Data Usability Summary
Test America Work Orders: 600-84633-1, 600-84629-1, 600-84450-1

Sample Dates:	December 18 - December 20, 2013	**Project No.:**	1302086
Laboratory:	Test America (TLAP Certification T104704223)	**Client:**	Exide Technologies Inc.
Work Orders:	Work Orders: 600-84633-1, 600-84629-1, 600-84450-1 (grid soil sampling of Class 2 landfill cap, Slag Landfill cap, North Disposal Area cap, South Disposal Area cap		
Intended Use	Affected Property Assessment Report (APAR)		
Site:	Exide Former Operating Plant (FOP), 7471 5th Street, Frisco, TX		

TESTS/ METHODS:
Total Metals by SW-846 3050B/6010B - Inductively Coupled Plasma-Atomic Emission Spectrometry

SAMPLES:
86 soil samples, 5 field duplicates, 4 equipment rinsate blanks, 5 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

- 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 Attachment 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: C. Higginbotham 3/20/14

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 600-84633-1, 600-84629-1, 600-84450-1. 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:

- For job numbers 600-84633-1, 600-84629-1, 600-84450-1, the intent was to instruct the laboratory to archive the deeper soil sample intervals; however this instruction was not marked on the C-O-C. Some work orders were revised initially to report only the shallow depth intervals.
- For 600-84629-1, the Rinsate Blank sample was incorrectly marked on the COC as a solid; however it is an aqueous sample.

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 600-84450-1, the temperature of the cooler at receipt was 16.9°C. For solid samples to be analyzed for metals, preservation on ice is not required; based on this the reviewer determined that data qualification is not necessary.
- For 600-84633-1,the temperature of the coolers at receipt were 4.1°C, 4.6°C, and 3°C.
- For 600-84629-1, the temperature of the coolers at receipt were 4.1°C, 4.6°C, 4.4°C and 3°C. Sample 2013-SDA-C05 (6-12) was received broken; analysis was still possible.

Field Procedures

The samples were collected and placed immediately into sterilized jars provided by the laboratory and then into a cooler with ice, except in the above instance, for overnight delivery to the laboratory.
Five field duplicates were collected with the 84 investigative samples; however, duplicates were collected from the deeper sample intervals, and the duplicate parent samples were not analyzed initially. Five site-specific MS/MSD samples were collected. Five 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

Lead 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
600-84450-1	Method	123705	Lead	0.1050 J mg/kg
600-84633-1	Method	124050	Lead	0.7250 mg/kg
600-84633-1	Method	124023	Antimony	0.4150 mg/kg

Results for samples prepared in the same preparation batch as a contaminated method blank may be affected by laboratory contamination. However for Lead, all of the associated samples have an analyte concentration well above (more than 5x) that in the blank and thus there is no effect on data quality. The antimony method blank detection affected sample 600-84633-7, and the concentration in the sample should be treated as non-detect.

Field QC Blanks

Four equipment rinsate blanks were collected to document sufficient field decontamination procedures for soil sampling devices. Detected concentrations in the rinsate blanks were as follows:

Lab Package	Field Sample ID	Sample Date	Analyte	Blank Concentration
600-84450-11	Rinsate Blank-Trowel	12-18-2014	Lead	0.00465 mg/L
600-84450-24	Rinse Blank-Hand Auger	12-20-2014	Lead	0.0131 mg/L

Results for samples collected with a contaminated rinsate blank may be affected by field contamination. However, these analytes were detected in the associated samples at concentrations well above (more than 5x) the equivalent concentration in the blank, and thus data qualification is not required.

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 five site-specific MS/MSDs 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.

In order to better evaluate data quality, the reviewer requested PDS data from TestAmerica for work orders 600-84633-1, 600-84629-1, 600-84450-1 and it was provided as package addenda (see Attachment 2).

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	PDS % Recovery	Qual
123942	600-84629-17	2013-SDA-C02 (6-12)	lead	202	58.4, 60.2	-213	-202	-	JL
123956	600-84629-26	2013-NDA-C23 (6-12)	arsenic	81.4	55.1, 56.1	9	31	90	JL
123956	600-84629-26	2013-NDA-C23 (6-12)	cadmium	32.1	27.6, 28.1	53	50	86	JL
123956	600-84629-26	2013-NDA-C23 (6-12)	lead	19900	55.1, 56.1	-1719	-1028	92	-
123983	600-84629-48	DUP-5	lead	1110	55.9, 59.2	1991	-1028	NC	-
124095	600-84633-36	2013-NDA-C13 (6-12)	lead	240	61.5, 60.8	199	70	-	J
124095	600-84633-36	2013-NDA-C13 (6-12)	cadmium	2.08	30.8	73	48	-	-
124023	600-84633-20	2013-NDA-C05 (6-12)	lead	845	57.6, 56.5	397	37	-	-
124037	600-84633-24	2013-NDA-C07 (6-12)	lead	713	58.6, 58.1	536	862	-	-
124050	600-84633-41	DUP-2	lead	37100	61.6, 57.1	-19980	-47910	-	-
123634	600-84450-16	2013-SL-C10 (0-6)	lead	528	62.3, 60.9	-313	-720	-	-

In all cases where the unspiked parent sample concentration is greater than approximately 4x the spike added, 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

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 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 11 MSD and MD for Total Metals (Cd and/or Pb) and six MD for pH, 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 from the given sample matrix, except as follows:

QC Batch	Lab Sample ID	MS/MSD ID	Analyte	Parent Amount (mg/kg)	MSD RPD*	MD RPD*
123942	600-84629-17	2013-SDA-C02 (6-12)	antimony	0.643	-	**49**
123942	600-84629-17	2013-SDA-C02 (6-12)	arsenic	4.15	2	**92**
123942	600-84629-17	2013-SDA-C02 (6-12)	cadmium	0.691	6	**106**
123942	600-84629-15	2013-SDA-C02 (6-12)	arsenic	26.4	6	**60**
123942	600-84629-15	2013-SDA-C02 (6-12)	cadmium	0.255	2	**51**
123956	600-84629-26	2013-NDA-C23 (6-12)	arsenic	81.4	14	**72**
123956	600-84629-26	2013-NDA-C23 (6-12)	antimony	72.1	**-**	**125**
123956	600-84629-26	2013-NDA-C23 (6-12)	cadmium	32.1	1	**101**
123956	600-84629-26	2013-NDA-C23 (6-12)	selenium	2.81	7	**46**
123956	600-84629-26	2013-NDA-C23 (6-12)	lead	19900	30	**77**
123956	600-84629-41	2013-C2L-C06 (0-6)	arsenic	6.99	9	**52**
123956	600-84629-41	2013-C2L-C06 (0-6)	cadmium	0.104 J	8	**71**
123956	600-84629-41	2013-C2L-C06 (0-6)	lead	20.7	19	20
123956	600-84629-41	2013-C2L-C06 (0-6)	selenium	0.316 U	9	NC
123983	600-84629-48	DUP-5	lead	1110	**126**	**43**
124095	600-84633-36	2013-NDA-C13 (6-12)	lead	240	**199**	**70**
124095	600-84633-36	2013-NDA-C13 (6-12)	cadmium	2.08	**73**	**48**
124023	600-84633-16	2013-NDA-C03 (6-12)	lead	805	**151**	7
124050	600-84633-41	DUP-2	lead	37100	**87**	**47**
123634	600-84450-16	2013-SL-C10 (0-6)	lead	528	**115**	**43**

*Bold indicates duplicate precision is outside specifications

In each case where either the MSD RPD or MD RPD is within control (within 30% for laboratory duplicates), a batch effect is not indicated, and the reviewer qualified the detect for the parent sample only as estimated (J). In each case where both the MSD RPD and MD RPD (or MD RPD only) are outside of control limits, samples in the associated batch were qualified as estimated (J).

Field Duplicate Precision

Five field duplicates were collected with the samples and analyzed for Total Cadmium and Total Lead. Results are summarized in Table 3. The RPDs (or the absolute difference between results for concentrations <5xMQL 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 total lead and cadmium at DUP-1 / 2013-SL-C11 (6-12), DUP-2 / 2013-NDA-C04 (6-12); cadmium only at DUP-3 / 2013-NDA-C14 (6-12); and total lead only at DUP-4 / 2013-NDA-C24 (6-12) and DUP-5 / 2013-SDA-C03 (6-12).

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 as follow

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 Indentifications and Laboratory Indentifications

Lab Sample ID	Field Sample ID	Sample Date	Matrix	Comments
600-84450-1	2013-SL-01 (0-6)	12/18/2013	Soil	
600-84450-2	2013-SL-01 (6-12)	12/18/2013	Soil	
600-84450-3	2013-SL-02 (0-6)	12/18/2013	Soil	
600-84450-4	2013-SL-02 (6-12)	12/18/2013	Soil	
600-84450-5	2013-SL-07 (0-6)	12/18/2013	Soil	
600-84450-6	2013-SL-07 (6-12)	12/18/2013	Soil	
600-84450-7	2013-SL-08 (0-6)	12/18/2013	Soil	
600-84450-8	2013-SL-08 (6-12)	12/18/2013	Soil	
600-84450-9	2013-SL-03 (0-6)	12/18/2013	Soil	
600-84450-10	2013-SL-03 (6-12)	12/18/2013	Soil	
600-84450-11	Rinsate Blank-Trowel	12/18/2013	Water	Rinsate Blank
600-84450-12	2013-SL-CO4 (0-6)	12/18/2013	Soil	
600-84450-13	2013-SL-CO4 (6-12)	12/18/2013	Soil	
600-84450-14	2013-SL-CO9 (0-6)	12/18/2013	Soil	
600-84450-15	2013-SL-CO9 (6-12)	12/18/2013	Soil	
600-84450-16	2013-SL-C10 (0-6)	12/18/2013	Soil	site-specific MS/MSD
600-84450-17	2013-SL-C10 (6-12)	12/18/2013	Soil	
600-84450-18	2013-SL-C05 (0-6)	12/18/2013	Soil	
600-84450-19	2013-SL-CO5 (6-12)	12/18/2013	Soil	
600-84450-20	2013-SL-CO6 (0-6)	12/18/2013	Soil	
600-84450-21	2013-SL-CO6 (6-12)	12/18/2013	Soil	
600-84450-22	2013-SL-C11 (0-6)	12/18/2013	Soil	
600-84450-23	2013-SL-C11 (6-12)	12/18/2013	Soil	
600-84450-24	Rinse Blank-Hand Auger	12/18/2013	Water	Rinsate Blank
600-84450-25	DUP-1	12/18/2013	Soil	Duplicate of 2013-SL-C11(6-12)
600-84633-1	2013-SL-C12 (0-6)	12/19/2013	Soil	
600-84633-2	2013-SL-C12 (6-12)	12/19/2013	Soil	
600-84633-3	2013-SL-C13 (0-6)	12/19/2013	Soil	
600-84633-4	2013-SL-C13 (6-12)	12/19/2013	Soil	
600-84633-5	2013-SL-C16 (0-6)	12/19/2013	Soil	
600-84633-6	2013-SL-C16 (6-12)	12/19/2013	Soil	
600-84633-7	2013-SL-C15 (0-6)	12/19/2013	Soil	
600-84633-8	2013-SL-C15 (6-12)	12/19/2013	Soil	
600-84633-9	2013-SL-C14 (0-6)	12/19/2013	Soil	
600-84633-10	2013-SL-C14 (6-12)	12/19/2013	Soil	
600-84633-11	2013-NDA-C01 (0-6)	12/19/2013	Soil	
600-84633-12	2013-NDA-C01 (6-12)	12/19/2013	Soil	
600-84633-13	2013-NDA-C02 (0-6)	12/19/2013	Soil	
600-84633-14	2013-NDA-C02 (6-12)	12/19/2013	Soil	
600-84633-15	2013-NDA-C03 (0-6)	12/19/2013	Soil	
600-84633-16	2013-NDA-C03 (6-12)	12/19/2013	Soil	site-specific MS/MSD
600-84633-17	2013-NDA-C04 (0-6)	12/19/2013	Soil	
600-84633-18	2013-NDA-C04 (6-12)	12/19/2013	Soil	
600-84633-19	2013-NDA-C05 (0-6)	12/19/2013	Soil	
600-84633-20	2013-NDA-C05 (6-12)	12/19/2013	Soil	
600-84633-21	2013-NDA-C06 (0-6)	12/19/2013	Soil	
600-84633-22	2013-NDA-C06 (6-12)	12/19/2013	Soil	
600-84633-23	2013-NDA-C07 (0-6)	12/19/2013	Soil	
600-84633-24	2013-NDA-C07 (6-12)	12/19/2013	Soil	
600-84633-25	2013-NDA-C08 (0-6)	12/19/2013	Soil	
600-84633-26	2013-NDA-C08 (6-12)	12/19/2013	Soil	
600-84633-27	2013-NDA-C09 (0-6)	12/19/2013	Soil	
600-84633-28	2013-NDA-C09 (6-12)	12/19/2013	Soil	
600-84633-29	2013-NDA-C10 (0-6)	12/19/2013	Soil	
600-84633-30	2013-NDA-C10 (6-12)	12/19/2013	Soil	
600-84633-31	2013-NDA-C11 (0-6)	12/19/2013	Soil	
600-84633-32	2013-NDA-C11 (6-12)	12/19/2013	Soil	
600-84633-33	2013-NDA-C12 (0-6)	12/19/2013	Soil	
600-84633-34	2013-NDA-C12 (6-12)	12/19/2013	Soil	
600-84633-35	2013-NDA-C13 (0-6)	12/19/2013	Soil	
600-84633-36	2013-NDA-C13 (6-12)	12/19/2013	Soil	site-specific MS/MSD
600-84633-37	2013-NDA-C14 (0-6)	12/19/2013	Soil	
600-84633-38	2013-NDA-C14 (6-12)	12/19/2013	Soil	
600-84633-39	2013-NDA-C15 (0-6)	12/19/2013	Soil	
600-84633-40	2013-NDA-C15 (6-12)	12/19/2013	Soil	
600-84633-41	DUP-2	12/19/2013	Soil	Duplicate of 2013-NDA-C04 (6-12)

Table 1
Cross Reference of Field Sample Indentifications and Laboratory Indentifications

600-84633-42	DUP-3	12/19/2013	Soil	Duplicate of 2013-NDA-C14 (6-12)
600-84633-43	Rinse Blank-Hand Auger	12/19/2013	Water	Rinsate Blank
600-84629-1	2013-NDA-C16 (0-6)	12/20/2013	Soil	
600-84629-3	2013-NDA-C18 (0-6)	12/20/2013	Soil	
600-84629-5	2013-NDA-C17 (0-6)	12/20/2013	Soil	
600-84629-7	2013-NDA-C19 (0-6)	12/20/2013	Soil	
600-84629-9	2013-NDA-C20 (0-6)	12/20/2013	Soil	
600-84629-11	2013-NDA-C21 (0-6)	12/20/2013	Soil	
600-84629-14	2013-SDA-C01 (0-6)	12/20/2013	Soil	
600-84629-16	2013-SDA-C02 (0-6)	12/20/2013	Soil	
600-84629-17	2013-SDA-C02 (6-12)	12/20/2013	Soil	site-specific MS/MSD
600-84629-18	2013-SDA-C03 (0-6)	12/20/2013	Soil	
600-84629-19	2013-SDA-C03 (6-12)	12/20/2013		
600-84629-20	2013-SDA-C04 (0-6)	12/20/2013	Soil	
600-84629-23	2013-NDA-C22 (0-6)	12/20/2013	Soil	
600-84629-25	2013-NDA-C23 (0-6)	12/20/2013	Soil	
600-84629-26	2013-NDA-C23 (6-12)	12/20/2013	Soil	site-specific MS/MSD
600-84629-27	2013-NDA-C24 (0-6)	12/20/2013	Soil	
600-84629-28	2013-NDA-C24 6-12)	12/20/2013	Soil	
600-84629-29	2013-NDA-C25 (0-6)	12/20/2013	Soil	
600-84629-31	2013-C2L-C01 (0-6)	12/20/2013	Soil	
600-84629-33	2013-C2L-C02 (0-6)	12/20/2013	Soil	
600-84629-35	2013-C2L-C03 (0-6)	12/20/2013	Soil	
600-84629-37	2013-C2L-C04 (0-6)	12/20/2013	Soil	
600-84629-39	2013-C2L-C05 (0-6)	12/20/2013	Soil	
600-84629-41	2013-C2L-C06 (0-6)	12/20/2013	Soil	
600-84629-42	2013-SDA-C05 (0-6)	12/20/2013	Soil	
600-84629-44	2013-SDA-C06 (0-6)	12/20/2013	Soil	
600-84629-46	Rinse Blank Hand Auger	12/20/2013	Water	Rinsate Blank
600-84629-47	DUP-4	12/20/2013	Soil	Duplicate 2013-NDA-C24 (6-12)
600-84629-48	DUP-5	12/20/2013	Soil	Duplicate 2013-SDA-C03 (6-12); lab selected MS/MSD

