboratory reportable data as defined in TRRP-13;
- Laboratory review checklists (LRC) with the associated exception reports;
- Laboratory Electronic Data Deliverable (EDD); and
- Project field notes from the sampling event.

The review of the reportable data included the quality control (QC) parameters listed below, as required per TRRP-13, using the applicable analytical method and project requirements:

- Data Completeness
- Chain-of-Custody Procedures
- Sample Condition - Holding Time, Preservation, and Containers
- Field Procedures
- Results Reporting Procedures
- Laboratory and Field QC Blanks

- Laboratory Control Spike and Matrix Spike Recoveries
- Surrogate Recoveries
- Laboratory and Field Duplicate Precision

Additionally, Golder used the LRC to evaluate the following QC parameters:

- Method Quantitation Limits (MQLs)
- Method Detection Limits (MDLs)
- Instrument Tuning, Calibration, and Performance
- Internal Standards

Criteria used for this data usability review are as follows:

- Inorganics: 70-130% spike recovery (and not less than 30% or data is rejected) and +MQL difference or 30% RPD (for laboratory duplicates) as recommended in TRRP-13; and
- Soil Samples: + 3x MQL difference (if either result is less than 5x MQL) or 50% RPD (for field duplicates) as recommended in TRRP-13.

If an item was found outside of the review criteria, the reviewer applied a data qualifier (DQ) and bias code to the results for the affected samples in accordance with TRRP-13. A list of all qualified results and definitions of the qualifier and bias codes are given in Table 2.

GLOSSARY OF TERMS

The following definitions apply for terms related to analyte reporting limits:

MDL (Method Detection Limit) – the minimum concentration of an analyte that the laboratory can measure and report with 99% confidence that the analyte concentration is greater than zero. The MDL is determined by the laboratory for each analyte in a given reagent matrix (water or soil) generally using the procedures specified in 40 CFR Part 136, Appendix B. It is a measure of the concentration an instrument can detect or 'see' in a given reagent matrix. TRRP-13 requires that the laboratory routinely check the MDL for reasonableness.

SDL (Sample Detection Limit) – the MDL adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes than prescribed in the analytical method, and taking into account sample characteristics, sample preparation, and analytical adjustments including dry-weight adjustments. It is a measure of the concentration an instrument can detect or 'see' in a given sample. For TRRP, non-detects are reported using the SDL. This term was originally called the SQL (Sample Quantitation Limit) before the TRRP rule revisions effective March 19, 2007.

Unadjusted MQL (Method Quantitation Limit) – the lowest non-zero concentration standard in the laboratory's initial calibration curve calculated using the normal aliquot sizes and final volumes prescribed in the analytical method. The unadjusted MQL is reported by the laboratory for each analyte in a given matrix (water or soil). It is a measure of the concentration an instrument can accurately measure in a typical sample. Per TRRP, the unadjusted MQLs should be below the Levels of Required Performance (LORPs) for purposes of assessment as well as demonstration of conformance with critical Protective Concentration Levels (PCLs).

MQL – the unadjusted MQL adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes than prescribed in the analytical method, and takes into account sample characteristics, sample preparation, and analytical adjustments including dry-weight adjustments. It is a measure of the concentration an instrument can accurately measure in a given sample. Analytes with concentrations above the SDL but below the MQL, though present in the sample, may not be accurately measured and are thus flagged as estimated (J).

LABORATORY CERTIFICATION

At the time the laboratory data were generated for this project, the laboratory was NELAC accredited under the Texas Laboratory Accreditation Program (TLAP) for the matrices, methods and parameters of analysis requested on the chain-of-custody forms. A copy of the applicable pages of the laboratory's National Environmental Laboratory Accreditation Program (NELAP) certificate valid during the period in which the laboratory generated the data in this report is included in Appendix 10.5.

USABILITY SUMMARY

1. Usability of Unqualified Non-Detects – Non-detects are reported at the sample detection limit (SDL) as required per TRRP. Additionally, according to the LRC, an MDL study was performed for each analyte and the MDLs were checked for reasonableness for each applicable analyte. The levels of required performance (LORPs) have been established by Golder/PBW as the Residential Assessment Levels (RALs), which are the minimum of the TRRP residential Tier 1 $^{Tot}Soil_{Comb}$ and Tier 1, 2 or 3 $^{GW}Soil_{Ing}$ PCLs for a 30-acre source area. As needed per TRRP, the unadjusted MQL stated by the laboratory is at or below the LORP for each applicable analyte, and thus the analytical methods are appropriate and the results can be used to demonstrate conformance with the criteria.
2. Usability of Qualified Data – There are no major QC deficiencies, and thus all data is usable as qualified for the intended use. As shown in Table 2, the reviewer qualified some detects as estimated (J) due to minor QC deficiencies. Detects that are biased high can be used; however, the reported concentration may be high. Detects that are estimated may be either low or high. Results with a laboratory J-flag (i.e., at a concentration between the SDL and MQL) should be considered estimates. The actual value is not expected to exceed the sample MQL.

Reviewer: Jing Song Xi 5/2/14

QUALITY CONTROL PARAMETERS AND OUTCOMES

Data Completeness

The laboratory data packages contain all necessary data (i.e., the laboratory reportable data per TRRP-13) and the EDD contain all sample results in acceptable format. Minor revisions were required for work orders 600-85636-1. All revisions are detailed in the laboratory narrative.

Chain-of-Custody

Proper sample custody procedures were used, which confirms that the integrity of the samples was maintained. Additionally, the information on the custody records is complete and agrees with that in the field notes and laboratory reports. The laboratory noted some container identifications did not match the chain-of-custody. In these cases, the records were logged in per the chain-of-custody.

Sample Condition

Samples were collected in appropriate containers, properly preserved in the field, and prepared and analyzed within the holding times as required in the analytical methods, which ensures that the samples were not affected by analyte degradation:

- For 600-89971-1, the temperature of the cooler at receipt was 2.2°C.

Field Procedures

The samples were collected and placed immediately into sterilized jars provided by the laboratory and then into a cooler with ice for overnight delivery to the laboratory.

One site-specific MS/MSD and field duplicate sample was collected with the 23 investigative samples.

Results Reporting Procedures

The hardcopy analytical results include a Result, MQL (adjusted), and SDL. The EDD includes the MDL, SDL (under the SQL column per previously used terminology) and the MQL, which is not adjusted for sample specific factors.

Results are reported in mg/kg with dry-weight correction for the metals. Non-detects are reported using the SDL as specified per TRRP and detects between the SDL and MQL are reported with a laboratory J-flag. The concentration reported for detects between the SDL and MQL is below the calibration range and thus is considered estimated.

MQLs- The LORPs have been established by Golder/PBW as the Residential Assessment Levels (RALs), which are the minimum of the TRRP residential Tier 1 Tier 1 $^{Tot}Soil_{Comb}$ and Tier 1, 2 or 3 $^{GW}Soil_{Ing}$ PCLs

for a 30-acre source area. The Unadjusted MQLs for the laboratory are at or below the LORPs for each applicable analyte.

MDLs- According to the LRC, an MDL study was performed for each analyte, and the MDLs were checked for reasonableness and either adjusted or supported by the analysis of detectability check standards (DCS) for each applicable analyte as required per TRRP-13. Results for the DCS are included in the data packages.

Laboratory Blanks

Results for samples prepared in the same QC batch as a contaminated method blank may be affected by laboratory contamination. No analytes were detected in the laboratory blanks.

Field QC Blanks

No field QC blanks were collected as part of this data package.

Laboratory Control Sample

The laboratory prepared one laboratory control sample (LCS) for each analytical batch and reported recoveries for all of the analytes for each test. The LCS recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on a sample, free of matrix effects.

Matrix Spike Recovery

The laboratory prepared one or more matrix spike (MS) and matrix spike duplicate (MSD) with each analytical batch plus a Post Digestion Spike (PDS) with each metals analytical batch. MS/MSD recoveries are reported for the same analytes as the LCS for MS/MSD prepared using a sample from the site, which includes one MS/MSD for Total Metals, as shown in Table 1.

PDS outcomes are given on the LRC for each job package; however PDS data are not reportable data per TRRP-13. According to the LRC, the PDS met method requirements, which indicates good accuracy for the analysis technique on the given sample matrix.

The MS/MSD recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on a sample free of matrix effects, except as follows:

QC Batch	Lab Sample ID	MS/MSD ID	Analyte	Parent Amount (mg/kg)	Spike Amount for MS/MSD (mg/kg)	MS % Recovery	MSD % Recovery	Qual
131778	600-89971-9	2014-C2L-C01-A	Antimony	0.278 U	59.0, 61.0	25	27	UJL
131778	600-89971-9	2014-C2L-C01-A	Lead	201	59.0, 61.0	-155	-179	-

NA – Not available.