TABLE 2 - QUALIFIED DATA

Lab Sample ID	Field Sample ID	Analyte	Result	Units	Qualifer	Explanation
600-84450-1	2013-SL-01 (0-6)	cadmium	0.139	mg/kg	J	Detected between SDL and MQL
600-84450-8	2013-SL-08 (6-12)	lead	75.6	mg/kg	J	lab duplicate and MSD RPD outside specifications
600-84450-9	2013-SL-03 (0-6)	lead	6950	mg/kg	J	lab duplicate and MSD RPD outside specifications
600-84450-10	2013-SL-03 (6-12)	lead	2060	mg/kg	J	lab duplicate and MSD RPD outside specifications
600-84450-12	2013-SL-C04 (0-6)	lead	245	mg/kg	J	lab duplicate and MSD RPD outside specifications
600-84450-13	2013-SL-C04 (6-12)	lead	113	mg/kg	J	lab duplicate and MSD RPD outside specifications
600-84450-14	2013-SL-C09 (0-6)	lead	84	mg/kg	J	lab duplicate and MSD RPD outside specifications
600-84450-15	2013-SL-C09 (6-12)	lead	14.2	mg/kg	J	lab duplicate and MSD RPD outside specifications
600-84450-16	2013-SL-C10 (0-6)	lead	528	mg/kg	J	lab duplicate and MSD RPD outside specifications
600-84450-17	2013-SL-C10 (6-12)	lead	57.6	mg/kg	J	lab duplicate and MSD RPD outside specifications
600-84450-18	2013-SL-C05 (0-6)	lead	273	mg/kg	J	lab duplicate and MSD RPD outside specifications
600-84450-19	2013-SL-C05 (6-12)	lead	141	mg/kg	J	lab duplicate and MSD RPD outside specifications
600-84450-20	2013-SL-C06 (0-6)	lead	297	mg/kg	J	lab duplicate and MSD RPD outside specifications
600-84450-21	2013-SL-C06 (6-12)	lead	174	mg/kg	J	lab duplicate and MSD RPD outside specifications
600-84450-22	2013-SL-C11 (0-6)	lead	470	mg/kg	J	lab duplicate and MSD RPD outside specifications
600-84450-23	2013-SL-C11 (6-12)	lead	243	mg/kg	J	Field Duplicate RPD greater than 50%
		cadmium	1.37	mg/kg	J	Field Duplicate RPD greater than 50%
600-84450-25	DUP-1	lead	78.9	mg/kg	J	Field Duplicate RPD greater than 50%
		cadmium	0.649	mg/kg	J	Field Duplicate RPD greater than 50%
600-84629-1	2013-NDA-C16 (0-6)	lead	491	mg/kg	JL	MS/MSD recovery below specifications
600-84629-3	2013-NDA-C18 (0-6)	lead	600	mg/kg	JL	MS/MSD recovery below specifications
600-84629-5	2013-NDA-C17 (0-6)	lead	318	mg/kg	JL	MS/MSD recovery below specifications
600-84629-7	2013-NDA-C19 (0-6)	lead	419	mg/kg	JL	MS/MSD recovery below specifications
600-84629-9	2013-NDA-C20 (0-6)	lead	44400	mg/kg	JL	MS/MSD recovery below specifications
		antimony	168	mg/kg	J	lab duplicate precision
600-84629-11	2013-NDA-C21 (0-6)	lead	37700	mg/kg	JL	MS/MSD recovery below specifications
		antimony	98	mg/kg	J	lab duplicate RPD > 30%
600-84629-14	2013-SDA-C01 (0-6)	lead	2500	mg/kg	JL	MS/MSD recovery below specifications
600-84629-16	2013-SDA-C02 (0-6)	lead	4260	mg/kg	JL	MS/MSD recovery below specifications
600-84629-17	2013-SDA-C02 (6-12)	cadmium	0.691	mg/kg	J	MSD RPD > 30%
		lead	202	mg/kg	JL	MS/MSD recovery below specifications
600-84629-18	2013-SDA-C03 (0-6)	lead	8680	mg/kg	JL	MS/MSD recovery below specifications
		antimony	52.2	mg/kg	J	lab duplicate RPD > 30%
600-84629-19	2013-SDA-C03 (6-12)	lead	3560	mg/kg	J	Field Duplicate RPD greater than 50%
600-84629-20	2013-SDA-C04 (0-6)	lead	944	mg/kg	JL	MS/MSD recovery below specifications
600-84629-23	2013-NDA-C22 (0-6)	cadmium	21.8	mg/kg	JL	Matrix Spike recovery below specifications
600-84629-25	2013-NDA-C23 (0-6)	cadmium	10.8	mg/kg	JL	Matrix Spike recovery below specifications
600-84629-26	2013-NDA-C23 (6-12)	cadmium	32.1	mg/kg	JL	Matrix Spike recovery below specifications
600-84629-27	2013-NDA-C24 (0-6)	cadmium	44.4	mg/kg	JL	Matrix Spike recovery below specifications
600-84629-29	2013-NDA-C25 (0-6)	cadmium	17.9	mg/kg	JL	Matrix Spike recovery below specifications
600-84629-31	2013-C2L-C01 (0-6)	selenium	1.58 J	mg/kg	J	Detected between SDL and MQL; lab duplicate RPD >30%
		arsenic	16.4	mg/kg	JL	Matrix Spike recovery below specifications; lab duplicate RPD > 30%
		antimony	2.27 J	mg/kg	J	Detected between SDL and MQL; lab duplicate RPD > 30%
		cadmium	3.05	mg/kg	JL	Matrix Spike recovery below specifications; lab duplicate RPD >30%
600-84629-33	2013-C2L-C02 (0-6)	arsenic	10.8	mg/kg	JL	Matrix Spike recovery below specifications
		cadmium	0.769	mg/kg	JL	Matrix Spike recovery below specifications
600-84629-35	2013-C2L-C03 (0-6)	selenium	0.339 J	mg/kg	J	Detected between SDL and MQL; lab duplicate RPD >30%
		arsenic	10.8	mg/kg	JL	Matrix Spike recovery below specifications
		cadmium	0.621	mg/kg	JL	Matrix Spike recovery below specifications
600-84629-37	2013-C2L-C04 (0-6)	cadmium	0.305 J	mg/kg	JL	Detected between SDL and MQL; Matrix Spike recovery below specifications
		arsenic	10.6	mg/kg	JL	Matrix Spike recovery below specifications
600-84629-39	2013-C2L-C05 (0-6)	cadmium	0.207 J	mg/kg	JL	Detected between SDL and MQL; Matrix Spike recovery below specifications
		arsenic	6.68	mg/kg	JL	Matrix Spike recovery below specifications
600-84629-41	2013-C2L-C06 (0-6)	cadmium	0.104 J	mg/kg	J	Detected between SDL and MQL
600-84629-42	2013-SDA-C05 (0-6)	lead	517	mg/kg	J	lab duplicate RPD >30%
600-84629-44	2013-SDA-C06 (0-6)	lead	348	mg/kg	J	lab duplicate RPD >30%
600-84629-47	DUP-4	lead	1880	mg/kg	J	lab duplicate RPD >30%
600-84629-48	DUP-5	cadmium	0.906	mg/kg	J	lab duplicate RPD > 30%
		lead	1110	mg/kg	J	Field Duplicate RPD greater than 50%
600-84633-7	2013-SL-C15 (0-6)	antimony	0.756 J	mg/kg	<2.075 U	Analyte detected within 5x MB concentration
		selenium	0.767 J	mg/kg	J	Analyte estimated betweem SDL and MQL
600-84633-41	DUP-2	lead	37100	mg/kg	J	Field Duplicate RPD greater than 50%; MSD and lab duplicate RPD >30%
		cadmium	4.88	mg/kg	J	Field Duplicate RPD greater than 50%
600-84633-42	DUP-3	lead	78.9	mg/kg	J	MSD and lab duplicate RPD >30%
		cadmium	0.649	mg/kg	J	Field Duplicate RPD greater than 50%
600-84633-16	2013-NDA-C03 (6-12)	lead	805	mg/kg	J	MSD recovery > 30%
600-84633-18	2013-NDA-C04 (6-12)	lead	14700	mg/kg	J	Field Duplicate RPD greater than 50%
		cadmium	2.43	mg/kg	J	Field Duplicate RPD greater than 50%
600-84633-38	2013-NDA-C14 (6-12)	lead	819	mg/kg	J	Field Duplicate RPD greater than 50%
		cadmium	5.78	mg/kg	J	Field Duplicate RPD greater than 50%

Note:

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 concentratior

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-1 / 2013-SL-C11 (6-12)	lead	243	78.9	102.0	A	J
	cadmium	1.37	0.649	71.4	A	J
DUP-2 / 2013-NDA-C04 (6-12)	lead	14700	37100	86.5	A	J
	cadmium	2.43	4.88	67.0	A	J
DUP-3 / 2013-NDA-C14 (6-12)	lead	819	700	15.7	A	
	cadmium	5.78	9.81	51.7	A	J
DUP-4 / 2013-NDA-C24 (6-12)	lead	2010	1880	44.0	A	J
	cadmium	3.23	5.05	6.7	A	
DUP-5 / 2013-SDA-C03 (6-12)	lead	3560	1110	104.9	A	J
	cadmium	0.714	0.906	23.7	A	

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: 600-84450-1
Client Project/Site: EXIDE Battery Plant - Frisco, TX

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

Attn: Christina Higginbotham

Authorized for release by:
12/30/2013 6:10:28 PM
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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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TestAmerica Houston
TRRP Data Package Cover Page

Job Number: 600-84450-1

Project Name/Number: EXIDE Battery Plant - Frisco, TX

This Data Package- consists of:

This signature page, the laboratory review checklist, and the following Reportable Data:

- ☒ R1 Field Chain-of-Custody Form
- ☒ 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
  - d) The laboratory's LCS QC limits
- ☒ R7 Test Reports for 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 sample,
  - d) Calculated %Rs and relative percent differences (RPDs), and
  - e) The laboratory's MS/MSD QC limits
- ☒ R8 Laboratory analytical duplicates (if applicable) recovery and precision, including:
  - 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 limit (MQL) 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 the 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 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, that 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		12/30/2013
Name (printed)	Signature	Date
Project Manager Assistant II		
Official Title (printed)		

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TestAmerica-Houston	LRC Date: 12/30/13
Project Name: Exide Battery Plant – Frisco, TX	Laboratory Job Number: 600-84450
Reviewer Name: TWR	Prep Batch Number(s): 600-123580(w), 123550, 123634, 123775(s) - ICP

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	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 soil/solid samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, 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				1
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			2
		Were MS/MSD RPDs within laboratory QC limits?		X			3
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			4
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 affects on the sample results?	X				5
		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).

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TestAmerica-Houston	LRC Date: 12/30/13
Project Name: Exide Battery Plant – Frisco, TX	Laboratory Job Number: 600-84450
Reviewer Name: TWR	Prep Batch Number(s): 600-123580(w), 123550, 123634, 123775(s) - ICP

#[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 (ICCV and CCV) and continuing calibration**					
		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" should be included in the laboratory data package submitted to the TCEQ 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).

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: TestAmerica-Houston	LRC Date: 12/30/13
Project Name: Exide Battery Plant – Frisco, TX	Laboratory Job Number: 600-84450
Reviewer Name: TWR	Prep Batch Number(s): 600-123580(w), 123550, 123634, 123775(s) - ICP

ER #[1]	DESCRIPTION
1	Lead was detected above the MDL, but below the MQL in the prep blank for batch 123634. The level of detection is below the recommended reporting limit and the appropriate flags have been applied.
2	The lead recoveries in samples 84450-16 MS and MSD were outside acceptance limits, but were not flagged due to the background sample result being greater than four times the spike added concentration. The lead recoveries in samples 84450-25 MS and MSD were below acceptance limits due to matrix interference. Method performance is demonstrated by acceptable LCS recoveries.
3	The lead RPD between samples 84450-16 MS and MSD was above acceptance limits due to the non-homogenous nature of the samples.
4	The cadmium and lead RPDs between samples 84450-16 and 84450-16 MD as well as the lead RPD between samples 84450-25 and 84450-25 MD were above acceptance limits due to the non-homogenous nature of the samples.
5	The lead SDL was elevated in sample 84450-9 due to the dilution necessary to bring this analyte to within linear dynamic range.

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)

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

Method Summary

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84450-1

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 Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84450-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-84450-1	2013-SL-01 (0-6)	Solid	12/18/13 10:15	12/20/13 11:18
600-84450-2	2013-SL-01 (6-12)	Solid	12/18/13 10:30	12/20/13 11:18
600-84450-3	2013-SL-02 (0-6)	Solid	12/18/13 10:50	12/20/13 11:18
600-84450-4	2013-SL-02 (6-12)	Solid	12/18/13 11:00	12/20/13 11:18
600-84450-5	2013-SL-07 (0-6)	Solid	12/18/13 11:13	12/20/13 11:18
600-84450-6	2013-SL-07 (6-12)	Solid	12/18/13 11:24	12/20/13 11:18
600-84450-7	2013-SL-08 (0-6)	Solid	12/18/13 11:39	12/20/13 11:18
600-84450-8	2013-SL-08 (6-12)	Solid	12/18/13 11:53	12/20/13 11:18
600-84450-9	2013-SL-03 (0-6)	Solid	12/18/13 12:06	12/20/13 11:18
600-84450-10	2013-SL-03 (6-12)	Solid	12/18/13 12:17	12/20/13 11:18
600-84450-11	Rinsate Blank-Trowel	Water	12/18/13 13:04	12/20/13 11:18
600-84450-12	2013-SL-CO4 (0-6)	Solid	12/18/13 13:19	12/20/13 11:18
600-84450-13	2013-SL-CO4 (6-12)	Solid	12/18/13 13:37	12/20/13 11:18
600-84450-14	2013-SL-CO9 (0-6)	Solid	12/18/13 13:58	12/20/13 11:18
600-84450-15	2013-SL-CO9 (6-12)	Solid	12/18/13 13:59	12/20/13 11:18
600-84450-16	2013-SL-C10 (0-6)	Solid	12/18/13 14:16	12/20/13 11:18
600-84450-17	2013-SL-C10 (6-12)	Solid	12/18/13 14:23	12/20/13 11:18
600-84450-18	2013-SL-C05 (0-6)	Solid	12/18/13 14:53	12/20/13 11:18
600-84450-19	2013-SL-CO5 (6-12)	Solid	12/18/13 14:55	12/20/13 11:18
600-84450-20	2013-SL-CO6 (0-6)	Solid	12/18/13 15:06	12/20/13 11:18
600-84450-21	2013-SL-CO6 (6-12)	Solid	12/18/13 15:11	12/20/13 11:18
600-84450-22	2013-SL-C11 (0-6)	Solid	12/18/13 15:30	12/20/13 11:18
600-84450-23	2013-SL-C11 (6-12)	Solid	12/18/13 15:45	12/20/13 11:18
600-84450-24	Rinsa Blank-Hand Auger	Water	12/18/13 16:50	12/20/13 11:18
600-84450-25	DUP-1	Solid	12/18/13 00:00	12/20/13 11:18

Client Sample ID: 2013-SL-01 (0-6)

Lab Sample ID: 600-84450-1

Date Collected: 12/18/13 10:15
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 77.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.139	J	0.302	0.0310	mg/Kg	☼	12/23/13 15:40	12/24/13 15:22	1
Lead	32.2		0.605	0.127	mg/Kg	☼	12/23/13 15:40	12/24/13 15:22	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	77		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: 2013-SL-01 (6-12)

Lab Sample ID: 600-84450-2

Date Collected: 12/18/13 10:30
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 74.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0324	U	0.316	0.0324	mg/Kg	☼	12/23/13 15:40	12/24/13 15:24	1
Lead	21.1		0.631	0.132	mg/Kg	☼	12/23/13 15:40	12/24/13 15:24	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	75		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: 2013-SL-02 (0-6)

Lab Sample ID: 600-84450-3

Date Collected: 12/18/13 10:50
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 76.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	3.32		0.307	0.0315	mg/Kg	☼	12/23/13 15:40	12/24/13 15:26	1
Lead	395		0.615	0.129	mg/Kg	☼	12/23/13 15:40	12/24/13 15:26	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	76		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: 2013-SL-02 (6-12)

Lab Sample ID: 600-84450-4

Date Collected: 12/18/13 11:00
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 77.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	2.13		0.312	0.0320	mg/Kg	☼	12/23/13 15:40	12/24/13 15:29	1
Lead	272		0.623	0.131	mg/Kg	☼	12/23/13 15:40	12/24/13 15:29	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	78		1.0	1.0	%			12/23/13 10:32	1

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84450-1

Client Sample ID: 2013-SL-07 (0-6)

Lab Sample ID: 600-84450-5
Date Collected: 12/18/13 11:13
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 72.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.73		0.340	0.0349	mg/Kg	☼	12/23/13 15:40	12/24/13 15:31	1
Lead	289		0.680	0.143	mg/Kg	☼	12/23/13 15:40	12/24/13 15:31	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	28		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	72		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: 2013-SL-07 (6-12)

Lab Sample ID: 600-84450-6
Date Collected: 12/18/13 11:24
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 74.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.94		0.338	0.0346	mg/Kg	☼	12/23/13 15:40	12/24/13 15:33	1
Lead	380		0.675	0.142	mg/Kg	☼	12/23/13 15:40	12/24/13 15:33	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	74		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: 2013-SL-08 (0-6)

Lab Sample ID: 600-84450-7
Date Collected: 12/18/13 11:39
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 77.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.23		0.321	0.0329	mg/Kg	☼	12/23/13 15:40	12/24/13 15:36	1
Lead	242		0.642	0.135	mg/Kg	☼	12/23/13 15:40	12/24/13 15:36	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	78		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: 2013-SL-08 (6-12)

Lab Sample ID: 600-84450-8
Date Collected: 12/18/13 11:53
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 80.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.630		0.312	0.0320	mg/Kg	☼	12/24/13 14:11	12/26/13 12:59	1
Lead	75.6	b	0.624	0.131	mg/Kg	☼	12/24/13 14:11	12/26/13 12:59	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	80		1.0	1.0	%			12/23/13 10:32	1

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84450-1

Client Sample ID: 2013-SL-03 (0-6)

Lab Sample ID: 600-84450-9
Date Collected: 12/18/13 12:06
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 79.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	2.95		0.301	0.0309	mg/Kg	☼	12/24/13 14:11	12/26/13 13:01	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6950	b	6.03	1.26	mg/Kg	☼	12/24/13 14:11	12/26/13 14:38	10

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	79		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: 2013-SL-03 (6-12)

Lab Sample ID: 600-84450-10
Date Collected: 12/18/13 12:17
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 79.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.880		0.310	0.0318	mg/Kg	☼	12/24/13 14:11	12/26/13 13:04	1
Lead	2060	b	0.620	0.130	mg/Kg	☼	12/24/13 14:11	12/26/13 13:04	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	80		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: Rinsate Blank-Trowel

Lab Sample ID: 600-84450-11
Date Collected: 12/18/13 13:04
Matrix: Water
Date Received: 12/20/13 11:18

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		12/24/13 07:38	12/26/13 13:25	1
Lead	0.00465	J	0.0100	0.00290	mg/L		12/24/13 07:38	12/26/13 13:25	1

Client Sample ID: 2013-SL-CO4 (0-6)

Lab Sample ID: 600-84450-12
Date Collected: 12/18/13 13:19
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 81.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.67		0.296	0.0303	mg/Kg	☼	12/24/13 14:11	12/26/13 13:06	1
Lead	245	b	0.591	0.124	mg/Kg	☼	12/24/13 14:11	12/26/13 13:06	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	81		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: 2013-SL-CO4 (6-12)

Lab Sample ID: 600-84450-13
Date Collected: 12/18/13 13:37
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 82.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.810		0.291	0.0299	mg/Kg	☼	12/24/13 14:11	12/26/13 13:09	1
Lead	113	b	0.583	0.122	mg/Kg	☼	12/24/13 14:11	12/26/13 13:09	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	82		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: 2013-SL-CO9 (0-6)

Lab Sample ID: 600-84450-14
Date Collected: 12/18/13 13:58
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 79.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.657		0.313	0.0321	mg/Kg	☼	12/24/13 14:11	12/26/13 13:11	1
Lead	84.0	b	0.626	0.131	mg/Kg	☼	12/24/13 14:11	12/26/13 13:11	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	80		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: 2013-SL-CO9 (6-12)

Lab Sample ID: 600-84450-15
Date Collected: 12/18/13 13:59
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 81.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.296		0.290	0.0297	mg/Kg	☼	12/24/13 14:11	12/26/13 13:14	1
Lead	14.2	b	0.580	0.122	mg/Kg	☼	12/24/13 14:11	12/26/13 13:14	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	81		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: 2013-SL-C10 (0-6)

Lab Sample ID: 600-84450-16
Date Collected: 12/18/13 14:16
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 80.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	2.62		0.290	0.0298	mg/Kg	☼	12/24/13 14:11	12/26/13 13:16	1
Lead	528	b	0.581	0.122	mg/Kg	☼	12/24/13 14:11	12/26/13 13:16	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	80		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: 2013-SL-C10 (6-12)

Lab Sample ID: 600-84450-17
Date Collected: 12/18/13 14:23
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 79.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.450		0.296	0.0304	mg/Kg	☼	12/24/13 14:11	12/26/13 13:36	1
Lead	57.6	b	0.592	0.124	mg/Kg	☼	12/24/13 14:11	12/26/13 13:36	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	80		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: 2013-SL-C05 (0-6)

Lab Sample ID: 600-84450-18
Date Collected: 12/18/13 14:53
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 77.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.86		0.300	0.0308	mg/Kg	☼	12/24/13 14:11	12/26/13 13:38	1
Lead	273	b	0.600	0.126	mg/Kg	☼	12/24/13 14:11	12/26/13 13:38	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	77		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: 2013-SL-CO5 (6-12)

Lab Sample ID: 600-84450-19
Date Collected: 12/18/13 14:55
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 77.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.16		0.295	0.0302	mg/Kg	☼	12/24/13 14:11	12/26/13 13:41	1
Lead	141	b	0.589	0.124	mg/Kg	☼	12/24/13 14:11	12/26/13 13:41	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	78		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: 2013-SL-CO6 (0-6)

Lab Sample ID: 600-84450-20
Date Collected: 12/18/13 15:06
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 78.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.66		0.317	0.0325	mg/Kg	☼	12/24/13 14:11	12/26/13 13:43	1
Lead	297	b	0.635	0.133	mg/Kg	☼	12/24/13 14:11	12/26/13 13:43	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	78		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: 2013-SL-CO6 (6-12)

Lab Sample ID: 600-84450-21
Date Collected: 12/18/13 15:11
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 82.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.25		0.294	0.0302	mg/Kg	☼	12/24/13 14:11	12/26/13 13:46	1
Lead	174	b	0.588	0.123	mg/Kg	☼	12/24/13 14:11	12/26/13 13:46	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	83		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: 2013-SL-C11 (0-6)

Lab Sample ID: 600-84450-22
Date Collected: 12/18/13 15:30
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 69.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	2.01		0.345	0.0354	mg/Kg	☼	12/24/13 14:11	12/26/13 13:49	1
Lead	470	b	0.690	0.145	mg/Kg	☼	12/24/13 14:11	12/26/13 13:49	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	30		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	70		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: 2013-SL-C11 (6-12)

Lab Sample ID: 600-84450-23
Date Collected: 12/18/13 15:45
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 78.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.37		0.299	0.0306	mg/Kg	☼	12/24/13 14:11	12/26/13 13:51	1
Lead	243	b	0.598	0.125	mg/Kg	☼	12/24/13 14:11	12/26/13 13:51	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	79		1.0	1.0	%			12/23/13 10:32	1

Client Sample ID: Rinsa Blank-Hand Auger

Lab Sample ID: 600-84450-24
Date Collected: 12/18/13 16:50
Matrix: Water
Date Received: 12/20/13 11:18

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		12/24/13 07:38	12/26/13 13:27	1
Lead	0.00290	U	0.0100	0.00290	mg/L		12/24/13 07:38	12/26/13 13:27	1

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84450-1

Client Sample ID: DUP-1
Date Collected: 12/18/13 00:00
Date Received: 12/20/13 11:18

Lab Sample ID: 600-84450-25
Matrix: Solid
Percent Solids: 79.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.649		0.306	0.0314	mg/Kg	☼	12/27/13 09:02	12/27/13 14:16	1
Lead	78.9		0.612	0.128	mg/Kg	☼	12/27/13 09:02	12/27/13 14:16	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	79		1.0	1.0	%			12/23/13 10:32	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.
F	Duplicate RPD exceeds the control limit
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
N	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 600-123550/1-A
Matrix: Solid
Analysis Batch: 123636

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123550

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/23/13 15:40	12/24/13 14:21	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/23/13 15:40	12/24/13 14:21	1

Lab Sample ID: LCSSRM 600-123550/2-A
Matrix: Solid
Analysis Batch: 123636

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123550

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	182	183.8		mg/Kg		101.0	81.9 - 118.1
Lead	115	111.3		mg/Kg		96.8	81.8 - 119.1

Lab Sample ID: MB 600-123580/1-A
Matrix: Water
Analysis Batch: 123707

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123580

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		12/24/13 07:38	12/26/13 13:09	1
Lead	0.00290	U	0.0100	0.00290	mg/L		12/24/13 07:38	12/26/13 13:09	1

Lab Sample ID: LCS 600-123580/2-A
Matrix: Water
Analysis Batch: 123707

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123580

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.500	0.5268		mg/L		105	80 - 120
Lead	1.00	1.060		mg/L		106	80 - 120

Lab Sample ID: MB 600-123634/1-A
Matrix: Solid
Analysis Batch: 123705

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123634

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/24/13 14:11	12/26/13 12:36	1
Lead	0.1050	J	0.500	0.105	mg/Kg		12/24/13 14:11	12/26/13 12:36	1

Lab Sample ID: LCS 600-123634/2-A
Matrix: Solid
Analysis Batch: 123705

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	182	173.6		mg/Kg		95	81 - 119
Lead	115	110.4		mg/Kg		96	79 - 121

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

Lab Sample ID: 600-84450-16 MS
Matrix: Solid
Analysis Batch: 123705

Client Sample ID: 2013-SL-C10 (0-6)
Prep Type: Total/NA
Prep Batch: 123634

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	2.62		31.1	30.95		mg/Kg	☼	91	75 - 125
Lead	528	b	62.3	333.1	4	mg/Kg	☼	-313	75 - 125

Lab Sample ID: 600-84450-16 MSD
Matrix: Solid
Analysis Batch: 123705

Client Sample ID: 2013-SL-C10 (0-6)
Prep Type: Total/NA
Prep Batch: 123634

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	2.62		30.4	28.62		mg/Kg	☼	85	75 - 125	8	20
Lead	528	b	60.9	89.26	4 N	mg/Kg	☼	-720	75 - 125	115	20

Lab Sample ID: 600-84450-16 DU
Matrix: Solid
Analysis Batch: 123705

Client Sample ID: 2013-SL-C10 (0-6)
Prep Type: Total/NA
Prep Batch: 123634

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cadmium	2.62		3.494	F	mg/Kg	☼	28	20
Lead	528	b	819.5	F	mg/Kg	☼	43	20

Lab Sample ID: MB 600-123775/1-A
Matrix: Solid
Analysis Batch: 123860

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123775

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/27/13 09:02	12/27/13 14:12	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/27/13 09:02	12/27/13 14:12	1

Lab Sample ID: LCSSRM 600-123775/2-A
Matrix: Solid
Analysis Batch: 123860

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123775

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	182	176.8		mg/Kg		97.1	81.9 - 118.1
Lead	115	115.6		mg/Kg		100.5	81.8 - 119.1

Lab Sample ID: 600-84450-25 MS
Matrix: Solid
Analysis Batch: 123860

Client Sample ID: DUP-1
Prep Type: Total/NA
Prep Batch: 123775

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.649		30.9	29.35		mg/Kg	☼	93	75 - 125
Lead	78.9		61.8	122.8	N	mg/Kg	☼	71	75 - 125

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

Lab Sample ID: 600-84450-25 MSD
Matrix: Solid
Analysis Batch: 123860

Client Sample ID: DUP-1
Prep Type: Total/NA
Prep Batch: 123775

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	0.649		29.8	27.93		mg/Kg	☼	92	75 - 125	5	20
Lead	78.9		59.5	122.5	N	mg/Kg	☼	73	75 - 125	0	20

Lab Sample ID: 600-84450-25 DU
Matrix: Solid
Analysis Batch: 123860

Client Sample ID: DUP-1
Prep Type: Total/NA
Prep Batch: 123775

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cadmium	0.649		0.5267		mg/Kg	☼	21	20
Lead	78.9		62.77	F	mg/Kg	☼	23	20

Method: Moisture - Percent Moisture

Lab Sample ID: 600-84450-4 DU
Matrix: Solid
Analysis Batch: 123501

Client Sample ID: 2013-SL-02 (6-12)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	22		22		%		0.9	20
Percent Solids	78		78		%		0.3	20

Lab Sample ID: 600-84450-15 DU
Matrix: Solid
Analysis Batch: 123501

Client Sample ID: 2013-SL-CO9 (6-12)
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		%		0.7	20

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84450-1

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
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