Where antimony recovery data was slightly below 30% and the parent sample was non-detect, the data is accepted with a low bias. In sample 600-89971-9, the lead spike amount is sufficiently less than the amount in the unspiked parent sample; thus, the data are considered inconclusive and the MS/MSD recovery check was waived.

Surrogate Recovery

Since organic analyses were not requested for these data packages, surrogate recoveries were not evaluated.

Laboratory Duplicate Precision

The laboratory prepared one or more Matrix Spike Duplicate (MSD) with each analytical batch for each test. Additionally, the laboratory prepared one Matrix Duplicate (MD) with each metals analytical batch. RPDs are reported for the same analytes as the LCS for MSD/MD prepared using a sample from the site, which includes one MSD and MD for Total Metals.

The MSD and MD RPDs are within the TRRP recommended criteria, which indicates good precision for the preparation and analysis technique for the given sample matrix, except as follows:

QC Batch	Lab Sample ID	MS/MSD ID	Analyte	Parent Amount (mg/kg)	MSD RPD	MD RPD	Qual
131778	600-89971-9	2014-C2L-C01-A	Cadmium	1.12	9	32	J
131778	600-89971-9	2014-C2L-C01-A	Lead	201	17	32	J

Where MSD RPDs were acceptable and MD RPDs were only marginally above criteria, a batch effect was not indicated and the parent sample (only) was qualified as estimated.

Field Duplicate Precision

One field duplicate was collected with the samples. Results are summarized in Table 3. The RPDs (or the absolute difference between results for concentrations <5x MQL and for non-detects) are within the TRRP criteria, which indicates good precision for the sampling, preparation, and analysis technique on the given sample matrix.

Instrument Tuning

According to the LRC, instrument tuning met method requirements for the samples, which indicates the GC/MS instrument was properly set up to identify analytes.

Instrument Calibration

According to the LRC, initial and continuing calibration data met method requirements for all reported results, which indicates the instruments were properly calibrated to measure analyte concentrations.

Instrument Performance

According to the LRC, the serial dilution and ICP interference check samples met method requirements, which indicates that no significant matrix interference exists.

Internal Standards

According to the LRC, area counts and retention times were within method requirements.

TABLE 1

CROSS REFERENCE OF FIELD SAMPLE IDENTIFICATIONS AND LABORATORY IDENTIFICATIONS

Lab Sample ID	Field Sample ID	Prep Batch/ Analysis Batch	Sample Date	Matrix	Comments
600-89971-1	2014-CUFT-5B-A (0.5-2)	131778/131831	4/4/2014	Soil	
600-89971-2	2014-CUFT-18 (0-0.5)	131778/131831	4/4/2014	Soil	
600-89971-3	2014-CUFT-15 (0-0.5)	131778/131831	4/4/2014	Soil	
600-89971-4	2014-CUFT-16 (0-0.5)	131778/131831	4/4/2014	Soil	
600-89971-5	2014-CUFT-17 (0-0.5)	131778/131831	4/4/2014	Soil	
600-89971-6	Dup-01	131778/131831	4/4/2014	Soil	Duplicate of 2014-AD-03A (2-4)
600-89971-7	2014-AD-03A (2-4)	131778/131831	4/4/2014	Soil	
600-89971-8	2014-AD-06 (0-0.5)	131778/131831	4/4/2014	Soil	
600-89971-9	2014-C2L-C01A	131778/131831	4/4/2014	Soil	site-specific MS/MSD
600-89971-10	2014-C2L-C01B	131778/131831	4/4/2014	Soil	
600-89971-11	2014-C2L-C01C	131778/131831	4/4/2014	Soil	
600-89971-12	2014-CUFT-5B-A (2-4)		4/4/2014	Soil	Not reported
600-89971-13	2014-CUFT-18 (0.5-2)		4/4/2014	Soil	Not reported
600-89971-14	2014-CUFT-18 (2-4)		4/4/2014	Soil	Not reported
600-89971-15	2014-CUFT-15 (0.5-2)		4/4/2014	Soil	Not reported
600-89971-16	2014-CUFT-15 (2-4)		4/4/2014	Soil	Not reported
600-89971-17	2014-CUFT-16 (0.5-2)		4/4/2014	Soil	Not reported
600-89971-18	2014-CUFT-16 (2-4)		4/4/2014	Soil	Not reported
600-89971-19	2014-CUFT-17 (0.5-2)		4/4/2014	Soil	Not reported
600-89971-20	2014-CUFT-17 (2-4)		4/4/2014	Soil	Not reported
600-89971-21	2014-AD-03A (4-6)		4/4/2014	Soil	Not reported
600-89971-22	2014-AD-03A (6-8)		4/4/2014	Soil	Not reported
600-89971-23	2014-AD-06 (1-2.5)		4/4/2014	Soil	Not reported
600-89971-24	2014-AD-06 (2.5-4.5)		4/4/2014	Soil	Not reported

TABLE 2 - QUALIFIED DATA

Lab Sample ID	Field Sample ID	Analyte	Result	Units	Qualifer	Explanation
600-89971-1	2014-CUFT-5B-A (0.5-2)	Antimony	0.292 U	mg/kg	UJL	Matrix Spike recovery slightly below 30%
600-89971-2	2014-CUFT-18 (0-0.5)	Antimony	0.284 U	mg/kg	UJL	Matrix Spike recovery slightly below 30%
600-89971-3	2014-CUFT-15 (0-0.5)	Antimony	1.03 J	mg/kg	JL	analyte estimated between SDL and MQL; Matrix Spike recovery slightly below 30%
600-89971-4	2014-CUFT-16 (0-0.5)	Antimony	0.459 J	mg/kg	JL	analyte estimated between SDL and MQL; Matrix Spike recovery slightly below 30%
600-89971-5	2014-CUFT-17 (0-0.5)	Antimony	0.271 U	mg/kg	UJL	Matrix Spike recovery slightly below 30%
600-89971-6	Dup-01	Antimony	0.288 U	mg/kg	UJL	Matrix Spike recovery slightly below 30%
600-89971-7	2014-AD-03A (2-4)	Antimony	0.258 U	mg/kg	UJL	Matrix Spike recovery slightly below 30%
600-89971-8	2014-AD-06 (0-0.5)	Antimony	0.284 U	mg/kg	UJL	analyte estimated between SDL and MQL; Matrix Spike recovery slightly below 30%
		Selenium	0.319 J	mg/kg	J	analyte estimated between SDL and MQL
600-89971-9	2014-C2L-C01A	Antimony	0.278 U	mg/kg	UJL	Matrix Spike recovery slightly below 30%
		Selenium	0.708 J	mg/kg	J	analyte estimated between SDL and MQL
		Lead	201	mg/kg	J	MD RPD outside specifications
		Cadmium	1.12	mg/kg	J	MD RPD outside specifications
600-89971-10	2014-C2L-C01B	Antimony	0.254 U	mg/kg	UJL	Matrix Spike recovery slightly below 30%
		Selenium	0.460 J	mg/kg	J	analyte estimated between SDL and MQL
600-89971-11	2014-C2L-C01C	Antimony	0.259 U	mg/kg	UJL	Matrix Spike recovery slightly below 30%
		Cadmium	0.0951 J	mg/kg	J	analyte estimated between SDL and MQL

Note:

Detected results between the SDL and MQL (i.e., results with a laboratory J-flag) have been included in the above table since the reported concentration is below the calibration range.

J Estimated data; The analyte was detected and identified. The associated numerical value (i.e., the reported sample concentration) is the approximate concentration of the analyte in the sample.

NJ Tentatively identified, estimated data; The analysis indicates the presence of the analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.

NS Not selected; Another result (from a secondary dilution, different analytical method, re-sampling, etc.) is selected for use based on QC outcomes and/or reported concentrations.

R Rejected data; The data is unusable. Serious QC deficiencies make it impossible to verify the absence or presence of this analyte.

U Not detected; The analyte was not detected >5x (10x for common contaminants) the level in an associated blank and thus should be considered not detected above the level of the associated numerical value (i.e., the reported sample concentration).

UJ Estimated data; The analyte was not detected above the reported sample detection limit (SDL). The numerical value of the SDL is estimated and may be inaccurate.