General Chemistry

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

Metals

Prep Batch: 123550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84450-1	2013-SL-01 (0-6)	Total/NA	Solid	3050B	
600-84450-2	2013-SL-01 (6-12)	Total/NA	Solid	3050B	
600-84450-3	2013-SL-02 (0-6)	Total/NA	Solid	3050B	
600-84450-4	2013-SL-02 (6-12)	Total/NA	Solid	3050B	
600-84450-5	2013-SL-07 (0-6)	Total/NA	Solid	3050B	
600-84450-6	2013-SL-07 (6-12)	Total/NA	Solid	3050B	
600-84450-7	2013-SL-08 (0-6)	Total/NA	Solid	3050B	
LCSSRM 600-123550/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-123550/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 123580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84450-11	Rinsate Blank-Trowel	Total/NA	Water	3010A	
600-84450-24	Rinsa Blank-Hand Auger	Total/NA	Water	3010A	
LCS 600-123580/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-123580/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 123634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84450-8	2013-SL-08 (6-12)	Total/NA	Solid	3050B	
600-84450-9	2013-SL-03 (0-6)	Total/NA	Solid	3050B	
600-84450-9 - DL	2013-SL-03 (0-6)	Total/NA	Solid	3050B	
600-84450-10	2013-SL-03 (6-12)	Total/NA	Solid	3050B	
600-84450-12	2013-SL-CO4 (0-6)	Total/NA	Solid	3050B	
600-84450-13	2013-SL-CO4 (6-12)	Total/NA	Solid	3050B	
600-84450-14	2013-SL-CO9 (0-6)	Total/NA	Solid	3050B	
600-84450-15	2013-SL-CO9 (6-12)	Total/NA	Solid	3050B	
600-84450-16	2013-SL-C10 (0-6)	Total/NA	Solid	3050B	
600-84450-16 DU	2013-SL-C10 (0-6)	Total/NA	Solid	3050B	
600-84450-16 MS	2013-SL-C10 (0-6)	Total/NA	Solid	3050B	
600-84450-16 MSD	2013-SL-C10 (0-6)	Total/NA	Solid	3050B	
600-84450-17	2013-SL-C10 (6-12)	Total/NA	Solid	3050B	
600-84450-18	2013-SL-C05 (0-6)	Total/NA	Solid	3050B	
600-84450-19	2013-SL-CO5 (6-12)	Total/NA	Solid	3050B	
600-84450-20	2013-SL-CO6 (0-6)	Total/NA	Solid	3050B	
600-84450-21	2013-SL-CO6 (6-12)	Total/NA	Solid	3050B	
600-84450-22	2013-SL-C11 (0-6)	Total/NA	Solid	3050B	
600-84450-23	2013-SL-C11 (6-12)	Total/NA	Solid	3050B	
LCS 600-123634/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-123634/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 123636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84450-1	2013-SL-01 (0-6)	Total/NA	Solid	6010B	123550
600-84450-2	2013-SL-01 (6-12)	Total/NA	Solid	6010B	123550
600-84450-3	2013-SL-02 (0-6)	Total/NA	Solid	6010B	123550
600-84450-4	2013-SL-02 (6-12)	Total/NA	Solid	6010B	123550
600-84450-5	2013-SL-07 (0-6)	Total/NA	Solid	6010B	123550
600-84450-6	2013-SL-07 (6-12)	Total/NA	Solid	6010B	123550
600-84450-7	2013-SL-08 (0-6)	Total/NA	Solid	6010B	123550
LCSSRM 600-123550/2-A	Lab Control Sample	Total/NA	Solid	6010B	123550

Metals (Continued)

Analysis Batch: 123636 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-123550/1-A	Method Blank	Total/NA	Solid	6010B	123550

Analysis Batch: 123705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84450-8	2013-SL-08 (6-12)	Total/NA	Solid	6010B	123634
600-84450-9	2013-SL-03 (0-6)	Total/NA	Solid	6010B	123634
600-84450-9 - DL	2013-SL-03 (0-6)	Total/NA	Solid	6010B	123634
600-84450-10	2013-SL-03 (6-12)	Total/NA	Solid	6010B	123634
600-84450-12	2013-SL-CO4 (0-6)	Total/NA	Solid	6010B	123634
600-84450-13	2013-SL-CO4 (6-12)	Total/NA	Solid	6010B	123634
600-84450-14	2013-SL-CO9 (0-6)	Total/NA	Solid	6010B	123634
600-84450-15	2013-SL-CO9 (6-12)	Total/NA	Solid	6010B	123634
600-84450-16	2013-SL-C10 (0-6)	Total/NA	Solid	6010B	123634
600-84450-16 DU	2013-SL-C10 (0-6)	Total/NA	Solid	6010B	123634
600-84450-16 MS	2013-SL-C10 (0-6)	Total/NA	Solid	6010B	123634
600-84450-16 MSD	2013-SL-C10 (0-6)	Total/NA	Solid	6010B	123634
600-84450-17	2013-SL-C10 (6-12)	Total/NA	Solid	6010B	123634
600-84450-18	2013-SL-C05 (0-6)	Total/NA	Solid	6010B	123634
600-84450-19	2013-SL-CO5 (6-12)	Total/NA	Solid	6010B	123634
600-84450-20	2013-SL-CO6 (0-6)	Total/NA	Solid	6010B	123634
600-84450-21	2013-SL-CO6 (6-12)	Total/NA	Solid	6010B	123634
600-84450-22	2013-SL-C11 (0-6)	Total/NA	Solid	6010B	123634
600-84450-23	2013-SL-C11 (6-12)	Total/NA	Solid	6010B	123634
LCS 600-123634/2-A	Lab Control Sample	Total/NA	Solid	6010B	123634
MB 600-123634/1-A	Method Blank	Total/NA	Solid	6010B	123634

Analysis Batch: 123707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84450-11	Rinsate Blank-Trowel	Total/NA	Water	6010B	123580
600-84450-24	Rinsa Blank-Hand Auger	Total/NA	Water	6010B	123580
LCS 600-123580/2-A	Lab Control Sample	Total/NA	Water	6010B	123580
MB 600-123580/1-A	Method Blank	Total/NA	Water	6010B	123580

Prep Batch: 123775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84450-25	DUP-1	Total/NA	Solid	3050B	
600-84450-25 DU	DUP-1	Total/NA	Solid	3050B	
600-84450-25 MS	DUP-1	Total/NA	Solid	3050B	
600-84450-25 MSD	DUP-1	Total/NA	Solid	3050B	
LCSSRM 600-123775/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-123775/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 123860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84450-25	DUP-1	Total/NA	Solid	6010B	123775
600-84450-25 DU	DUP-1	Total/NA	Solid	6010B	123775
600-84450-25 MS	DUP-1	Total/NA	Solid	6010B	123775
600-84450-25 MSD	DUP-1	Total/NA	Solid	6010B	123775
LCSSRM 600-123775/2-A	Lab Control Sample	Total/NA	Solid	6010B	123775
MB 600-123775/1-A	Method Blank	Total/NA	Solid	6010B	123775

General Chemistry

Analysis Batch: 123501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84450-1	2013-SL-01 (0-6)	Total/NA	Solid	Moisture	
600-84450-2	2013-SL-01 (6-12)	Total/NA	Solid	Moisture	
600-84450-3	2013-SL-02 (0-6)	Total/NA	Solid	Moisture	
600-84450-4	2013-SL-02 (6-12)	Total/NA	Solid	Moisture	
600-84450-4 DU	2013-SL-02 (6-12)	Total/NA	Solid	Moisture	
600-84450-5	2013-SL-07 (0-6)	Total/NA	Solid	Moisture	
600-84450-6	2013-SL-07 (6-12)	Total/NA	Solid	Moisture	
600-84450-7	2013-SL-08 (0-6)	Total/NA	Solid	Moisture	
600-84450-8	2013-SL-08 (6-12)	Total/NA	Solid	Moisture	
600-84450-9	2013-SL-03 (0-6)	Total/NA	Solid	Moisture	
600-84450-10	2013-SL-03 (6-12)	Total/NA	Solid	Moisture	
600-84450-12	2013-SL-CO4 (0-6)	Total/NA	Solid	Moisture	
600-84450-13	2013-SL-CO4 (6-12)	Total/NA	Solid	Moisture	
600-84450-14	2013-SL-CO9 (0-6)	Total/NA	Solid	Moisture	
600-84450-15	2013-SL-CO9 (6-12)	Total/NA	Solid	Moisture	
600-84450-15 DU	2013-SL-CO9 (6-12)	Total/NA	Solid	Moisture	
600-84450-16	2013-SL-C10 (0-6)	Total/NA	Solid	Moisture	
600-84450-16 MS	2013-SL-C10 (0-6)	Total/NA	Solid	Moisture	
600-84450-16 MSD	2013-SL-C10 (0-6)	Total/NA	Solid	Moisture	
600-84450-17	2013-SL-C10 (6-12)	Total/NA	Solid	Moisture	
600-84450-18	2013-SL-C05 (0-6)	Total/NA	Solid	Moisture	
600-84450-19	2013-SL-CO5 (6-12)	Total/NA	Solid	Moisture	
600-84450-20	2013-SL-CO6 (0-6)	Total/NA	Solid	Moisture	
600-84450-21	2013-SL-CO6 (6-12)	Total/NA	Solid	Moisture	
600-84450-22	2013-SL-C11 (0-6)	Total/NA	Solid	Moisture	
600-84450-23	2013-SL-C11 (6-12)	Total/NA	Solid	Moisture	
600-84450-25	DUP-1	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84450-1

Client Sample ID: 2013-SL-01 (0-6)

Lab Sample ID: 600-84450-1

Date Collected: 12/18/13 10:15
Matrix: Solid
Date Received: 12/20/13 11:18
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			1.07 g	50 mL	123550	12/23/13 15:40	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	123636	12/24/13 15:22	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: 2013-SL-01 (6-12)

Lab Sample ID: 600-84450-2

Date Collected: 12/18/13 10:30
Matrix: Solid
Date Received: 12/20/13 11:18
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			1.06 g	50 mL	123550	12/23/13 15:40	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	123636	12/24/13 15:24	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: 2013-SL-02 (0-6)

Lab Sample ID: 600-84450-3

Date Collected: 12/18/13 10:50
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 76.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.07 g	50 mL	123550	12/23/13 15:40	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	123636	12/24/13 15:26	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: 2013-SL-02 (6-12)

Lab Sample ID: 600-84450-4

Date Collected: 12/18/13 11:00
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 77.9

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	123550	12/23/13 15:40	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	123636	12/24/13 15:29	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: 2013-SL-07 (0-6)

Lab Sample ID: 600-84450-5

Date Collected: 12/18/13 11:13
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 72.1

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	123550	12/23/13 15:40	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	123636	12/24/13 15:31	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84450-1

Client Sample ID: 2013-SL-07 (6-12)

Lab Sample ID: 600-84450-6

Date Collected: 12/18/13 11:24
Date Received: 12/20/13 11:18

Matrix: Solid
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			1.00 g	50 mL	123550	12/23/13 15:40	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	123636	12/24/13 15:33	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: 2013-SL-08 (0-6)

Lab Sample ID: 600-84450-7

Date Collected: 12/18/13 11:39
Date Received: 12/20/13 11:18

Matrix: Solid
Percent Solids: 77.9

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	123550	12/23/13 15:40	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	123636	12/24/13 15:36	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: 2013-SL-08 (6-12)

Lab Sample ID: 600-84450-8

Date Collected: 12/18/13 11:53
Date Received: 12/20/13 11:18

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			1.00 g	50 mL	123634	12/24/13 14:11	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	123705	12/26/13 12:59	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: 2013-SL-03 (0-6)

Lab Sample ID: 600-84450-9

Date Collected: 12/18/13 12:06
Date Received: 12/20/13 11:18

Matrix: Solid
Percent Solids: 79.0

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.05 g	50 mL	123634	12/24/13 14:11	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	123705	12/26/13 13:01	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.05 g	50 mL	123634	12/24/13 14:11	NER	TAL HOU
Total/NA	Analysis	6010B	DL	10	1.05 g	50 mL	123705	12/26/13 14:38	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: 2013-SL-03 (6-12)

Lab Sample ID: 600-84450-10

Date Collected: 12/18/13 12:17
Date Received: 12/20/13 11:18

Matrix: Solid
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	123634	12/24/13 14:11	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	123705	12/26/13 13:04	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: Rinsate Blank-Trowel

Lab Sample ID: 600-84450-11

Date Collected: 12/18/13 13:04

Matrix: Water

Date Received: 12/20/13 11:18

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	123580	12/24/13 07:38	NER	TAL HOU
Total/NA	Analysis	6010B		1	50 mL	50 mL	123707	12/26/13 13:25	DCL	TAL HOU

Client Sample ID: 2013-SL-CO4 (0-6)

Lab Sample ID: 600-84450-12

Date Collected: 12/18/13 13:19

Matrix: Solid

Date Received: 12/20/13 11:18

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			1.04 g	50 mL	123634	12/24/13 14:11	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	123705	12/26/13 13:06	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: 2013-SL-CO4 (6-12)

Lab Sample ID: 600-84450-13

Date Collected: 12/18/13 13:37

Matrix: Solid

Date Received: 12/20/13 11:18

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	Prep	3050B			1.04 g	50 mL	123634	12/24/13 14:11	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	123705	12/26/13 13:09	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: 2013-SL-CO9 (0-6)

Lab Sample ID: 600-84450-14

Date Collected: 12/18/13 13:58

Matrix: Solid

Date Received: 12/20/13 11:18

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			1.00 g	50 mL	123634	12/24/13 14:11	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	123705	12/26/13 13:11	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: 2013-SL-CO9 (6-12)

Lab Sample ID: 600-84450-15

Date Collected: 12/18/13 13:59

Matrix: Solid

Date Received: 12/20/13 11:18

Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.06 g	50 mL	123634	12/24/13 14:11	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	123705	12/26/13 13:14	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: 2013-SL-C10 (0-6)

Lab Sample ID: 600-84450-16

Date Collected: 12/18/13 14:16
Matrix: Solid
Date Received: 12/20/13 11:18
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			1.07 g	50 mL	123634	12/24/13 14:11	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	123705	12/26/13 13:16	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: 2013-SL-C10 (6-12)

Lab Sample ID: 600-84450-17

Date Collected: 12/18/13 14:23
Matrix: Solid
Date Received: 12/20/13 11:18
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			1.06 g	50 mL	123634	12/24/13 14:11	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	123705	12/26/13 13:36	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: 2013-SL-C05 (0-6)

Lab Sample ID: 600-84450-18

Date Collected: 12/18/13 14:53
Matrix: Solid
Date Received: 12/20/13 11:18
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	123634	12/24/13 14:11	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	123705	12/26/13 13:38	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: 2013-SL-CO5 (6-12)

Lab Sample ID: 600-84450-19

Date Collected: 12/18/13 14:55
Matrix: Solid
Date Received: 12/20/13 11:18
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			1.09 g	50 mL	123634	12/24/13 14:11	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	123705	12/26/13 13:41	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: 2013-SL-CO6 (0-6)

Lab Sample ID: 600-84450-20

Date Collected: 12/18/13 15:06
Matrix: Solid
Date Received: 12/20/13 11:18
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	123634	12/24/13 14:11	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	123705	12/26/13 13:43	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84450-1

Client Sample ID: 2013-SL-CO6 (6-12)

Lab Sample ID: 600-84450-21

Date Collected: 12/18/13 15:11
Matrix: Solid
Date Received: 12/20/13 11:18
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			1.03 g	50 mL	123634	12/24/13 14:11	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	123705	12/26/13 13:46	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: 2013-SL-C11 (0-6)

Lab Sample ID: 600-84450-22

Date Collected: 12/18/13 15:30
Matrix: Solid
Date Received: 12/20/13 11:18
Percent Solids: 69.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.04 g	50 mL	123634	12/24/13 14:11	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	123705	12/26/13 13:49	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: 2013-SL-C11 (6-12)

Lab Sample ID: 600-84450-23

Date Collected: 12/18/13 15:45
Matrix: Solid
Date Received: 12/20/13 11:18
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			1.06 g	50 mL	123634	12/24/13 14:11	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	123705	12/26/13 13:51	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	AYS	TAL HOU

Client Sample ID: Rinsa Blank-Hand Auger

Lab Sample ID: 600-84450-24

Date Collected: 12/18/13 16:50
Matrix: Water
Date Received: 12/20/13 11:18

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	123580	12/24/13 07:38	NER	TAL HOU
Total/NA	Analysis	6010B		1	50 mL	50 mL	123707	12/26/13 13:27	DCL	TAL HOU

Client Sample ID: DUP-1

Lab Sample ID: 600-84450-25

Date Collected: 12/18/13 00:00
Matrix: Solid
Date Received: 12/20/13 11:18
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			1.03 g	50 mL	123775	12/27/13 09:02	DCL	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	123860	12/27/13 14:16	TWR	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	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 Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84450-1