H Bias in sample result is likely to be high

L Bias in sample result is likely to be low

TABLE 3 - FIELD DUPLICATE PRECISION CALCULATIONS

Duplicate and Parent Sample Field Identification	Analyte	Sample Result	Duplicate Result	RPD[a]	Accept or Reject	Qualifier Added
DUP-01 / 2014-AD-03A (2-4)	arsenic	8.91	9.16	2.8	A	-
	cadmium	0.367	0.423	14.2	A	-
	lead	15.5	13.8	11.6	A	-

[a] RPD = ((SR - DR)*200)/(SR + DR)

A - Acceptable Data

NA - Not Analyzed

The RPD test (<50%) applies if both results are greater than 5x MQL. Otherwise, the absolute difference test (< 3x MQL) applies.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-89971-1
Client Project/Site: Exide Recycling Center, Frisco TX Projec

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
4/11/2014 7:17:51 PM
Cathy Upton, Project Management Assistant II
(713)690-4444
cathy.upton@testamericainc.com

Designee for

Dean Joiner, Project Manager II
(713)690-4444
dean.joiner@testamericainc.com

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.

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-89971-1 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☐ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☑ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☐ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton		4/11/2014
Name (printed)	Signature	Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/11/2014
Project Name:	Exide Recycling Center, Frisco TX Projec	Laboratory Job Number:	600-89971-1
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?			X		
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?			X		
		Were LCSs analyzed at the required frequency?			X		
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?			X		
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?			X		
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			R07C
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?		X			R08C
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/11/2014
Project Name:	Exide Recycling Center, Frisco TX Projec	Laboratory Job Number:	600-89971-1
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?			X		
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/11/2014
Project Name:	Exide Recycling Center, Frisco TX Projec	Laboratory Job Number:	600-89971-1
Reviewer Name:	Dean A Joiner		

ER #[1]	Description
R07C	Method 6010B: 600-89971-9 MS/MSD failed the recovery criteria for the following analyte(s): Antimony, Lead. Matrix interference is suspected.
R08C	Method 6010B: The sample duplicate (DUP) precision for batch 131778 was outside control limits for cadmium and lead. Non-homogeneity is suspected.

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Detection Check Standard

Matrix:	Soil
Method:	6010B
Preparation:	3050
Date Analyzed:	3/28/2014
Date Prepared:	3/27/2014
Instrument:	Thermo 6500
TALS Batches:	130577p, 130672
Prep/Reagent Factor =	50
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.299654	0.5	0.36	25
Antimony	0.231553	0.45	0.31	2.5
Arsenic	0.217923	0.5	0.57	1
Barium	0.011322	0.03	0.03	1
Beryllium	0.014513	0.02	0.02	0.25
Boron	0.385535	0.6	0.49	20
Cadmium	0.025642	0.05	0.045	0.25
Calcium	0.86399	1.5	2.07	100
Chromium	0.050606	0.1	0.11	0.5
Cobalt	0.067622	0.1	0.105	0.5
Copper	0.173703	0.5	0.535	0.5
Iron	2.534007	4	4.035	20
Lead	0.104832	0.2	0.18	0.5
Selenium	0.258884	0.5	0.505	2
Manganese	0.038111	0.05	0.05	1.5
Molybdenum	0.136448	0.35	0.325	0.5
Nickel	0.116599	0.15	0.145	1
Silver	0.118848	0.2	0.22	0.5
Sodium	0.885548	2.4	2.13	100
Thallium	0.276988	0.7	0.615	1.5
Tin	0.08729	0.15	0.13	1
Titanium	0.014529	0.03	0.035	0.5
Vanadium	0.079068	0.15	0.165	0.5
Zinc	0.108432	0.2	0.285	1.5

Job ID: 600-89971-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-89971-1

Comments
No additional comments.

Receipt
The samples were received on 4/5/2014 10:47 AM; the samples arrived in good condition, properly preserved and, where required, on ice.
The temperature of the cooler at receipt was 2.2º C.

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-89971-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU
Moisture	Percent Moisture	EPA	TAL HOU

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 HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-89971-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-89971-1	2014-CUFT-5B-A (0.5-2)	Solid	04/04/14 10:55	04/05/14 10:47
600-89971-2	2014-CUFT-18 (0-0.5)	Solid	04/04/14 11:13	04/05/14 10:47
600-89971-3	2014-CUFT-15 (0-0.5)	Solid	04/04/14 11:30	04/05/14 10:47
600-89971-4	2014-CUFT-16 (0-0.5)	Solid	04/04/14 11:45	04/05/14 10:47
600-89971-5	2014-CUFT-17 (0-0.5)	Solid	04/04/14 12:00	04/05/14 10:47
600-89971-6	Dup-01	Solid	04/04/14 00:00	04/05/14 10:47
600-89971-7	2014-AD-03A (2-4)	Solid	04/04/14 12:44	04/05/14 10:47
600-89971-8	2014-AD-06 (0-0.5)	Solid	04/04/14 13:02	04/05/14 10:47
600-89971-9	2014-C2L-C01A	Solid	04/04/14 13:25	04/05/14 10:47
600-89971-10	2014-C2L-C01B	Solid	04/04/14 13:38	04/05/14 10:47
600-89971-11	2014-C2L-C01C	Solid	04/04/14 13:31	04/05/14 10:47

Client Sample ID: 2014-CUFT-5B-A (0.5-2)

Lab Sample ID: 600-89971-1

Date Collected: 04/04/14 10:55
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 74.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.292	U	3.15	0.292	mg/Kg	☼	04/10/14 16:40	04/11/14 11:21	1
Arsenic	**9.51**		1.26	0.275	mg/Kg	☼	04/10/14 16:40	04/11/14 11:21	1
Cadmium	**2.05**		0.315	0.0323	mg/Kg	☼	04/10/14 16:40	04/11/14 11:21	1
Lead	**308**		0.630	0.132	mg/Kg	☼	04/10/14 16:40	04/11/14 11:21	1
Selenium	0.326	U	2.52	0.326	mg/Kg	☼	04/10/14 16:40	04/11/14 11:21	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**25**		1.0	1.0	%			04/08/14 15:38	1
Percent Solids	**75**		1.0	1.0	%			04/08/14 15:38	1

Client Sample ID: 2014-CUFT-18 (0-0.5)

Lab Sample ID: 600-89971-2

Date Collected: 04/04/14 11:13
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 80.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.284	U	3.07	0.284	mg/Kg	☼	04/10/14 16:40	04/11/14 11:23	1
Arsenic	**6.01**		1.23	0.267	mg/Kg	☼	04/10/14 16:40	04/11/14 11:23	1
Cadmium	**4.20**		0.307	0.0315	mg/Kg	☼	04/10/14 16:40	04/11/14 11:23	1
Lead	**261**		0.614	0.129	mg/Kg	☼	04/10/14 16:40	04/11/14 11:23	1
Selenium	0.318	U	2.45	0.318	mg/Kg	☼	04/10/14 16:40	04/11/14 11:23	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**19**		1.0	1.0	%			04/08/14 15:38	1
Percent Solids	**81**		1.0	1.0	%			04/08/14 15:38	1

Client Sample ID: 2014-CUFT-15 (0-0.5)

Lab Sample ID: 600-89971-3

Date Collected: 04/04/14 11:30
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 88.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**1.03**	**J**	2.83	0.262	mg/Kg	☼	04/10/14 16:40	04/11/14 11:26	1
Arsenic	**7.52**		1.13	0.246	mg/Kg	☼	04/10/14 16:40	04/11/14 11:26	1
Cadmium	**2.06**		0.283	0.0290	mg/Kg	☼	04/10/14 16:40	04/11/14 11:26	1
Lead	**1090**		0.565	0.119	mg/Kg	☼	04/10/14 16:40	04/11/14 11:26	1
Selenium	0.293	U	2.26	0.293	mg/Kg	☼	04/10/14 16:40	04/11/14 11:26	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**12**		1.0	1.0	%			04/08/14 15:38	1
Percent Solids	**88**		1.0	1.0	%			04/08/14 15:38	1

Client Sample ID: 2014-CUFT-16 (0-0.5)

Lab Sample ID: 600-89971-4
Date Collected: 04/04/14 11:45 **Matrix: Solid**
Date Received: 04/05/14 10:47 **Percent Solids: 84.4**

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**0.459**	**J**	2.91	0.269	mg/Kg	☼	04/10/14 16:40	04/11/14 11:28	1
Arsenic	**10.4**		1.16	0.253	mg/Kg	☼	04/10/14 16:40	04/11/14 11:28	1
Cadmium	**1.06**		0.291	0.0298	mg/Kg	☼	04/10/14 16:40	04/11/14 11:28	1
Lead	**1530**		0.581	0.122	mg/Kg	☼	04/10/14 16:40	04/11/14 11:28	1
Selenium	0.301	U	2.32	0.301	mg/Kg	☼	04/10/14 16:40	04/11/14 11:28	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16**		1.0	1.0	%			04/08/14 15:38	1
Percent Solids	**84**		1.0	1.0	%			04/08/14 15:38	1