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

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

Chain of Custody

600-84450 Chain of Custody

TestAmerica

Client Information	Sampler: Chris Trevino	Lab PM: Joiner, Dean A	COC No: 0-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com	Page: Page 1 of 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 Battery Plant - Frisco, TX	Project #: 60004794		
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)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	6010B - Cd, Pb	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	D		
2013-SL-01 (0-6)	12-18-13	1015	G	Solid			X				1	
2013-SL-01 (6-12)	12-18-13	1030	G	Solid			X				1	
2013-SL-02 (0-6)	12-18-13	1050	G	Solid			X				1	
2013-SL-02 (6-12)	12-18-13	1100	G	Solid			X				1	
2013-SL-07 (0-6)	12-18-13	1113	G	Solid			X				1	
2013-SL-07 (6-12)	12-18-13	1124	G	Solid			X				1	
2013-SL-08 (0-6)	12-18-13	1139	G	Solid			X				1	
2013-SL-08 (6-12)	12-18-13	1153	G	Solid			X				1	
2013-SL-03 (0-6)	12-18-13	1206	G	Solid			X				1	
2013-SL-03 (6-12)	12-18-13	1217	G	Solid			X				1	
Rinse Blank - Trowel	12-18-13	1304	G	W ~~Solid~~						X	1	

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	Chris Trevino	12-19-13 / 1530	Golder	[signature]	12/19/13 1536	TA
2				[signature]	12/20/13 1124	L
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: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 2 OF 3
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 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:
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 Battery Plant - Frisco, TX	Project #: 60004794		
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)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
2013-SL-C04 (0-6)	12-18-13	1319	G	Solid			X			1	
2013-SL-C04 (6-12)	12-18-13	1337	G	Solid			X			1	
2013-SL-C09 (0-6)	12-18-13	1358	G	Solid			X			1	
2013-SL-C09 (6-12)	12-18-13	1359	G	Solid			X			1	
2013-SL-C10 (0-6)	12-18-13	1416	G	Solid			X			1	
2013-SL-C10 (0-6) MS	12-18-13	1416	G	Solid		X	X			1	
2013-SL-C10 (0-6) MSD	12-18-13	1416	G	Solid		X	X			1	
2013-SL-C10 (6-12)	12-18-13	1423	G	Solid			X			1	
2013-SL-C05 (0-6)	12-18-13	1453	G	Solid			X			1	
2013-SL-C05 (6-12)	12-18-13	1455	G	Solid			X			1	
2013-SL-C06 (0-6)	12-18-13	1506	G	Solid			X			1	

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
Chris Trevino	12-19-13 / 1530	Golder	[signature]	12/19/13 1530	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
			[signature]	12/19/13 1715	
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:

12/30/2013

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: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 3 of 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 Battery Plant - Frisco, TX	Project #: 60004794			
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)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	6010B - Cd, Pb	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	D		
2013-SL-C06 (6-12)	12-18-13	1511	G	Solid			X				1	
2013-SL-C11 (0-6)	12-18-13	1530	G	Solid			X				1	
2013-SL-C11 (6-12)	12-18-13	1545	G	Solid			X				1	
Rinse Blank - Hand Auger	12-18-13	1650	G	~~Solid~~ W						X	1	
DUP-1	12-18-13		G	Solid			X				1	
			G	Solid							1	
			G	Solid							1	
			G	Solid							1	
			G	Solid							1	
			G	Solid							1	

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	Chris Trevino	12-19-13/1530	Golder	McGowen	12/19/13 1530	QL
2					12/20/13 1115	
3						

Custody Seals Intact: △ Yes △ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

12/30/2013

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-84450-1

Login Number: 84450

List Source: TestAmerica Houston

List Number: 1

Creator: Trenery, Michael J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	False	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.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	16.9
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: 600-84450-3
Client Project/Site: EXIDE Battery Plant - Frisco, TX

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

Attn: Christina Higginbotham

Authorized for release by:
1/29/2014 11:07:41 AM
Sophia Shah, Project Management Assistant I
sophia.shah@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 600-84450-3 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.

Sophia Shah		1/29/2014
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 Battery Plant - Frisco, TX	Laboratory Job Number:	600-84450-3
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		
		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:	1/27/2014
Project Name:	EXIDE Battery Plant - Frisco, TX	Laboratory Job Number:	600-84450-3
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:	1/27/2014
Project Name:	EXIDE Battery Plant - Frisco, TX	Laboratory Job Number:	600-84450-3
Reviewer Name:	Dean A Joiner		

ER #[1]	Description
R05D	Method 6010B: The method blank for batch 123634 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.

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: 600-84450-3

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-84450-3

Comments
No additional comments.

Receipt
The samples were received on 12/20/2013 11:18 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 16.9º C.

Method Summary

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84450-3

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 Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84450-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-84450-23	2013-SL-C11 (6-12)	Solid	12/18/13 15:45	12/20/13 11:18

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84450-3

Client Sample ID: 2013-SL-C11 (6-12)
Date Collected: 12/18/13 15:45
Date Received: 12/20/13 11:18

Lab Sample ID: 600-84450-23
Matrix: Solid
Percent Solids: 78.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.37		0.299	0.0306	mg/Kg	☼	12/24/13 14:11	12/26/13 13:51	1
Lead	243	b	0.598	0.125	mg/Kg	☼	12/24/13 14:11	12/26/13 13:51	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			12/23/13 10:32	1
Percent Solids	79		1.0	1.0	%			12/23/13 10:32	1

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84450-3

Qualifiers

Metals

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
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.

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 Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84450-3

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-123634/1-A
Matrix: Solid
Analysis Batch: 123705

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123634

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/24/13 14:11	12/26/13 12:36	1
Lead	0.1050	J	0.500	0.105	mg/Kg		12/24/13 14:11	12/26/13 12:36	1

Lab Sample ID: LCS 600-123634/2-A
Matrix: Solid
Analysis Batch: 123705

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123634

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	182	173.6		mg/Kg		95	81 - 119
Lead	115	110.4		mg/Kg		96	79 - 121

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84450-3

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

QC Association Summary

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84450-3

Metals

Prep Batch: 123634

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84450-23	2013-SL-C11 (6-12)	Total/NA	Solid	3050B	
LCS 600-123634/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-123634/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 123705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84450-23	2013-SL-C11 (6-12)	Total/NA	Solid	6010B	123634
LCS 600-123634/2-A	Lab Control Sample	Total/NA	Solid	6010B	123634
MB 600-123634/1-A	Method Blank	Total/NA	Solid	6010B	123634

General Chemistry

Analysis Batch: 123501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84450-23	2013-SL-C11 (6-12)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84450-3

Client Sample ID: 2013-SL-C11 (6-12)
Date Collected: 12/18/13 15:45
Date Received: 12/20/13 11:18

Lab Sample ID: 600-84450-23
Matrix: Solid
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			1.06 g	50 mL	123634	12/24/13 14:11	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	123705	12/26/13 13:51	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123501	12/23/13 10:32	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 Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84450-3

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 of Custody

600-84450 Chain of Custody

TestAmerica

Client Information	Sampler: Chris Trevino	Lab PM: Joiner, Dean A	COC No: 0-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com	Page: Page 1 of 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 Battery Plant - Frisco, TX	Project #: 60004794		
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)	Perform MS/MSD (Yes or No)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	6010B - Cd, Pb	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	N	N	D		
2013-SL-01 (0-6)	12-18-13	1015	G	Solid			X				1	
2013-SL-01 (6-12)	12-18-13	1030	G	Solid			X				1	
2013-SL-02 (0-6)	12-18-13	1050	G	Solid			X				1	
2013-SL-02 (6-12)	12-18-13	1100	G	Solid			X				1	
2013-SL-07 (0-6)	12-18-13	1113	G	Solid			X				1	
2013-SL-07 (6-12)	12-18-13	1124	G	Solid			X				1	
2013-SL-08 (0-6)	12-18-13	1139	G	Solid			X				1	
2013-SL-08 (6-12)	12-18-13	1153	G	Solid			X				1	
2013-SL-03 (0-6)	12-18-13	1206	G	Solid			X				1	
2013-SL-03 (6-12)	12-18-13	1217	G	Solid			X				1	
Rinse Blank - Trowel	12-18-13	1304	G	W ~~Solid~~						X	1	

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	Chris Trevino	12-19-13 / 1530	Golder	MMcLowen	12/19/13 1536	TA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 12/20/13 1114	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

Client Information	Sampler: Chris Trevino	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 2 OF 3
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 Battery Plant - Frisco, TX	Project #: 60004794	
Site:	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)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
2013-SL-C04 (0-6)	12-18-13	1319	G	Solid			X			1	
2013-SL-C04 (6-12)	12-18-13	1337	G	Solid			X			1	
2013-SL-C09 (0-6)	12-18-13	1358	G	Solid			X			1	
2013-SL-C09 (6-12)	12-18-13	1359	G	Solid			X			1	
2013-SL-C10 (0-6)	12-18-13	1416	G	Solid			X			1	
2013-SL-C10 (0-6) MS	12-18-13	1416	G	Solid		X	X			1	
2013-SL-C10 (0-6) MSD	12-18-13	1416	G	Solid		X	X			1	
2013-SL-C10 (6-12)	12-18-13	1423	G	Solid			X			1	
2013-SL-C05 (0-6)	12-18-13	1453	G	Solid			X			1	
2013-SL-C05 (6-12)	12-18-13	1455	G	Solid			X			1	
2013-SL-C06 (0-6)	12-18-13	1506	G	Solid			X			1	

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
Chris Trevino	12-19-13 / 1530	Golder	[signature]	12/19/13 1530	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 12/19/13 1715	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
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: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 3 of 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 Battery Plant - Frisco, TX	Project #: 60004794			
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)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	6010B - Cd, Pb	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	D		
2013-SL-C06 (6-12)	12-18-13	1511	G	Solid			X				1	
2013-SL-C11 (0-6)	12-18-13	1530	G	Solid			X				1	
2013-SL-C11 (6-12)	12-18-13	1545	G	Solid			X				1	
Rinse Blank - Hand Auger	12-18-13	1650	G	~~Solid~~ W						X	1	
DUP-1	12-18-13		G	Solid			X				1	
			G	Solid							1	
			G	Solid							1	
			G	Solid							1	
			G	Solid							1	
			G	Solid							1	

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	Chris Trevino	12-19-13/1530	Golder	MMcGowen	12/19/13 1530	QR
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 12/20/13 1115	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: 600-84450-3

Login Number: 84450

List Source: TestAmerica Houston

List Number: 1

Creator: Trenery, Michael J

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	False	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.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	16.9
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: 600-84629-1
Client Project/Site: EXIDE Battery Plant - Frisco, TX
Revision: 2

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

Attn: Christina Higginbotham

Authorized for release by:
2/14/2014 11:58:12 AM
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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TestAmerica Houston
TRRP Data Package Cover Page

Job Number: 600-84629-1

Project Name/Number: EXIDE Battery Plant - Frisco, TX

This Data Package- consists of:

This signature page, the laboratory review checklist, and the following Reportable Data:

- ☒ R1 Field Chain-of-Custody Form
- ☒ 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
  - d) The laboratory's LCS QC limits
- ☒ R7 Test Reports for 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 sample,
  - d) Calculated %Rs and relative percent differences (RPDs), and
  - e) The laboratory's MS/MSD QC limits
- ☒ R8 Laboratory analytical duplicates (if applicable) recovery and precision, including:
  - 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 limit (MQL) 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 the 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 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, that 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		01/03/2014
Name (printed)	Signature	Date
Project Manager Assistant II		
Official Title (printed)		

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TestAmerica-Houston	LRC Date: 1/2/14
Project Name: EXIDE Battery Plant – Frisco, TX	Laboratory Job Number: 600-84629
Reviewer Name: TWR	Prep Batch Number(s): 600-123903(w), 123942, 123956, 123983(s)- ICP

#[1]	A[2]	Description	Yes	No	NA[3]	NR[4]	ER#[5]
		Chain-of-custody (C-O-C)					
R1	OI	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 soil/solid samples for volatile analysis extracted with methanol per SW846 Method 5035?			X		
		If required for the project, 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			1
		Were MS/MSD RPDs within laboratory QC limits?		X			2
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			3
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 affects on the sample results?	X				4
		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).

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data

Laboratory Name: TestAmerica-Houston	LRC Date: 1/2/14
Project Name: EXIDE Battery Plant – Frisco, TX	Laboratory Job Number: 600-84629
Reviewer Name: TWR	Prep Batch Number(s): 600-123903(w), 123942, 123956, 123983(s)- ICP

#[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 (ICCV and CCV) and continuing calibration**					
		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			5
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" should be included in the laboratory data package submitted to the TCEQ 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).

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports	
Laboratory Name: TestAmerica-Houston	LRC Date: 1/2/14
Project Name: EXIDE Battery Plant – Frisco, TX	Laboratory Job Number: 600-84629
Reviewer Name: TWR	Prep Batch Number(s): 600-123903(w), 123942, 123956, 123983(s)- ICP

ER #[1]	DESCRIPTION
1	The lead recoveries in samples 84629-26 MS and MSD as well as 84629-48 MS and MSD were outside acceptance limits, but were not flagged due to the background sample result being greater than four times the spike added concentration. The lead recoveries in samples 17 MS and MSD as well as the arsenic and cadmium recoveries in samples 26 MS and MSD were outside acceptance limits due to matrix interference. Method performance is demonstrated by acceptable LCS recoveries.
2	The lead RPDs between samples 84629-26 MS and MSD as well as between samples 84629-48 MS and MSD were above acceptance limits due to the non-homogenous nature of the samples.
3	The arsenic RPD between samples 84629-15 and 84629-15 MD, the arsenic, cadmium and lead RPDs between samples 84629-17 and 84629-17 MD and samples 84629-26 and 84629-26 MD, the arsenic RPD between samples 84629-41 and 84629-41 MD and the lead RPD between samples 84629-48 and 84629-48 MD were above acceptance limits due to the non-homogenous nature of the samples.
4	The lead SDLs were elevated in samples 84629-9, 11, 16, 18, 26, 27, and 29 due to the dilutions necessary to bring this analyte to within linear dynamic range.
5	Cadmium and selenium were detected above the MDL in the CCB analyzed on 12/31/13 at 12:39 and cadmium was detected above the MDL in the CCB analyzed at 13:03. Lead was detected above the MDL in the CCB analyzed on 12/31/13 at 15:27. Since the concentrations were below the MQL, no corrective action was required.

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)

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

Job ID: 600-84629-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-84629-1

Comments

Report revised February 14, 2014 updating the metals list at the client's request.

EDD revised February 13, 2014 updating the metals list at the client's request.

Report revised January 28, 2014 adding additional metals analysis at the client's request.

Please note that the designated MS/MSDs were reported on the 6-12 depths, so these samples were included in the report. The report was revised to report additional metals for samples 600-84629-9, 11, 18 and 31 per client request via email on 01/23/14.

Receipt

The samples were received on 12/24/2013 10:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 3.0º C, 4.1º C, 4.4º C and 4.6º C.

Method Summary

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84629-1

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 Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84629-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-84629-1	2013-NDA-C16 (0-6)	Solid	12/20/13 08:45	12/24/13 10:25
600-84629-3	2013-NDA-C18 (0-6)	Solid	12/20/13 08:55	12/24/13 10:25
600-84629-5	2013-NDA-C17 (0-6)	Solid	12/20/13 09:12	12/24/13 10:25
600-84629-7	2013-NDA-C19 (0-6)	Solid	12/20/13 09:33	12/24/13 10:25
600-84629-9	2013-NDA-C20 (0-6)	Solid	12/20/13 09:44	12/24/13 10:25
600-84629-11	2013-NDA-C21 (0-6)	Solid	12/20/13 10:03	12/24/13 10:25
600-84629-14	2013-SDA-C01 (0-6)	Solid	12/20/13 14:16	12/24/13 10:25
600-84629-16	2013-SDA-C02 (0-6)	Solid	12/20/13 14:28	12/24/13 10:25
600-84629-17	2013-SDA-C02 (6-12)	Solid	12/20/13 14:32	12/24/13 10:25
600-84629-18	2013-SDA-C03 (0-6)	Solid	12/20/13 14:44	12/24/13 10:25
600-84629-20	2013-SDA-C04 (0-6)	Solid	12/20/13 14:53	12/24/13 10:25
600-84629-23	2013-NDA-C22 (0-6)	Solid	12/20/13 10:28	12/24/13 10:25
600-84629-25	2013-NDA-C23 (0-6)	Solid	12/20/13 10:59	12/24/13 10:25
600-84629-26	2013-NDA-C23 (6-12)	Solid	12/20/13 11:06	12/24/13 10:25
600-84629-27	2013-NDA-C24 (0-6)	Solid	12/20/13 11:21	12/24/13 10:25
600-84629-29	2013-NDA-C25 (0-6)	Solid	12/20/13 11:33	12/24/13 10:25
600-84629-31	2013-C2L-C01 (0-6)	Solid	12/20/13 12:07	12/24/13 10:25
600-84629-33	2013-C2L-C02 (0-6)	Solid	12/20/13 12:26	12/24/13 10:25
600-84629-35	2013-C2L-C03 (0-6)	Solid	12/20/13 12:37	12/24/13 10:25
600-84629-37	2013-C2L-C04 (0-6)	Solid	12/20/13 13:04	12/24/13 10:25
600-84629-39	2013-C2L-C05 (0-6)	Solid	12/20/13 13:21	12/24/13 10:25
600-84629-41	2013-C2L-C06 (0-6)	Solid	12/20/13 13:31	12/24/13 10:25
600-84629-42	2013-SDA-C05 (0-6)	Solid	12/20/13 15:05	12/24/13 10:25
600-84629-44	2013-SDA-C06 (0-6)	Solid	12/20/13 15:12	12/24/13 10:25
600-84629-46	Rinse Blank Hand Auger	Water	12/20/13 15:30	12/24/13 10:25
600-84629-47	DUP-4	Solid	12/20/13 00:00	12/24/13 10:25
600-84629-48	DUP-5	Solid	12/20/13 00:00	12/24/13 10:25

Client Sample ID: 2013-NDA-C16 (0-6)

Lab Sample ID: 600-84629-1
Date Collected: 12/20/13 08:45
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 82.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.95		0.299	0.0306	mg/Kg	☼	12/30/13 12:46	12/31/13 13:29	1
Lead	491		0.597	0.125	mg/Kg	☼	12/30/13 12:46	12/31/13 13:29	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	83		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C18 (0-6)

Lab Sample ID: 600-84629-3
Date Collected: 12/20/13 08:55
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 79.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	2.30		0.310	0.0318	mg/Kg	☼	12/30/13 12:46	12/31/13 13:34	1
Lead	600		0.619	0.130	mg/Kg	☼	12/30/13 12:46	12/31/13 13:34	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	80		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C17 (0-6)

Lab Sample ID: 600-84629-5
Date Collected: 12/20/13 09:12
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 78.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.54		0.299	0.0306	mg/Kg	☼	12/30/13 12:46	12/31/13 13:39	1
Lead	318		0.598	0.125	mg/Kg	☼	12/30/13 12:46	12/31/13 13:39	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	78		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C19 (0-6)

Lab Sample ID: 600-84629-7
Date Collected: 12/20/13 09:33
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 83.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.83		0.296	0.0303	mg/Kg	☼	12/30/13 12:46	12/31/13 13:44	1
Lead	419		0.591	0.124	mg/Kg	☼	12/30/13 12:46	12/31/13 13:44	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	84		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C20 (0-6)

Lab Sample ID: 600-84629-9

Date Collected: 12/20/13 09:44
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 81.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	168		2.94	0.272	mg/Kg	☼	12/30/13 12:46	12/31/13 13:56	1
Arsenic	50.2		1.18	0.256	mg/Kg	☼	12/30/13 12:46	12/31/13 13:56	1
Cadmium	10.9		0.294	0.0302	mg/Kg	☼	12/30/13 12:46	12/31/13 13:56	1
Selenium	1.73	J	2.35	0.304	mg/Kg	☼	12/30/13 12:46	12/31/13 13:56	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	44400		29.4	6.16	mg/Kg	☼	12/30/13 12:46	01/02/14 10:46	50

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	81		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C21 (0-6)

Lab Sample ID: 600-84629-11

Date Collected: 12/20/13 10:03
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 83.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	98.0		2.99	0.277	mg/Kg	☼	12/30/13 12:46	12/31/13 14:01	1
Arsenic	72.5		1.20	0.260	mg/Kg	☼	12/30/13 12:46	12/31/13 14:01	1
Cadmium	49.9		0.299	0.0307	mg/Kg	☼	12/30/13 12:46	12/31/13 14:01	1
Selenium	2.03	J	2.39	0.309	mg/Kg	☼	12/30/13 12:46	12/31/13 14:01	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	37700		12.0	2.51	mg/Kg	☼	12/30/13 12:46	01/02/14 10:50	20

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	84		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-SDA-C01 (0-6)

Lab Sample ID: 600-84629-14

Date Collected: 12/20/13 14:16
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 71.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.36		0.352	0.0361	mg/Kg	☼	12/30/13 12:46	12/31/13 14:06	1
Lead	2500		0.703	0.147	mg/Kg	☼	12/30/13 12:46	12/31/13 14:06	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	29		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	71		1.0	1.0	%			12/26/13 14:58	1

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84629-1

Client Sample ID: 2013-SDA-C02 (0-6)

Lab Sample ID: 600-84629-16
Date Collected: 12/20/13 14:28
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 79.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	9.71		0.314	0.0322	mg/Kg	☼	12/30/13 12:46	12/31/13 14:18	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4260		6.28	1.32	mg/Kg	☼	12/30/13 12:46	01/02/14 10:53	10

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	80		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-SDA-C02 (6-12)

Lab Sample ID: 600-84629-17
Date Collected: 12/20/13 14:32
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 81.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.691		0.301	0.0308	mg/Kg	☼	12/30/13 12:46	12/31/13 14:27	1
Lead	202		0.601	0.126	mg/Kg	☼	12/30/13 12:46	12/31/13 14:27	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	82		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-SDA-C03 (0-6)

Lab Sample ID: 600-84629-18
Date Collected: 12/20/13 14:44
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 83.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	52.2		2.81	0.261	mg/Kg	☼	12/30/13 12:46	12/31/13 14:36	1
Arsenic	27.2		1.13	0.245	mg/Kg	☼	12/30/13 12:46	12/31/13 14:36	1
Cadmium	1.76		0.281	0.0289	mg/Kg	☼	12/30/13 12:46	12/31/13 14:36	1
Selenium	1.51	J	2.25	0.291	mg/Kg	☼	12/30/13 12:46	12/31/13 14:36	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	8680		5.63	1.18	mg/Kg	☼	12/30/13 12:46	01/02/14 10:55	10

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	83		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-SDA-C04 (0-6)

Lab Sample ID: 600-84629-20
Date Collected: 12/20/13 14:53
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 76.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	4.48		0.320	0.0328	mg/Kg	☼	12/30/13 12:46	12/31/13 14:41	1
Lead	944		0.641	0.134	mg/Kg	☼	12/30/13 12:46	12/31/13 14:41	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	77		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C22 (0-6)

Lab Sample ID: 600-84629-23
Date Collected: 12/20/13 10:28
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 77.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	21.8		0.308	0.0316	mg/Kg	☼	12/30/13 14:19	12/31/13 15:05	1
Lead	1220		0.617	0.129	mg/Kg	☼	12/30/13 14:19	12/31/13 15:05	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	78		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C23 (0-6)

Lab Sample ID: 600-84629-25
Date Collected: 12/20/13 10:59
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 81.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	10.8		0.293	0.0301	mg/Kg	☼	12/30/13 14:19	12/31/13 15:10	1
Lead	1480		0.587	0.123	mg/Kg	☼	12/30/13 14:19	12/31/13 15:10	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	82		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C23 (6-12)

Lab Sample ID: 600-84629-26
Date Collected: 12/20/13 11:06
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 84.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	32.1		0.283	0.0291	mg/Kg	☼	12/30/13 14:19	12/31/13 15:12	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	19900		11.3	2.38	mg/Kg	☼	12/30/13 14:19	01/02/14 11:04	20

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	15		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C23 (6-12)

Lab Sample ID: 600-84629-26

Date Collected: 12/20/13 11:06
Matrix: Solid
Date Received: 12/24/13 10:25

General Chemistry (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	85		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C24 (0-6)

Lab Sample ID: 600-84629-27

Date Collected: 12/20/13 11:21
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 82.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	44.4		0.282	0.0289	mg/Kg	☼	12/30/13 14:19	12/31/13 15:29	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4980		5.64	1.18	mg/Kg	☼	12/30/13 14:19	01/02/14 11:20	10

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	82		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C25 (0-6)

Lab Sample ID: 600-84629-29

Date Collected: 12/20/13 11:33
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 80.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	17.9		0.287	0.0294	mg/Kg	☼	12/30/13 14:19	12/31/13 15:34	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	26700		11.5	2.40	mg/Kg	☼	12/30/13 14:19	01/02/14 11:22	20

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	80		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-C2L-C01 (0-6)

Lab Sample ID: 600-84629-31

Date Collected: 12/20/13 12:07
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 75.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	2.27	J	3.09	0.286	mg/Kg	☼	12/30/13 14:19	12/31/13 15:40	1
Arsenic	16.4		1.23	0.269	mg/Kg	☼	12/30/13 14:19	12/31/13 15:40	1
Cadmium	3.05		0.309	0.0317	mg/Kg	☼	12/30/13 14:19	12/31/13 15:40	1
Lead	435		0.617	0.129	mg/Kg	☼	12/30/13 14:19	12/31/13 15:40	1
Selenium	1.58	J	2.47	0.320	mg/Kg	☼	12/30/13 14:19	12/31/13 15:40	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-C2L-C01 (0-6)

Lab Sample ID: 600-84629-31
Date Collected: 12/20/13 12:07
Matrix: Solid
Date Received: 12/24/13 10:25

General Chemistry (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	76		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-C2L-C02 (0-6)

Lab Sample ID: 600-84629-33
Date Collected: 12/20/13 12:26
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 81.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10.8		1.22	0.266	mg/Kg	☼	12/30/13 14:19	12/31/13 15:44	1
Cadmium	0.769		0.305	0.0313	mg/Kg	☼	12/30/13 14:19	12/31/13 15:44	1
Lead	90.8		0.610	0.128	mg/Kg	☼	12/30/13 14:19	12/31/13 15:44	1
Selenium	0.316	U	2.44	0.316	mg/Kg	☼	12/30/13 14:19	12/31/13 15:44	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	81		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-C2L-C03 (0-6)

Lab Sample ID: 600-84629-35
Date Collected: 12/20/13 12:37
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 76.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10.8		1.25	0.273	mg/Kg	☼	12/30/13 14:19	12/31/13 15:49	1
Cadmium	0.621		0.314	0.0322	mg/Kg	☼	12/30/13 14:19	12/31/13 15:49	1
Lead	74.3		0.627	0.132	mg/Kg	☼	12/30/13 14:19	12/31/13 15:49	1
Selenium	0.339	J	2.51	0.325	mg/Kg	☼	12/30/13 14:19	12/31/13 15:49	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	77		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-C2L-C04 (0-6)

Lab Sample ID: 600-84629-37
Date Collected: 12/20/13 13:04
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 77.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	10.6		1.27	0.277	mg/Kg	☼	12/30/13 14:19	12/31/13 16:01	1
Cadmium	0.305	J	0.318	0.0326	mg/Kg	☼	12/30/13 14:19	12/31/13 16:01	1
Lead	52.7		0.636	0.133	mg/Kg	☼	12/30/13 14:19	12/31/13 16:01	1
Selenium	0.329	U	2.54	0.329	mg/Kg	☼	12/30/13 14:19	12/31/13 16:01	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	77		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-C2L-C05 (0-6)

Lab Sample ID: 600-84629-39

Date Collected: 12/20/13 13:21
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 77.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.68		1.26	0.274	mg/Kg	☼	12/30/13 14:19	12/31/13 16:06	1
Cadmium	0.207	J	0.314	0.0322	mg/Kg	☼	12/30/13 14:19	12/31/13 16:06	1
Lead	28.8		0.629	0.132	mg/Kg	☼	12/30/13 14:19	12/31/13 16:06	1
Selenium	0.325	U	2.51	0.325	mg/Kg	☼	12/30/13 14:19	12/31/13 16:06	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	77		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-C2L-C06 (0-6)

Lab Sample ID: 600-84629-41

Date Collected: 12/20/13 13:31
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 76.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.99		1.22	0.266	mg/Kg	☼	12/30/13 14:19	12/31/13 16:10	1
Cadmium	0.104	J	0.305	0.0313	mg/Kg	☼	12/30/13 14:19	12/31/13 16:10	1
Lead	20.7		0.611	0.128	mg/Kg	☼	12/30/13 14:19	12/31/13 16:10	1
Selenium	0.316	U	2.44	0.316	mg/Kg	☼	12/30/13 14:19	12/31/13 16:10	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	76		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-SDA-C05 (0-6)

Lab Sample ID: 600-84629-42

Date Collected: 12/20/13 15:05
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 75.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	3.63		0.319	0.0327	mg/Kg	☼	12/30/13 16:21	12/31/13 16:36	1
Lead	517		0.638	0.134	mg/Kg	☼	12/30/13 16:21	12/31/13 16:36	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	75		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-SDA-C06 (0-6)

Lab Sample ID: 600-84629-44

Date Collected: 12/20/13 15:12
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 79.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.47		0.292	0.0299	mg/Kg	☼	12/30/13 16:21	12/31/13 16:41	1
Lead	348		0.583	0.122	mg/Kg	☼	12/30/13 16:21	12/31/13 16:41	1

Client Sample ID: 2013-SDA-C06 (0-6)

Lab Sample ID: 600-84629-44

Date Collected: 12/20/13 15:12
Matrix: Solid
Date Received: 12/24/13 10:25

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	79		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: Rinse Blank Hand Auger

Lab Sample ID: 600-84629-46

Date Collected: 12/20/13 15:30
Matrix: Water
Date Received: 12/24/13 10:25

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		12/30/13 08:50	12/31/13 12:47	1
Cadmium	0.000350	U	0.00500	0.000350	mg/L		12/30/13 08:50	12/31/13 12:47	1
Lead	0.0131		0.0100	0.00290	mg/L		12/30/13 08:50	12/31/13 12:47	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		12/30/13 08:50	12/31/13 12:47	1

Client Sample ID: DUP-4

Lab Sample ID: 600-84629-47

Date Collected: 12/20/13 00:00
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 81.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.05		0.302	0.0310	mg/Kg	☼	12/30/13 16:21	12/31/13 16:46	1
Lead	1880		0.604	0.127	mg/Kg	☼	12/30/13 16:21	12/31/13 16:46	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	81		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: DUP-5

Lab Sample ID: 600-84629-48

Date Collected: 12/20/13 00:00
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 82.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.906		0.296	0.0304	mg/Kg	☼	12/30/13 16:21	12/31/13 16:48	1
Lead	1110		0.592	0.124	mg/Kg	☼	12/30/13 16:21	12/31/13 16:48	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	83		1.0	1.0	%			12/26/13 14:58	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.
F	Duplicate RPD exceeds the control limit
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

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 600-123903/1-A
Matrix: Water
Analysis Batch: 124030