Client Sample ID: 2014-CUFT-17 (0-0.5)

Lab Sample ID: 600-89971-5
Date Collected: 04/04/14 12:00 **Matrix: Solid**
Date Received: 04/05/14 10:47 **Percent Solids: 80.7**

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.271	U	2.92	0.271	mg/Kg	☼	04/10/14 16:40	04/11/14 11:31	1
Arsenic	**6.74**		1.17	0.255	mg/Kg	☼	04/10/14 16:40	04/11/14 11:31	1
Cadmium	**4.43**		0.292	0.0300	mg/Kg	☼	04/10/14 16:40	04/11/14 11:31	1
Lead	**172**		0.585	0.123	mg/Kg	☼	04/10/14 16:40	04/11/14 11:31	1
Selenium	0.303	U	2.34	0.303	mg/Kg	☼	04/10/14 16:40	04/11/14 11:31	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**19**		1.0	1.0	%			04/08/14 15:38	1
Percent Solids	**81**		1.0	1.0	%			04/08/14 15:38	1

Client Sample ID: Dup-01

Lab Sample ID: 600-89971-6
Date Collected: 04/04/14 00:00 **Matrix: Solid**
Date Received: 04/05/14 10:47 **Percent Solids: 80.4**

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.288	U	3.11	0.288	mg/Kg	☼	04/10/14 16:40	04/11/14 11:33	1
Arsenic	**8.91**		1.24	0.271	mg/Kg	☼	04/10/14 16:40	04/11/14 11:33	1
Cadmium	**0.367**		0.311	0.0319	mg/Kg	☼	04/10/14 16:40	04/11/14 11:33	1
Lead	**15.5**		0.622	0.130	mg/Kg	☼	04/10/14 16:40	04/11/14 11:33	1
Selenium	0.322	U	2.49	0.322	mg/Kg	☼	04/10/14 16:40	04/11/14 11:33	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**20**		1.0	1.0	%			04/08/14 15:38	1
Percent Solids	**80**		1.0	1.0	%			04/08/14 15:38	1

Client Sample ID: 2014-AD-03A (2-4) — Lab Sample ID: 600-89971-7

Date Collected: 04/04/14 12:44 — **Matrix: Solid**
Date Received: 04/05/14 10:47 — **Percent Solids: 82.4**

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.258	U	2.78	0.258	mg/Kg	☼	04/10/14 16:40	04/11/14 11:36	1
Arsenic	**9.16**		1.11	0.243	mg/Kg	☼	04/10/14 16:40	04/11/14 11:36	1
Cadmium	**0.423**		0.278	0.0285	mg/Kg	☼	04/10/14 16:40	04/11/14 11:36	1
Lead	**13.8**		0.557	0.117	mg/Kg	☼	04/10/14 16:40	04/11/14 11:36	1
Selenium	0.288	U	2.23	0.288	mg/Kg	☼	04/10/14 16:40	04/11/14 11:36	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**18**		1.0	1.0	%			04/08/14 15:38	1
Percent Solids	**82**		1.0	1.0	%			04/08/14 15:38	1

Client Sample ID: 2014-AD-06 (0-0.5) — Lab Sample ID: 600-89971-8

Date Collected: 04/04/14 13:02 — **Matrix: Solid**
Date Received: 04/05/14 10:47 — **Percent Solids: 77.5**

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.284	U	3.07	0.284	mg/Kg	☼	04/10/14 16:40	04/11/14 11:38	1
Arsenic	**12.2**		1.23	0.268	mg/Kg	☼	04/10/14 16:40	04/11/14 11:38	1
Cadmium	**0.540**		0.307	0.0315	mg/Kg	☼	04/10/14 16:40	04/11/14 11:38	1
Lead	**19.1**		0.614	0.129	mg/Kg	☼	04/10/14 16:40	04/11/14 11:38	1
Selenium	**0.319**	**J**	2.46	0.318	mg/Kg	☼	04/10/14 16:40	04/11/14 11:38	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**22**		1.0	1.0	%			04/08/14 15:38	1
Percent Solids	**78**		1.0	1.0	%			04/08/14 15:38	1

Client Sample ID: 2014-C2L-C01A — Lab Sample ID: 600-89971-9

Date Collected: 04/04/14 13:25 — **Matrix: Solid**
Date Received: 04/05/14 10:47 — **Percent Solids: 80.1**

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.278	U	3.00	0.278	mg/Kg	☼	04/10/14 16:40	04/11/14 11:41	1
Arsenic	**11.9**		1.20	0.262	mg/Kg	☼	04/10/14 16:40	04/11/14 11:41	1
Cadmium	**1.12**		0.300	0.0308	mg/Kg	☼	04/10/14 16:40	04/11/14 11:41	1
Lead	**201**		0.600	0.126	mg/Kg	☼	04/10/14 16:40	04/11/14 11:41	1
Selenium	**0.708**	**J**	2.40	0.311	mg/Kg	☼	04/10/14 16:40	04/11/14 11:41	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**20**		1.0	1.0	%			04/08/14 15:38	1
Percent Solids	**80**		1.0	1.0	%			04/08/14 15:38	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-89971-1

Client Sample ID: 2014-C2L-C01B

Lab Sample ID: 600-89971-10
Date Collected: 04/04/14 13:38
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 83.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.254	U	2.74	0.254	mg/Kg	☼	04/10/14 16:40	04/11/14 11:57	1
Arsenic	**19.3**		1.10	0.239	mg/Kg	☼	04/10/14 16:40	04/11/14 11:57	1
Cadmium	**0.581**		0.274	0.0281	mg/Kg	☼	04/10/14 16:40	04/11/14 11:57	1
Lead	**35.6**		0.548	0.115	mg/Kg	☼	04/10/14 16:40	04/11/14 11:57	1
Selenium	**0.460**	**J**	2.19	0.284	mg/Kg	☼	04/10/14 16:40	04/11/14 11:57	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**16**		1.0	1.0	%			04/08/14 15:38	1
Percent Solids	**84**		1.0	1.0	%			04/08/14 15:38	1

Client Sample ID: 2014-C2L-C01C

Lab Sample ID: 600-89971-11
Date Collected: 04/04/14 13:31
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 86.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.259	U	2.80	0.259	mg/Kg	☼	04/10/14 16:40	04/11/14 12:00	1
Arsenic	**6.36**		1.12	0.244	mg/Kg	☼	04/10/14 16:40	04/11/14 12:00	1
Cadmium	**0.0951**	**J**	0.280	0.0287	mg/Kg	☼	04/10/14 16:40	04/11/14 12:00	1
Lead	**14.4**		0.560	0.117	mg/Kg	☼	04/10/14 16:40	04/11/14 12:00	1
Selenium	0.290	U	2.24	0.290	mg/Kg	☼	04/10/14 16:40	04/11/14 12:00	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	**13**		1.0	1.0	%			04/08/14 15:38	1
Percent Solids	**87**		1.0	1.0	%			04/08/14 15:38	1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
F	Duplicate RPD exceeds the control limit
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.

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
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)

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-131778/1-A
Matrix: Solid
Analysis Batch: 131831

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 131778

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		04/10/14 16:40	04/11/14 10:51	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		04/10/14 16:40	04/11/14 10:51	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		04/10/14 16:40	04/11/14 10:51	1
Lead	0.105	U	0.500	0.105	mg/Kg		04/10/14 16:40	04/11/14 10:51	1
Selenium	0.259	U	2.00	0.259	mg/Kg		04/10/14 16:40	04/11/14 10:51	1

Lab Sample ID: LCSSRM 600-131778/2-A
Matrix: Solid
Analysis Batch: 131831

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 131778

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Antimony			88.2	69.32		mg/Kg		78.6	45.4 - 231.3		
Arsenic			99.6	100.0		mg/Kg		100.4	80.8 - 119.5		
Cadmium			182	184.5		mg/Kg		101.4	81.9 - 118.1		
Lead			115	118.9		mg/Kg		103.4	81.8 - 119.1		
Selenium			150	147.6		mg/Kg		98.4	77.3 - 122.7		

Lab Sample ID: 600-89971-9 MS
Matrix: Solid
Analysis Batch: 131831

Client Sample ID: 2014-C2L-C01A
Prep Type: Total/NA
Prep Batch: 131778

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.278	U	59.0	15.02	N1	mg/Kg	☼	25	75 - 125
Arsenic	11.9		59.0	59.90		mg/Kg	☼	81	75 - 125
Cadmium	1.12		29.5	27.05		mg/Kg	☼	88	75 - 125
Lead	201		59.0	109.5	N1	mg/Kg	☼	-155	75 - 125
Selenium	0.708	J	59.0	48.54		mg/Kg	☼	81	75 - 125