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123903

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00328	U	0.0100	0.00328	mg/L		12/30/13 08:50	12/31/13 12:21	1
Cadmium	0.000350	U	0.00500	0.000350	mg/L		12/30/13 08:50	12/31/13 12:21	1
Lead	0.00290	U	0.0100	0.00290	mg/L		12/30/13 08:50	12/31/13 12:21	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		12/30/13 08:50	12/31/13 12:21	1

Lab Sample ID: LCS 600-123903/2-A
Matrix: Water
Analysis Batch: 124030

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123903

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	1.00	1.071		mg/L		107	80 - 120
Cadmium	0.500	0.5323		mg/L		106	80 - 120
Lead	1.00	1.084		mg/L		108	80 - 120
Selenium	1.00	1.062		mg/L		106	80 - 120

Lab Sample ID: 600-84629-46 MS
Matrix: Water
Analysis Batch: 124030

Client Sample ID: Rinse Blank Hand Auger
Prep Type: Total/NA
Prep Batch: 123903

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.00328	U	1.00	1.051		mg/L		105	75 - 125
Cadmium	0.000350	U	0.500	0.5243		mg/L		105	75 - 125
Lead	0.0131		1.00	1.066		mg/L		105	75 - 125
Selenium	0.00417	U	1.00	1.046		mg/L		105	75 - 125

Lab Sample ID: 600-84629-46 MSD
Matrix: Water
Analysis Batch: 124030

Client Sample ID: Rinse Blank Hand Auger
Prep Type: Total/NA
Prep Batch: 123903

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	0.00328	U	1.00	1.092		mg/L		109	75 - 125	4	20
Cadmium	0.000350	U	0.500	0.5428		mg/L		109	75 - 125	3	20
Lead	0.0131		1.00	1.112		mg/L		110	75 - 125	4	20
Selenium	0.00417	U	1.00	1.079		mg/L		108	75 - 125	3	20

Lab Sample ID: 600-84629-46 DU
Matrix: Water
Analysis Batch: 124030

Client Sample ID: Rinse Blank Hand Auger
Prep Type: Total/NA
Prep Batch: 123903

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	0.00328	U	0.00328	U	mg/L		NC	20
Cadmium	0.000350	U	0.000350	U	mg/L		NC	20
Lead	0.0131		0.01241		mg/L		5	20
Selenium	0.00417	U	0.00417	U	mg/L		NC	20

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

Lab Sample ID: MB 600-123942/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 124038 — **Prep Batch: 123942**

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		12/30/13 12:46	12/31/13 13:25	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		12/30/13 12:46	12/31/13 13:25	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/30/13 12:46	12/31/13 13:25	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/30/13 12:46	12/31/13 13:25	1
Selenium	0.259	U	2.00	0.259	mg/Kg		12/30/13 12:46	12/31/13 13:25	1

Lab Sample ID: LCSSRM 600-123942/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 124038 — **Prep Batch: 123942**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	99.6	100.3		mg/Kg		100.7	80.8 - 119.5
Cadmium	182	176.2		mg/Kg		96.8	81.9 - 118.1
Lead	115	115.3		mg/Kg		100.3	81.8 - 119.1
Selenium	150	153.3		mg/Kg		102.2	77.3 - 122.7

Lab Sample ID: 600-84629-17 MS — **Client Sample ID: 2013-SDA-C02 (6-12)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 124038 — **Prep Batch: 123942**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	4.15		58.4	61.74		mg/Kg	☼	99	75 - 125
Cadmium	0.691		29.2	28.91		mg/Kg	☼	97	75 - 125
Lead	202		58.4	77.75	N	mg/Kg	☼	-213	75 - 125
Selenium	0.311		58.4	55.69		mg/Kg	☼	95	75 - 125

Lab Sample ID: 600-84629-17 MSD — **Client Sample ID: 2013-SDA-C02 (6-12)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 124038 — **Prep Batch: 123942**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.15		60.2	63.18		mg/Kg	☼	98	75 - 125	2	20
Cadmium	0.691		30.1	30.77		mg/Kg	☼	100	75 - 125	6	20
Lead	202		60.2	80.83	N	mg/Kg	☼	-202	75 - 125	4	20
Selenium	0.311		60.2	58.41		mg/Kg	☼	97	75 - 125	5	20

Lab Sample ID: 600-84629-17 DU — **Client Sample ID: 2013-SDA-C02 (6-12)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 124038 — **Prep Batch: 123942**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	0.643		0.3885	J	mg/Kg	☼	49	20
Arsenic	4.15		11.25	F	mg/Kg	☼	92	20
Cadmium	0.691		0.2124	J F	mg/Kg	☼	106	20
Lead	202		151.3	F	mg/Kg	☼	29	20
Selenium	0.311		0.314	U	mg/Kg	☼	NC	20

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

Lab Sample ID: MB 600-123956/1-A
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123956

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.232	U	2.50	0.232	mg/Kg		12/30/13 14:19	12/31/13 14:58	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		12/30/13 14:19	12/31/13 14:58	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/30/13 14:19	12/31/13 14:58	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/30/13 14:19	12/31/13 14:58	1
Selenium	0.259	U	2.00	0.259	mg/Kg		12/30/13 14:19	12/31/13 14:58	1

Lab Sample ID: LCSSRM 600-123956/2-A
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123956

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	99.6	95.74		mg/Kg		96.1	80.8 - 119.5
Cadmium	182	167.0		mg/Kg		91.8	81.9 - 118.1
Lead	115	117.4		mg/Kg		102.1	81.8 - 119.1
Selenium	150	144.5		mg/Kg		96.3	77.3 - 122.7

Lab Sample ID: 600-84629-26 MS
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: 2013-NDA-C23 (6-12)
Prep Type: Total/NA
Prep Batch: 123956

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	81.4		55.1	86.20	N	mg/Kg	☼	9	75 - 125
Cadmium	32.1		27.6	46.56	N	mg/Kg	☼	53	75 - 125
Selenium	2.81		55.1	51.26		mg/Kg	☼	88	75 - 125

Lab Sample ID: 600-84629-26 MSD
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: 2013-NDA-C23 (6-12)
Prep Type: Total/NA
Prep Batch: 123956

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	81.4		56.1	98.86	N	mg/Kg	☼	31	75 - 125	14	20
Cadmium	32.1		28.1	45.98	N	mg/Kg	☼	50	75 - 125	1	20
Selenium	2.81		56.1	54.89		mg/Kg	☼	93	75 - 125	7	20

Lab Sample ID: 600-84629-41 MS
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: 2013-C2L-C06 (0-6)
Prep Type: Total/NA
Prep Batch: 123956

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	6.99		64.7	71.33		mg/Kg	☼	99	75 - 125
Cadmium	0.104	J	32.4	29.55		mg/Kg	☼	91	75 - 125
Lead	20.7		64.7	91.53		mg/Kg	☼	109	75 - 125
Selenium	0.316	U	64.7	58.90		mg/Kg	☼	91	75 - 125

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

Lab Sample ID: 600-84629-41 MSD
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: 2013-C2L-C06 (0-6)
Prep Type: Total/NA
Prep Batch: 123956

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	6.99		61.7	65.07		mg/Kg	☼	94	75 - 125	9	20
Cadmium	0.104	J	30.8	27.41		mg/Kg	☼	89	75 - 125	8	20
Lead	20.7		61.7	75.99		mg/Kg	☼	90	75 - 125	19	20
Selenium	0.316	U	61.7	53.58		mg/Kg	☼	87	75 - 125	9	20

Lab Sample ID: 600-84629-26 DU
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: 2013-NDA-C23 (6-12)
Prep Type: Total/NA
Prep Batch: 123956

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	72.1		16.56	F	mg/Kg	☼	125	20
Arsenic	81.4		38.35	F	mg/Kg	☼	72	20
Cadmium	32.1		10.57	F	mg/Kg	☼	101	20
Selenium	2.81		1.751	J	mg/Kg	☼	46	20

Lab Sample ID: 600-84629-41 DU
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: 2013-C2L-C06 (0-6)
Prep Type: Total/NA
Prep Batch: 123956

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	6.99		11.92	F	mg/Kg	☼	52	20
Cadmium	0.104	J	0.2179	J	mg/Kg	☼	71	20
Lead	20.7		25.21		mg/Kg	☼	20	20
Selenium	0.316	U	0.4615	J	mg/Kg	☼	NC	20

Lab Sample ID: MB 600-123983/1-A
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123983

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.218	U	1.00	0.218	mg/Kg		12/30/13 16:21	12/31/13 16:31	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/30/13 16:21	12/31/13 16:31	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/30/13 16:21	12/31/13 16:31	1
Selenium	0.259	U	2.00	0.259	mg/Kg		12/30/13 16:21	12/31/13 16:31	1

Lab Sample ID: LCSSRM 600-123983/2-A
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123983

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	99.6	99.98		mg/Kg		100.4	80.8 - 119.5
Cadmium	182	169.9		mg/Kg		93.4	81.9 - 118.1
Lead	115	113.1		mg/Kg		98.3	81.8 - 119.1
Selenium	150	151.7		mg/Kg		101.1	77.3 - 122.7

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

Lab Sample ID: 600-84629-48 MS
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: DUP-5
Prep Type: Total/NA
Prep Batch: 123983

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	16.4		55.9	71.52		mg/Kg	☼	99	75 - 125
Cadmium	0.906		28.0	25.64		mg/Kg	☼	88	75 - 125
Lead	1110		55.9	2228	4	mg/Kg	☼	1991	75 - 125
Selenium	1.07		55.9	51.10		mg/Kg	☼	89	75 - 125

Lab Sample ID: 600-84629-48 MSD
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: DUP-5
Prep Type: Total/NA
Prep Batch: 123983

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	16.4		59.2	65.60		mg/Kg	☼	83	75 - 125	9	20
Cadmium	0.906		29.6	24.34		mg/Kg	☼	79	75 - 125	5	20
Lead	1110		59.2	506.4	4 N	mg/Kg	☼	-1028	75 - 125	126	20
Selenium	1.07		59.2	48.98		mg/Kg	☼	81	75 - 125	4	20

Lab Sample ID: 600-84629-48 DU
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: DUP-5
Prep Type: Total/NA
Prep Batch: 123983

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	16.4		15.75		mg/Kg	☼	4	20
Cadmium	0.906		0.8090		mg/Kg	☼	11	20
Lead	1110		1734	F	mg/Kg	☼	43	20
Selenium	1.07		0.8888	J	mg/Kg	☼	18	20

Method: 6010B - Metals (ICP) - DL

Lab Sample ID: 600-84629-26 MS
Matrix: Solid
Analysis Batch: 124095

Client Sample ID: 2013-NDA-C23 (6-12)
Prep Type: Total/NA
Prep Batch: 123956

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead - DL	19900		55.1	10410	4	mg/Kg	☼	-1719 4	75 - 125

Lab Sample ID: 600-84629-26 MSD
Matrix: Solid
Analysis Batch: 124095

Client Sample ID: 2013-NDA-C23 (6-12)
Prep Type: Total/NA
Prep Batch: 123956

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead - DL	19900		56.1	14120	4 N	mg/Kg	☼	-1028 1	75 - 125	30	20

Lab Sample ID: 600-84629-26 DU
Matrix: Solid
Analysis Batch: 124095

Client Sample ID: 2013-NDA-C23 (6-12)
Prep Type: Total/NA
Prep Batch: 123956

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead - DL	19900		8821	F	mg/Kg	☼	77	20

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84629-1

Method: Moisture - Percent Moisture

Lab Sample ID: 600-84629-25 DU
Matrix: Solid
Analysis Batch: 123729

Client Sample ID: 2013-NDA-C23 (0-6)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	18			17		%				5	20
Percent Solids	82			83		%				1	20

Lab Sample ID: 600-84629-35 DU
Matrix: Solid
Analysis Batch: 123729

Client Sample ID: 2013-C2L-C03 (0-6)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	23			24		%				2	20
Percent Solids	77			76		%				0.7	20

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84629-1

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
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

Prep Batch: 123903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84629-46	Rinse Blank Hand Auger	Total/NA	Water	3010A	
600-84629-46 DU	Rinse Blank Hand Auger	Total/NA	Water	3010A	
600-84629-46 MS	Rinse Blank Hand Auger	Total/NA	Water	3010A	
600-84629-46 MSD	Rinse Blank Hand Auger	Total/NA	Water	3010A	
LCS 600-123903/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-123903/1-A	Method Blank	Total/NA	Water	3010A	

Prep Batch: 123942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84629-1	2013-NDA-C16 (0-6)	Total/NA	Solid	3050B	
600-84629-3	2013-NDA-C18 (0-6)	Total/NA	Solid	3050B	
600-84629-5	2013-NDA-C17 (0-6)	Total/NA	Solid	3050B	
600-84629-7	2013-NDA-C19 (0-6)	Total/NA	Solid	3050B	
600-84629-9	2013-NDA-C20 (0-6)	Total/NA	Solid	3050B	
600-84629-9 - DL	2013-NDA-C20 (0-6)	Total/NA	Solid	3050B	
600-84629-11	2013-NDA-C21 (0-6)	Total/NA	Solid	3050B	
600-84629-11 - DL	2013-NDA-C21 (0-6)	Total/NA	Solid	3050B	
600-84629-14	2013-SDA-C01 (0-6)	Total/NA	Solid	3050B	
600-84629-16	2013-SDA-C02 (0-6)	Total/NA	Solid	3050B	
600-84629-16 - DL	2013-SDA-C02 (0-6)	Total/NA	Solid	3050B	
600-84629-17	2013-SDA-C02 (6-12)	Total/NA	Solid	3050B	
600-84629-17 DU	2013-SDA-C02 (6-12)	Total/NA	Solid	3050B	
600-84629-17 MS	2013-SDA-C02 (6-12)	Total/NA	Solid	3050B	
600-84629-17 MSD	2013-SDA-C02 (6-12)	Total/NA	Solid	3050B	
600-84629-18 - DL	2013-SDA-C03 (0-6)	Total/NA	Solid	3050B	
600-84629-18	2013-SDA-C03 (0-6)	Total/NA	Solid	3050B	
600-84629-20	2013-SDA-C04 (0-6)	Total/NA	Solid	3050B	
LCSSRM 600-123942/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-123942/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 123956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84629-23	2013-NDA-C22 (0-6)	Total/NA	Solid	3050B	
600-84629-25	2013-NDA-C23 (0-6)	Total/NA	Solid	3050B	
600-84629-26	2013-NDA-C23 (6-12)	Total/NA	Solid	3050B	
600-84629-26 - DL	2013-NDA-C23 (6-12)	Total/NA	Solid	3050B	
600-84629-26 DU	2013-NDA-C23 (6-12)	Total/NA	Solid	3050B	
600-84629-26 DU - DL	2013-NDA-C23 (6-12)	Total/NA	Solid	3050B	
600-84629-26 MS - DL	2013-NDA-C23 (6-12)	Total/NA	Solid	3050B	
600-84629-26 MS	2013-NDA-C23 (6-12)	Total/NA	Solid	3050B	
600-84629-26 MSD	2013-NDA-C23 (6-12)	Total/NA	Solid	3050B	
600-84629-26 MSD - DL	2013-NDA-C23 (6-12)	Total/NA	Solid	3050B	
600-84629-27	2013-NDA-C24 (0-6)	Total/NA	Solid	3050B	
600-84629-27 - DL	2013-NDA-C24 (0-6)	Total/NA	Solid	3050B	
600-84629-29	2013-NDA-C25 (0-6)	Total/NA	Solid	3050B	
600-84629-29 - DL	2013-NDA-C25 (0-6)	Total/NA	Solid	3050B	
600-84629-31	2013-C2L-C01 (0-6)	Total/NA	Solid	3050B	
600-84629-33	2013-C2L-C02 (0-6)	Total/NA	Solid	3050B	
600-84629-35	2013-C2L-C03 (0-6)	Total/NA	Solid	3050B	
600-84629-37	2013-C2L-C04 (0-6)	Total/NA	Solid	3050B	
600-84629-39	2013-C2L-C05 (0-6)	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 123956 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84629-41	2013-C2L-C06 (0-6)	Total/NA	Solid	3050B	
600-84629-41 DU	2013-C2L-C06 (0-6)	Total/NA	Solid	3050B	
600-84629-41 MS	2013-C2L-C06 (0-6)	Total/NA	Solid	3050B	
600-84629-41 MSD	2013-C2L-C06 (0-6)	Total/NA	Solid	3050B	
LCSSRM 600-123956/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-123956/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 123983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84629-42	2013-SDA-C05 (0-6)	Total/NA	Solid	3050B	
600-84629-44	2013-SDA-C06 (0-6)	Total/NA	Solid	3050B	
600-84629-47	DUP-4	Total/NA	Solid	3050B	
600-84629-48	DUP-5	Total/NA	Solid	3050B	
600-84629-48 DU	DUP-5	Total/NA	Solid	3050B	
600-84629-48 MS	DUP-5	Total/NA	Solid	3050B	
600-84629-48 MSD	DUP-5	Total/NA	Solid	3050B	
LCSSRM 600-123983/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-123983/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 124030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84629-46	Rinse Blank Hand Auger	Total/NA	Water	6010B	123903
600-84629-46 DU	Rinse Blank Hand Auger	Total/NA	Water	6010B	123903
600-84629-46 MS	Rinse Blank Hand Auger	Total/NA	Water	6010B	123903
600-84629-46 MSD	Rinse Blank Hand Auger	Total/NA	Water	6010B	123903
LCS 600-123903/2-A	Lab Control Sample	Total/NA	Water	6010B	123903
MB 600-123903/1-A	Method Blank	Total/NA	Water	6010B	123903