Lab Sample ID: 600-89971-9 MSD
Matrix: Solid
Analysis Batch: 131831

Client Sample ID: 2014-C2L-C01A
Prep Type: Total/NA
Prep Batch: 131778

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	0.278	U	61.0	16.57	N1	mg/Kg	☼	27	75 - 125	10	20
Arsenic	11.9		61.0	64.53		mg/Kg	☼	86	75 - 125	7	20
Cadmium	1.12		30.5	29.66		mg/Kg	☼	93	75 - 125	9	20
Lead	201		61.0	92.24	N1	mg/Kg	☼	-179	75 - 125	17	20
Selenium	0.708	J	61.0	52.95		mg/Kg	☼	86	75 - 125	9	20

Lab Sample ID: 600-89971-9 DU
Matrix: Solid
Analysis Batch: 131831

Client Sample ID: 2014-C2L-C01A
Prep Type: Total/NA
Prep Batch: 131778

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Antimony	0.278	U		0.289	U	mg/Kg	☼			NC	20

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

Lab Sample ID: 600-89971-9 DU
Matrix: Solid
Analysis Batch: 131831

Client Sample ID: 2014-C2L-C01A
Prep Type: Total/NA
Prep Batch: 131778

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	11.9		12.24		mg/Kg	☼	3	20
Cadmium	1.12		0.8117	F	mg/Kg	☼	32	20
Lead	201		145.8	F	mg/Kg	☼	32	20
Selenium	0.708	J	0.5744	J	mg/Kg	☼	21	20

Method: Moisture - Percent Moisture

Lab Sample ID: 600-89971-6 DU
Matrix: Solid
Analysis Batch: 131537

Client Sample ID: Dup-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	20		19		%		1	20
Percent Solids	80		81		%		0.3	20

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-89971-1

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Antimony	2.50	0.232	mg/Kg	6010B
Arsenic	1.00	0.218	mg/Kg	6010B
Cadmium	0.250	0.0256	mg/Kg	6010B
Lead	0.500	0.105	mg/Kg	6010B
Selenium	2.00	0.259	mg/Kg	6010B

General Chemistry

Analyte	MQL	MDL	Units	Method
Percent Moisture	1.0	1.0	%	Moisture
Percent Solids	1.0	1.0	%	Moisture

Metals

Prep Batch: 131778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89971-1	2014-CUFT-5B-A (0.5-2)	Total/NA	Solid	3050B	
600-89971-2	2014-CUFT-18 (0-0.5)	Total/NA	Solid	3050B	
600-89971-3	2014-CUFT-15 (0-0.5)	Total/NA	Solid	3050B	
600-89971-4	2014-CUFT-16 (0-0.5)	Total/NA	Solid	3050B	
600-89971-5	2014-CUFT-17 (0-0.5)	Total/NA	Solid	3050B	
600-89971-6	Dup-01	Total/NA	Solid	3050B	
600-89971-7	2014-AD-03A (2-4)	Total/NA	Solid	3050B	
600-89971-8	2014-AD-06 (0-0.5)	Total/NA	Solid	3050B	
600-89971-9	2014-C2L-C01A	Total/NA	Solid	3050B	
600-89971-9 DU	2014-C2L-C01A	Total/NA	Solid	3050B	
600-89971-9 MS	2014-C2L-C01A	Total/NA	Solid	3050B	
600-89971-9 MSD	2014-C2L-C01A	Total/NA	Solid	3050B	
600-89971-10	2014-C2L-C01B	Total/NA	Solid	3050B	
600-89971-11	2014-C2L-C01C	Total/NA	Solid	3050B	
LCSSRM 600-131778/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-131778/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 131831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89971-1	2014-CUFT-5B-A (0.5-2)	Total/NA	Solid	6010B	131778
600-89971-2	2014-CUFT-18 (0-0.5)	Total/NA	Solid	6010B	131778
600-89971-3	2014-CUFT-15 (0-0.5)	Total/NA	Solid	6010B	131778
600-89971-4	2014-CUFT-16 (0-0.5)	Total/NA	Solid	6010B	131778
600-89971-5	2014-CUFT-17 (0-0.5)	Total/NA	Solid	6010B	131778
600-89971-6	Dup-01	Total/NA	Solid	6010B	131778
600-89971-7	2014-AD-03A (2-4)	Total/NA	Solid	6010B	131778
600-89971-8	2014-AD-06 (0-0.5)	Total/NA	Solid	6010B	131778
600-89971-9	2014-C2L-C01A	Total/NA	Solid	6010B	131778
600-89971-9 DU	2014-C2L-C01A	Total/NA	Solid	6010B	131778
600-89971-9 MS	2014-C2L-C01A	Total/NA	Solid	6010B	131778
600-89971-9 MSD	2014-C2L-C01A	Total/NA	Solid	6010B	131778
600-89971-10	2014-C2L-C01B	Total/NA	Solid	6010B	131778
600-89971-11	2014-C2L-C01C	Total/NA	Solid	6010B	131778
LCSSRM 600-131778/2-A	Lab Control Sample	Total/NA	Solid	6010B	131778
MB 600-131778/1-A	Method Blank	Total/NA	Solid	6010B	131778

General Chemistry

Analysis Batch: 131537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89971-1	2014-CUFT-5B-A (0.5-2)	Total/NA	Solid	Moisture	
600-89971-2	2014-CUFT-18 (0-0.5)	Total/NA	Solid	Moisture	
600-89971-3	2014-CUFT-15 (0-0.5)	Total/NA	Solid	Moisture	
600-89971-4	2014-CUFT-16 (0-0.5)	Total/NA	Solid	Moisture	
600-89971-5	2014-CUFT-17 (0-0.5)	Total/NA	Solid	Moisture	
600-89971-6	Dup-01	Total/NA	Solid	Moisture	
600-89971-6 DU	Dup-01	Total/NA	Solid	Moisture	
600-89971-7	2014-AD-03A (2-4)	Total/NA	Solid	Moisture	
600-89971-8	2014-AD-06 (0-0.5)	Total/NA	Solid	Moisture	
600-89971-9	2014-C2L-C01A	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 131537 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89971-9 MS	2014-C2L-C01A	Total/NA	Solid	Moisture	
600-89971-9 MSD	2014-C2L-C01A	Total/NA	Solid	Moisture	
600-89971-10	2014-C2L-C01B	Total/NA	Solid	Moisture	
600-89971-11	2014-C2L-C01C	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-89971-1

Client Sample ID: 2014-CUFT-5B-A (0.5-2)

Lab Sample ID: 600-89971-1

Date Collected: 04/04/14 10:55
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 74.9

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	131778	04/10/14 16:40	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	131831	04/11/14 11:21	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131537	04/08/14 15:38	AYS	TAL HOU

Client Sample ID: 2014-CUFT-18 (0-0.5)

Lab Sample ID: 600-89971-2

Date Collected: 04/04/14 11:13
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 80.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	50 mL	131778	04/10/14 16:40	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	131831	04/11/14 11:23	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131537	04/08/14 15:38	AYS	TAL HOU

Client Sample ID: 2014-CUFT-15 (0-0.5)

Lab Sample ID: 600-89971-3

Date Collected: 04/04/14 11:30
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 88.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	50 mL	131778	04/10/14 16:40	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	131831	04/11/14 11:26	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131537	04/08/14 15:38	AYS	TAL HOU

Client Sample ID: 2014-CUFT-16 (0-0.5)

Lab Sample ID: 600-89971-4

Date Collected: 04/04/14 11:45
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 84.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.02 g	50 mL	131778	04/10/14 16:40	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	131831	04/11/14 11:28	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131537	04/08/14 15:38	AYS	TAL HOU

Client Sample ID: 2014-CUFT-17 (0-0.5)

Lab Sample ID: 600-89971-5

Date Collected: 04/04/14 12:00
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 80.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	131778	04/10/14 16:40	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	131831	04/11/14 11:31	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131537	04/08/14 15:38	AYS	TAL HOU

Client Sample ID: Dup-01

Lab Sample ID: 600-89971-6

Date Collected: 04/04/14 00:00
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 80.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	50 mL	131778	04/10/14 16:40	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	131831	04/11/14 11:33	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131537	04/08/14 15:38	AYS	TAL HOU

Client Sample ID: 2014-AD-03A (2-4)

Lab Sample ID: 600-89971-7

Date Collected: 04/04/14 12:44
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 82.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	50 mL	131778	04/10/14 16:40	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	131831	04/11/14 11:36	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131537	04/08/14 15:38	AYS	TAL HOU

Client Sample ID: 2014-AD-06 (0-0.5)

Lab Sample ID: 600-89971-8

Date Collected: 04/04/14 13:02
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 77.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	131778	04/10/14 16:40	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	131831	04/11/14 11:38	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131537	04/08/14 15:38	AYS	TAL HOU

Client Sample ID: 2014-C2L-C01A

Lab Sample ID: 600-89971-9

Date Collected: 04/04/14 13:25
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	50 mL	131778	04/10/14 16:40	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	131831	04/11/14 11:41	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131537	04/08/14 15:38	AYS	TAL HOU

Client Sample ID: 2014-C2L-C01B

Lab Sample ID: 600-89971-10

Date Collected: 04/04/14 13:38
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 83.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.09 g	50 mL	131778	04/10/14 16:40	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	131831	04/11/14 11:57	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131537	04/08/14 15:38	AYS	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-89971-1

Client Sample ID: 2014-C2L-C01C
Date Collected: 04/04/14 13:31
Date Received: 04/05/14 10:47

Lab Sample ID: 600-89971-11
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			1.03 g	50 mL	131778	04/10/14 16:40	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	131831	04/11/14 12:00	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			131537	04/08/14 15:38	AYS	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc. TestAmerica Job ID: 600-89971-1
Project/Site: Exide Recycling Center, Frisco TX Projec

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Texas	NELAP	6	T104704223	10-31-14

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica LABORATORIES

4/11/2014

Client Information	Sampler: A. Marlow	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-27110-9386.5
Client Contact: Christina Higginbotham	Phone: 303-664-4302	E-Mail: dean.joiner@testamericainc.com		Page: Page 1 of 4
Company: Golder Associates Inc.			Analysis Requested	Job #: 130 2096
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			Preservation Codes:
City: Houston	TAT Requested (days): 5-Day			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			Other:
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Projec	Project #: 60004831			
Site:	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010 Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
2014-CUFT-SB-A (0.5-2)	4-4-14	1055	C	Solid			X		
2014-CUFT-28 (0-0.5)	4-4-14	1113	C	Solid			X		
2014-CUFT-15 (0-0.5)	4-4-14	1130	C	Solid			X		
2014-CUFT-26 (0-0.5)	4-4-14	1145	C	Solid			X		
2014-CUFT-27 (0-0.5)	4-4-14	1200	C	Solid			X		
Dup-01	4-4-14	-	C	Solid			X		
2014-AD-03A (2-4)	4-4-14	1244	C	Solid			X		
2014-AD-06 (0-0.5)	4-4-14	1302	C	Solid			X		
2014-C2L-C01A	4-4-14	1325	C	Solid			X		
2014-C2L-C01A MS	4-4-14	1325	C	Solid			X		
2014-C2L-C01A MSD	4-4-14	1325	C	Solid			X		

600-89971 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☒ Archive For 1 Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	A. Marlow	4-4-14 1533			4/5/14 10:47	
2						TA Houston
3						

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica

Client Information	Sampler: A Marler	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-27110-9386.5
Client Contact: Christina Higginbotham	Phone: 803-664-4302	E-Mail: dean.joiner@testamericainc.com		Page: Page 2 of 4
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days):			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Projec	Project #: 60004831			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	6010 Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:			M		
2014-L2L-L01B	4-4-14	1338	C	Solid		X		
2014-L2L-L01B	4-4-14	1331	C	Solid		X		
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☒ Archive For until client authorizes Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:				
Relinquished by:	Date/Time: 4-4-14 1533	Company	Received by:	Date/Time: 4/5/14 10:47	Company TAH
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

4/11/2014

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: A. Marlow	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-27110-9386.5
Client Contact: Christina Higginbotham	Phone: 801-664-4302	E-Mail: dean.joiner@testamericainc.com		Page: Page 3 of 4
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): Hold			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Projec	Project #: 60004831			
Site:	SSOW#:			

Analysis Requested

Preservation Codes: A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - Di Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - ph 4-5; Z - other (specify); Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010 Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
2014-CUFT-5B-A (2-4)	4-4-14	1056	C	Solid			X		Hold
2014-CUFT-18 (0.5-2)		1114		Solid			X		Hold
2014-CUFT-18 (2-4)		1115		Solid			X		Hold
2014-CUFT-15 (0.5-2)		1131		Solid			X		Hold
2014-CUFT-15 (2-4)		1132		Solid			X		Hold
2014-CUFT-16 (0.5-2)		1146		Solid			X		Hold
2014-CUFT-16 (2-4)		1147		Solid			X		Hold
2014-CUFT-17 (0.5-2)		1201		Solid			X		Hold
2014-CUFT-17 (2-4)		1202		Solid			X		Hold
2014-AD-03A (4-6)		1245		Solid			X		Hold
2014-AD-03A (6-8)		1246		Solid			X		Hold

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☒ Archive For until cycle authorized Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time:	Company	Received by	Date/Time:	Company
	4-4-14 1533			4/5/14 10:47	TA Hou
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica

Client Information	Sampler: A. Mallon	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-27110-9386.5
Client Contact: Christina Higginbotham	Phone: 903-664-4302	E-Mail: dean.joiner@testamericainc.com		Page: Page 4 of 4
Company: Golder Associates Inc.				Job #: 130286
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): Hold			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Projec	Project #: 60004831			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	6010 Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:			N		
2014-AD-06 (1-2.5)	4-4-14	1310	C	Solid		X		Hold
2014-AD-06 (2.5-4.5)	↓	1311	↓	Solid		X		Hold
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☒ Archive For until client authorizes Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4-4-14 1533			4/5/14 10:47	TA Hou
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-89971-1

Login Number: 89971

List Source: TestAmerica Houston

List Number: 1

Creator: Culik, Marie E

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	2.2
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.	False	IDs on containers do not match the COC. Logged in per COC.
Samples are received within Holding Time.	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	Check done at department level as required.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Tel: (713)690-4444

TestAmerica Job ID: 600-89971-2
Client Project/Site: Exide Recycling Center, Frisco TX Projec

For:
Golder Associates Inc.
500 Century Plaza Drive
Suite 190
Houston, Texas 77073

Attn: Christina Higginbotham

Authorized for release by:
4/24/2014 4:40:39 PM
Cathy Upton, Project Management Assistant II
(713)690-4444
cathy.upton@testamericainc.com

Designee for

Dean Joiner, Project Manager II
(713)690-4444
dean.joiner@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: 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.

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Appendix A
Laboratory Data Package Cover Page - Page 1 of 4

This data package is for TestAmerica Houston job number 600-89971-2 and consists of:

- ☑ R1 - Field chain-of-custody documentation;
- ☑ R2 - Sample identification cross-reference;
- ☑ R3 - Test reports (analytical data sheets) for each environmental sample that includes:
  a. Items consistent with NELAC Chapter 5,
  b. dilution factors,
  c. preparation methods,
  d. cleanup methods, and
  e. if required for the project, tentatively identified compounds (TICs).
- ☐ R4 - Surrogate recovery data including:
  a. Calculated recovery (%R), and
  b. The laboratory's surrogate QC limits.
- ☑ R5 - Test reports/summary forms for blank samples;
- ☐ R6 - Test reports/summary forms for laboratory control samples (LCSs) including:
  a. LCS spiking amounts,
  b. Calculated %R for each analyte, and
  c. The laboratory's LCS QC limits.
- ☑ R7 - Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  a. Samples associated with the MS/MSD clearly identified,
  b. MS/MSD spiking amounts,
  c. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  d. Calculated %Rs and relative percent differences (RPDs), and
  e. The laboratory's MS/MSD QC limits
- ☑ R8 - Laboratory analytical duplicate (if applicable) recovery and precision:
  a. The amount of analyte measured in the duplicate,
  b. The calculated RPD, and
  c. The laboratory's QC limits for analytical duplicates.
- ☑ R9 - List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- ☑ R10 - Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Cathy Upton		4/24/2014
Name (printed)	Signature	Date

Project Management Asst II
Official Title (printed)

Laboratory Review Checklist: Reportable Data - Page 2 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/24/2014
Project Name:	Exide Recycling Center, Frisco TX Projec	Laboratory Job Number:	600-89971-2
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
R1	OI	**Chain-of-custody (C-O-C)**					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	**Sample and quality control (QC) identification**					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	**Test reports**					
		Were all samples prepared and analyzed within holding times?	X				
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample detection limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, are TICs reported?			X		
R4	O	**Surrogate recovery data**					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	**Test reports/summary forms for blank samples**					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	**Laboratory control samples (LCS):**					
		Were all COCs included in the LCS?			X		
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?			X		
		Were LCSs analyzed at the required frequency?			X		
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?			X		
		Does the detectability check sample data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?			X		
		Was the LCSD RPD within QC limits?			X		
R7	OI	**Matrix spike (MS) and matrix spike duplicate (MSD) data**					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	**Analytical duplicate data**					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	**Method quantitation limits (MQLs):**					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory data package?	X				
R10	OI	**Other problems/anomalies**					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Review checklist: Supporting Data - Page 3 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/24/2014
Project Name:	Exide Recycling Center, Frisco TX Projec	Laboratory Job Number:	600-89971-2
Reviewer Name:	Dean A Joiner		

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
S1	OI	**Initial calibration (ICAL)**					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?	X				
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	OI	**Initial and continuing calibration verification (ICV and CCV) and continuing calibration blank (CCB):**					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	**Mass spectral tuning**					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	**Internal standards (IS)**					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	OI	**Raw data (NELAC Section 5.5.10)**					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	**Dual column confirmation**					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	**Tentatively identified compounds (TICs)**					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	**Interference Check Sample (ICS) results**					
		Were percent recoveries within method QC limits?	X				
S9	I	**Serial dilutions, post digestion spikes, and method of standard additions**					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	OI	**Method detection limit (MDL) studies**					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	**Proficiency test reports**					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	**Standards documentation**					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	**Compound/analyte identification procedures**					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	**Demonstration of analyst competency (DOC)**					
		Was DOC conducted consistent with NELAC Chapter 5?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	**Verification/validation documentation for methods (NELAC Chapter 5)**					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	**Laboratory standard operating procedures (SOPs)**					
		Are laboratory SOPs current and on file for each method performed?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
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Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	4/24/2014
Project Name:	Exide Recycling Center, Frisco TX Projec	Laboratory Job Number:	600-89971-2
Reviewer Name:	Dean A Joiner		

ER #[1]	Description

1. Items identified by the letter “R” must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter “S” should be retained and made available upon request for the appropriate retention period.
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3. NA = Not applicable;
4. NR = Not reviewed;
5. ER# = Exception Report identification number (an Exception Report should be completed for an item if “NR” or “No” is checked).

Detection Check Standard

Matrix:	Soil
Method:	6010B
Preparation:	3050
Date Analyzed:	3/28/2014
Date Prepared:	3/27/2014
Instrument:	Thermo 6500
TALS Batches:	130577p, 130672
Prep/Reagent Factor =	50
Units:	mg/kg

Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.299654	0.5	0.36	25
Antimony	0.231553	0.45	0.31	2.5
Arsenic	0.217923	0.5	0.57	1
Barium	0.011322	0.03	0.03	1
Beryllium	0.014513	0.02	0.02	0.25
Boron	0.385535	0.6	0.49	20
Cadmium	0.025642	0.05	0.045	0.25
Calcium	0.86399	1.5	2.07	100
Chromium	0.050606	0.1	0.11	0.5
Cobalt	0.067622	0.1	0.105	0.5
Copper	0.173703	0.5	0.535	0.5
Iron	2.534007	4	4.035	20
Lead	0.104832	0.2	0.18	0.5
Selenium	0.258884	0.5	0.505	2
Manganese	0.038111	0.05	0.05	1.5
Molybdenum	0.136448	0.35	0.325	0.5
Nickel	0.116599	0.15	0.145	1
Silver	0.118848	0.2	0.22	0.5
Sodium	0.885548	2.4	2.13	100
Thallium	0.276988	0.7	0.615	1.5
Tin	0.08729	0.15	0.13	1
Titanium	0.014529	0.03	0.035	0.5
Vanadium	0.079068	0.15	0.165	0.5
Zinc	0.108432	0.2	0.285	1.5

Method Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-89971-2

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU
Moisture	Percent Moisture	EPA	TAL HOU

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 HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Sample Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-89971-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-89971-12	2014-CUFT-5B-A (2-4)	Solid	04/04/14 10:56	04/05/14 10:47
600-89971-15	2014-CUFT-15 (0.5-2))	Solid	04/04/14 11:31	04/05/14 10:47
600-89971-17	2014-CUFT-16 (0.5-2)	Solid	04/04/14 11:46	04/05/14 10:47

Client Sample ID: 2014-CUFT-5B-A (2-4)

Lab Sample ID: 600-89971-12

Date Collected: 04/04/14 10:56
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 68.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	30.4		0.722	0.151	mg/Kg	☼	04/17/14 09:22	04/17/14 13:57	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	31		1.0	1.0	%			04/17/14 14:26	1
Percent Solids	69		1.0	1.0	%			04/17/14 14:26	1

Client Sample ID: 2014-CUFT-15 (0.5-2))

Lab Sample ID: 600-89971-15

Date Collected: 04/04/14 11:31
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 75.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	65.8		0.633	0.133	mg/Kg	☼	04/17/14 09:22	04/17/14 13:59	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25		1.0	1.0	%			04/17/14 14:26	1
Percent Solids	75		1.0	1.0	%			04/17/14 14:26	1

Client Sample ID: 2014-CUFT-16 (0.5-2)

Lab Sample ID: 600-89971-17

Date Collected: 04/04/14 11:46
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 76.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	117		0.651	0.136	mg/Kg	☼	04/17/14 09:22	04/17/14 14:01	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			04/17/14 14:26	1
Percent Solids	77		1.0	1.0	%			04/17/14 14:26	1

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-89971-2

Qualifiers

Metals

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.

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
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)

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-132292/1-A
Matrix: Solid
Analysis Batch: 132306

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 132292

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	0.105	U	0.500	0.105	mg/Kg		04/17/14 09:22	04/17/14 13:52	1

Lab Sample ID: LCSSRM 600-132292/2-A
Matrix: Solid
Analysis Batch: 132306

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 132292

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead			115	117.0		mg/Kg		101.7	81.8 - 119.1		

Lab Sample ID: 600-88305-A-11-C MS
Matrix: Solid
Analysis Batch: 132306

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 132292

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Lead	28.5		47.2	78.35		mg/Kg		106	75 - 125		

Lab Sample ID: 600-88305-A-11-D MSD
Matrix: Solid
Analysis Batch: 132306

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 132292

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	28.5		45.9	79.27		mg/Kg		111	75 - 125	1	20

Lab Sample ID: 600-88305-A-11-B DU
Matrix: Solid
Analysis Batch: 132306

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 132292

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Lead	28.5			33.29		mg/Kg				15	20

Method: Moisture - Percent Moisture

Lab Sample ID: 600-89799-A-2 DU
Matrix: Solid
Analysis Batch: 132331

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	20			21		%				2	20
Percent Solids	80			79		%				0.5	20

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-89971-2

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Lead	0.500	0.105	mg/Kg	6010B

General Chemistry

Analyte	MQL	MDL	Units	Method
Percent Moisture	1.0	1.0	%	Moisture
Percent Solids	1.0	1.0	%	Moisture

Metals

Prep Batch: 132292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-88305-A-11-B DU	Duplicate	Total/NA	Solid	3050B	
600-88305-A-11-C MS	Matrix Spike	Total/NA	Solid	3050B	
600-88305-A-11-D MSD	Matrix Spike Duplicate	Total/NA	Solid	3050B	
600-89971-12	2014-CUFT-5B-A (2-4)	Total/NA	Solid	3050B	
600-89971-15	2014-CUFT-15 (0.5-2))	Total/NA	Solid	3050B	
600-89971-17	2014-CUFT-16 (0.5-2)	Total/NA	Solid	3050B	
LCSSRM 600-132292/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-132292/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 132306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-88305-A-11-B DU	Duplicate	Total/NA	Solid	6010B	132292
600-88305-A-11-C MS	Matrix Spike	Total/NA	Solid	6010B	132292
600-88305-A-11-D MSD	Matrix Spike Duplicate	Total/NA	Solid	6010B	132292
600-89971-12	2014-CUFT-5B-A (2-4)	Total/NA	Solid	6010B	132292
600-89971-15	2014-CUFT-15 (0.5-2))	Total/NA	Solid	6010B	132292
600-89971-17	2014-CUFT-16 (0.5-2)	Total/NA	Solid	6010B	132292
LCSSRM 600-132292/2-A	Lab Control Sample	Total/NA	Solid	6010B	132292
MB 600-132292/1-A	Method Blank	Total/NA	Solid	6010B	132292

General Chemistry

Analysis Batch: 132331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-89799-A-2 DU	Duplicate	Total/NA	Solid	Moisture	
600-89971-12	2014-CUFT-5B-A (2-4)	Total/NA	Solid	Moisture	
600-89971-15	2014-CUFT-15 (0.5-2))	Total/NA	Solid	Moisture	
600-89971-17	2014-CUFT-16 (0.5-2)	Total/NA	Solid	Moisture	
600-90579-B-6 MS	Matrix Spike	Total/NA	Solid	Moisture	
600-90579-B-6 MSD	Matrix Spike Duplicate	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-89971-2

Client Sample ID: 2014-CUFT-5B-A (2-4)

Lab Sample ID: 600-89971-12

Date Collected: 04/04/14 10:56
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 68.6

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	50 mL	132292	04/17/14 09:22	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	132306	04/17/14 13:57	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			132331	04/17/14 14:26	AYS	TAL HOU

Client Sample ID: 2014-CUFT-15 (0.5-2))

Lab Sample ID: 600-89971-15

Date Collected: 04/04/14 11:31
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 75.2

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	132292	04/17/14 09:22	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	132306	04/17/14 13:59	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			132331	04/17/14 14:26	AYS	TAL HOU

Client Sample ID: 2014-CUFT-16 (0.5-2)

Lab Sample ID: 600-89971-17

Date Collected: 04/04/14 11:46
Matrix: Solid
Date Received: 04/05/14 10:47
Percent Solids: 76.8

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	50 mL	132292	04/17/14 09:22	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	132306	04/17/14 14:01	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			132331	04/17/14 14:26	AYS	TAL HOU

Laboratory References:

TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Certification Summary

Client: Golder Associates Inc.
Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-89971-2

Laboratory: TestAmerica Houston

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Texas	NELAP	6	T104704223	10-31-14

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica LABORATORIES

4/24/2014

Client Information	Sampler: A. Marlow	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-27110-9386.5
Client Contact: Christina Higginbotham	Phone: 803-664-4302	E-Mail: dean.joiner@testamericainc.com		Page: Page 1 of 4
Company: Golder Associates Inc.				Job #: 130 2096
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): 5-Day			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Projec	Project #: 60004831			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010 Metals	Total Number of containers	Special Instructions/Note:
Preservation Code:							N		
2014-CUFT-5B-A (0.5-2)	4-4-14	1055	C	Solid			X		
2014-CUFT-28 (0-0.5)	4-4-14	1113	C	Solid			X		
2014-CUFT-15 (0-0.5)	4-4-14	1130	C	Solid			X		
2014-CUFT-26 (0-0.5)	4-4-14	1145	C	Solid			X		
2014-CUFT-27 (0-0.5)	4-4-14	1200	C	Solid			X		
Dup-01	4-4-14	-	C	Solid			X		
2014-AD-03A (2-4)	4-4-14	1244	C	Solid			X		
2014-AD-06 (0-0.5)	4-4-14	1302	C	Solid			X		
2014-C2L-C01A	4-4-14	1325	C	Solid			X		
2014-C2L-C01A MS	4-4-14	1325	C	Solid			X		
2014-C2L-C01A MSD	4-4-14	1325	C	Solid			X		

600-89971 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☒ Archive For 1 Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Ashley Marlow	4-4-14 1533			4/5/14 10:47	
2	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No
Custody Seal No.:
Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica

Client Information	Sampler: A Marler	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-27110-9386.5
Client Contact: Christina Higginbotham	Phone: 803-664-4302	E-Mail: dean.joiner@testamericainc.com		Page: Page 2 of 4
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days):			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Projec	Project #: 60004831			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - ph 4-5; Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	6010 Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:			M		
2014-L2L-L01B	4-4-14	1338	C	Solid		X		
2014-L2L-L01B	4-4-14	1331	C	Solid		X		
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☒ Archive For until client authorizes Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	4-4-14 1533		[signature]	4/5/14 10:47	TA Hou
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: A. Marlow	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-27110-9386.5
Client Contact: Christina Higginbotham	Phone: 801-664-4302	E-Mail: dean.joiner@testamericainc.com		Page: Page 3 of 4
Company: Golder Associates Inc.				Job #: 1302086
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): Hold			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Projec	Project #: 60004831			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - Di Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2SO3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - ph 4-5; Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010 Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N		
2014-CUFT-5B-A (2-4)	4-4-14	1056	C	Solid			X		Hold
2014-CUFT-18 (0.5-2)		1114		Solid			X		Hold
2014-CUFT-18 (2-4)		1115		Solid			X		Hold
2014-CUFT-15 (0.5-2)		1131		Solid			X		Hold
2014-CUFT-15 (2-4)		1132		Solid			X		Hold
2014-CUFT-16 (0.5-2)		1146		Solid			X		Hold
2014-CUFT-16 (2-4)		1147		Solid			X		Hold
2014-CUFT-17 (0.5-2)		1201		Solid			X		Hold
2014-CUFT-17 (2-4)		1202		Solid			X		Hold
2014-AD-03A (4-6)		1245		Solid			X		Hold
2014-AD-03A (6-8)		1246		Solid			X		Hold

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☒ Archive For until cycle authorized Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time:	Company	Received by	Date/Time:	Company
	4-4-14 1533			4/5/14 10:47	TA Hou
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

TestAmerica Houston
6310 Rothway Street
Houston, TX 77040
Phone (713) 690-4444 Fax (713) 690-5646

Chain of Custody Record

TestAmerica

Client Information	Sampler: A. Marlow	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-27110-9386.5
Client Contact: Christina Higginbotham	Phone: 903-664-4302	E-Mail: dean.joiner@testamericainc.com		Page: Page 4 of 4
Company: Golder Associates Inc.				Job #: 130286
Address: 500 Century Plaza Drive Suite 190	Due Date Requested:			
City: Houston	TAT Requested (days): Hold			
State, Zip: TX, 77073				
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: Exide Recycling Center, Frisco TX Projec	Project #: 60004831			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	6010 Metals	Total Number of containers	Special Instructions/Note:
	Preservation Code:					N		
2014-AD-06 (1-2.5)	4-4-14	1310	C	Solid		X		Hold
2014-AD-06 (2.5-4.5)	↓	1311	↓	Solid		X		Hold
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				
				Solid				

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☒ Archive For until client authorizes Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		4-4-14 1533			4/5/14 10:47	TA Hou
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Upton, Cathy

From: Higginbotham, Christina [Christina_Higginbotham@golder.com]
Sent: Wednesday, April 16, 2014 1:05 PM
To: Upton, Cathy; Joiner, Dean
Cc: Faeth-Boyd, Anne; Xi, Jing Song; Forthaus, Brett; Thomas, Jim; Janzen, Joshua
Subject: Hold Samples to Analyze - 89701, 89799, 89971
Follow Up Flag: Follow up
Flag Status: Completed

Cathy and Dean,

Please log in the following hold samples for analysis as follows:

Lab Package	J 89701-1	Final	
Location	**Depth to Analyze**	**Analytes**	**Notes**
2014-C2L-06A	0.5-2	Lead, Selenium	
2014-C2L-06C	0.5-2	Antimony, Arsenic, Lead, Selenium	
D-11B	0.5-2	Arsenic	
2014-NT-3	0.5-2	Lead	
2014-SL-5	0.5-2	Lead	
2014-TS-3	0.5-2	Lead	
2014-SDA-7	0.5-2	Antimony, Arsenic, Lead	
SRB-VS-11B	2-4	Antimony	
B3RA	0.5-2	Arsenic, Lead	
ECO 8B	0.5-2	Antimony, Arsenic, Lead	

Lab Package	J 89799-1	Final	
Location	**Depth to Analyze**	**Analytes**	**Notes**
2014-NDA-7	0.5-2	Lead, Antimony, methylene chloride	dup exceedence for shallow interval (and mc
2014-FFTA-07	0.5-2	Arsenic, Lead	
2014-FFTA-08	0.5-2	Bis(2-chloroethyl)ether, Arsenic, Lead	
2014-FFTA-06	0.5-2	Arsenic, Lead, Methylene Chloride	
2014-NDA-9	0.5-2	Lead	
2014-NDA-8	0.5-2	Lead	

Lab Package	J 89971-1	Final	
Location	**Depth to Analyze**	**Analytes**	**Notes**
2014-CUFT-5B-A	2-4	Lead	
2014-CUFT-15	0.5-2	Lead	
2014-CUFT-16	0.5-2	Lead	

Christina Higginbotham, P.G. | Remediation Project Manager | **Golder Associates Inc.**
500 Century Plaza Drive, Suite 190, Houston, Texas, USA 77073
T: +1 (281) 821-6868 | **F:** +1 (281) 821-6870 | **C:** +1 (281) 620-7835 | **E:** CHigginbotham@golder.com |

www.golder.com

Work Safe, Home Safe

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Please consider the environment before printing this email.

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-89971-2

Login Number: 89971

List Source: TestAmerica Houston

List Number: 1

Creator: Culik, Marie E

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
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	2.2
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.	False	IDs on containers do not match the COC. Logged in per COC.
Samples are received within Holding Time.	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	Check done at department level as required.