Analysis Batch: 124038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84629-1	2013-NDA-C16 (0-6)	Total/NA	Solid	6010B	123942
600-84629-3	2013-NDA-C18 (0-6)	Total/NA	Solid	6010B	123942
600-84629-5	2013-NDA-C17 (0-6)	Total/NA	Solid	6010B	123942
600-84629-7	2013-NDA-C19 (0-6)	Total/NA	Solid	6010B	123942
600-84629-9	2013-NDA-C20 (0-6)	Total/NA	Solid	6010B	123942
600-84629-11	2013-NDA-C21 (0-6)	Total/NA	Solid	6010B	123942
600-84629-14	2013-SDA-C01 (0-6)	Total/NA	Solid	6010B	123942
600-84629-16	2013-SDA-C02 (0-6)	Total/NA	Solid	6010B	123942
600-84629-17	2013-SDA-C02 (6-12)	Total/NA	Solid	6010B	123942
600-84629-17 DU	2013-SDA-C02 (6-12)	Total/NA	Solid	6010B	123942
600-84629-17 MS	2013-SDA-C02 (6-12)	Total/NA	Solid	6010B	123942
600-84629-17 MSD	2013-SDA-C02 (6-12)	Total/NA	Solid	6010B	123942
600-84629-18	2013-SDA-C03 (0-6)	Total/NA	Solid	6010B	123942
600-84629-20	2013-SDA-C04 (0-6)	Total/NA	Solid	6010B	123942
600-84629-23	2013-NDA-C22 (0-6)	Total/NA	Solid	6010B	123956
600-84629-25	2013-NDA-C23 (0-6)	Total/NA	Solid	6010B	123956
600-84629-26	2013-NDA-C23 (6-12)	Total/NA	Solid	6010B	123956
600-84629-26 DU	2013-NDA-C23 (6-12)	Total/NA	Solid	6010B	123956
600-84629-26 MS	2013-NDA-C23 (6-12)	Total/NA	Solid	6010B	123956
600-84629-26 MSD	2013-NDA-C23 (6-12)	Total/NA	Solid	6010B	123956
600-84629-27	2013-NDA-C24 (0-6)	Total/NA	Solid	6010B	123956

Metals (Continued)

Analysis Batch: 124038 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84629-29	2013-NDA-C25 (0-6)	Total/NA	Solid	6010B	123956
600-84629-31	2013-C2L-C01 (0-6)	Total/NA	Solid	6010B	123956
600-84629-33	2013-C2L-C02 (0-6)	Total/NA	Solid	6010B	123956
600-84629-35	2013-C2L-C03 (0-6)	Total/NA	Solid	6010B	123956
600-84629-37	2013-C2L-C04 (0-6)	Total/NA	Solid	6010B	123956
600-84629-39	2013-C2L-C05 (0-6)	Total/NA	Solid	6010B	123956
600-84629-41	2013-C2L-C06 (0-6)	Total/NA	Solid	6010B	123956
600-84629-41 DU	2013-C2L-C06 (0-6)	Total/NA	Solid	6010B	123956
600-84629-41 MS	2013-C2L-C06 (0-6)	Total/NA	Solid	6010B	123956
600-84629-41 MSD	2013-C2L-C06 (0-6)	Total/NA	Solid	6010B	123956
600-84629-42	2013-SDA-C05 (0-6)	Total/NA	Solid	6010B	123983
600-84629-44	2013-SDA-C06 (0-6)	Total/NA	Solid	6010B	123983
600-84629-47	DUP-4	Total/NA	Solid	6010B	123983
600-84629-48	DUP-5	Total/NA	Solid	6010B	123983
600-84629-48 DU	DUP-5	Total/NA	Solid	6010B	123983
600-84629-48 MS	DUP-5	Total/NA	Solid	6010B	123983
600-84629-48 MSD	DUP-5	Total/NA	Solid	6010B	123983
LCSSRM 600-123942/2-A	Lab Control Sample	Total/NA	Solid	6010B	123942
LCSSRM 600-123956/2-A	Lab Control Sample	Total/NA	Solid	6010B	123956
LCSSRM 600-123983/2-A	Lab Control Sample	Total/NA	Solid	6010B	123983
MB 600-123942/1-A	Method Blank	Total/NA	Solid	6010B	123942
MB 600-123956/1-A	Method Blank	Total/NA	Solid	6010B	123956
MB 600-123983/1-A	Method Blank	Total/NA	Solid	6010B	123983

Analysis Batch: 124095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84629-9 - DL	2013-NDA-C20 (0-6)	Total/NA	Solid	6010B	123942
600-84629-11 - DL	2013-NDA-C21 (0-6)	Total/NA	Solid	6010B	123942
600-84629-16 - DL	2013-SDA-C02 (0-6)	Total/NA	Solid	6010B	123942
600-84629-18 - DL	2013-SDA-C03 (0-6)	Total/NA	Solid	6010B	123942
600-84629-26 - DL	2013-NDA-C23 (6-12)	Total/NA	Solid	6010B	123956
600-84629-26 DU - DL	2013-NDA-C23 (6-12)	Total/NA	Solid	6010B	123956
600-84629-26 MS - DL	2013-NDA-C23 (6-12)	Total/NA	Solid	6010B	123956
600-84629-26 MSD - DL	2013-NDA-C23 (6-12)	Total/NA	Solid	6010B	123956
600-84629-27 - DL	2013-NDA-C24 (0-6)	Total/NA	Solid	6010B	123956
600-84629-29 - DL	2013-NDA-C25 (0-6)	Total/NA	Solid	6010B	123956

General Chemistry

Analysis Batch: 123729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84629-1	2013-NDA-C16 (0-6)	Total/NA	Solid	Moisture	
600-84629-3	2013-NDA-C18 (0-6)	Total/NA	Solid	Moisture	
600-84629-5	2013-NDA-C17 (0-6)	Total/NA	Solid	Moisture	
600-84629-7	2013-NDA-C19 (0-6)	Total/NA	Solid	Moisture	
600-84629-9	2013-NDA-C20 (0-6)	Total/NA	Solid	Moisture	
600-84629-11	2013-NDA-C21 (0-6)	Total/NA	Solid	Moisture	
600-84629-14	2013-SDA-C01 (0-6)	Total/NA	Solid	Moisture	
600-84629-16	2013-SDA-C02 (0-6)	Total/NA	Solid	Moisture	
600-84629-17	2013-SDA-C02 (6-12)	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 123729 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84629-17 MS	2013-SDA-C02 (6-12)	Total/NA	Solid	Moisture	
600-84629-17 MSD	2013-SDA-C02 (6-12)	Total/NA	Solid	Moisture	
600-84629-18	2013-SDA-C03 (0-6)	Total/NA	Solid	Moisture	
600-84629-20	2013-SDA-C04 (0-6)	Total/NA	Solid	Moisture	
600-84629-23	2013-NDA-C22 (0-6)	Total/NA	Solid	Moisture	
600-84629-25	2013-NDA-C23 (0-6)	Total/NA	Solid	Moisture	
600-84629-25 DU	2013-NDA-C23 (0-6)	Total/NA	Solid	Moisture	
600-84629-26	2013-NDA-C23 (6-12)	Total/NA	Solid	Moisture	
600-84629-26 MS	2013-NDA-C23 (6-12)	Total/NA	Solid	Moisture	
600-84629-26 MSD	2013-NDA-C23 (6-12)	Total/NA	Solid	Moisture	
600-84629-27	2013-NDA-C24 (0-6)	Total/NA	Solid	Moisture	
600-84629-29	2013-NDA-C25 (0-6)	Total/NA	Solid	Moisture	
600-84629-31	2013-C2L-C01 (0-6)	Total/NA	Solid	Moisture	
600-84629-33	2013-C2L-C02 (0-6)	Total/NA	Solid	Moisture	
600-84629-35	2013-C2L-C03 (0-6)	Total/NA	Solid	Moisture	
600-84629-35 DU	2013-C2L-C03 (0-6)	Total/NA	Solid	Moisture	
600-84629-37	2013-C2L-C04 (0-6)	Total/NA	Solid	Moisture	
600-84629-39	2013-C2L-C05 (0-6)	Total/NA	Solid	Moisture	
600-84629-41	2013-C2L-C06 (0-6)	Total/NA	Solid	Moisture	
600-84629-42	2013-SDA-C05 (0-6)	Total/NA	Solid	Moisture	
600-84629-44	2013-SDA-C06 (0-6)	Total/NA	Solid	Moisture	
600-84629-47	DUP-4	Total/NA	Solid	Moisture	
600-84629-48	DUP-5	Total/NA	Solid	Moisture	

Client Sample ID: 2013-NDA-C16 (0-6)

Lab Sample ID: 600-84629-1

Date Collected: 12/20/13 08:45

Matrix: Solid

Date Received: 12/24/13 10:25

Percent Solids: 82.9

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	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	124038	12/31/13 13:29	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C18 (0-6)

Lab Sample ID: 600-84629-3

Date Collected: 12/20/13 08:55

Matrix: Solid

Date Received: 12/24/13 10:25

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	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	124038	12/31/13 13:34	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C17 (0-6)

Lab Sample ID: 600-84629-5

Date Collected: 12/20/13 09:12

Matrix: Solid

Date Received: 12/24/13 10:25

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			1.07 g	50 mL	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	124038	12/31/13 13:39	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C19 (0-6)

Lab Sample ID: 600-84629-7

Date Collected: 12/20/13 09:33

Matrix: Solid

Date Received: 12/24/13 10:25

Percent Solids: 83.7

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	50 mL	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	124038	12/31/13 13:44	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C20 (0-6)

Lab Sample ID: 600-84629-9

Date Collected: 12/20/13 09:44

Matrix: Solid

Date Received: 12/24/13 10:25

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			1.05 g	50 mL	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	124038	12/31/13 13:56	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.05 g	50 mL	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B	DL	50	1.05 g	50 mL	124095	01/02/14 10:46	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C21 (0-6) — **Lab Sample ID: 600-84629-11**
Date Collected: 12/20/13 10:03 — **Matrix: Solid**
Date Received: 12/24/13 10:25 — **Percent Solids: 83.7**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	50 mL	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	124038	12/31/13 14:01	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.00 g	50 mL	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B	DL	20	1.00 g	50 mL	124095	01/02/14 10:50	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-SDA-C01 (0-6) — **Lab Sample ID: 600-84629-14**
Date Collected: 12/20/13 14:16 — **Matrix: Solid**
Date Received: 12/24/13 10:25 — **Percent Solids: 71.1**

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	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	124038	12/31/13 14:06	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-SDA-C02 (0-6) — **Lab Sample ID: 600-84629-16**
Date Collected: 12/20/13 14:28 — **Matrix: Solid**
Date Received: 12/24/13 10:25 — **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			1.00 g	50 mL	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	124038	12/31/13 14:18	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.00 g	50 mL	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B	DL	10	1.00 g	50 mL	124095	01/02/14 10:53	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-SDA-C02 (6-12) — **Lab Sample ID: 600-84629-17**
Date Collected: 12/20/13 14:32 — **Matrix: Solid**
Date Received: 12/24/13 10:25 — **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			1.02 g	50 mL	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	124038	12/31/13 14:27	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-SDA-C03 (0-6) — **Lab Sample ID: 600-84629-18**
Date Collected: 12/20/13 14:44 — **Matrix: Solid**
Date Received: 12/24/13 10:25 — **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			1.07 g	50 mL	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	124038	12/31/13 14:36	DCL	TAL HOU

Client Sample ID: 2013-SDA-C03 (0-6)

Lab Sample ID: 600-84629-18

Date Collected: 12/20/13 14:44
Matrix: Solid
Date Received: 12/24/13 10:25
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	DL		1.07 g	50 mL	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B	DL	10	1.07 g	50 mL	124095	01/02/14 10:55	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-SDA-C04 (0-6)

Lab Sample ID: 600-84629-20

Date Collected: 12/20/13 14:53
Matrix: Solid
Date Received: 12/24/13 10:25
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	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	124038	12/31/13 14:41	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C22 (0-6)

Lab Sample ID: 600-84629-23

Date Collected: 12/20/13 10:28
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 77.9

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	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	124038	12/31/13 15:05	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C23 (0-6)

Lab Sample ID: 600-84629-25

Date Collected: 12/20/13 10:59
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 81.9

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	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	124038	12/31/13 15:10	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C23 (6-12)

Lab Sample ID: 600-84629-26

Date Collected: 12/20/13 11:06
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 84.9

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	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	124038	12/31/13 15:12	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.04 g	50 mL	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B	DL	20	1.04 g	50 mL	124095	01/02/14 11:04	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C24 (0-6)

Lab Sample ID: 600-84629-27

Date Collected: 12/20/13 11:21
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 82.0

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	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	124038	12/31/13 15:29	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.08 g	50 mL	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B	DL	10	1.08 g	50 mL	124095	01/02/14 11:20	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C25 (0-6)

Lab Sample ID: 600-84629-29

Date Collected: 12/20/13 11:33
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.09 g	50 mL	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	124038	12/31/13 15:34	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.09 g	50 mL	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B	DL	20	1.09 g	50 mL	124095	01/02/14 11:22	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-C2L-C01 (0-6)

Lab Sample ID: 600-84629-31

Date Collected: 12/20/13 12:07
Matrix: Solid
Date Received: 12/24/13 10:25
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	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	124038	12/31/13 15:40	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-C2L-C02 (0-6)

Lab Sample ID: 600-84629-33

Date Collected: 12/20/13 12:26
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.01 g	50 mL	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	124038	12/31/13 15:44	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-C2L-C03 (0-6)

Lab Sample ID: 600-84629-35

Date Collected: 12/20/13 12:37
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.04 g	50 mL	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	124038	12/31/13 15:49	DCL	TAL HOU

Client Sample ID: 2013-C2L-C03 (0-6)

Lab Sample ID: 600-84629-35

Date Collected: 12/20/13 12:37

Matrix: Solid

Date Received: 12/24/13 10:25

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			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-C2L-C04 (0-6)

Lab Sample ID: 600-84629-37

Date Collected: 12/20/13 13:04

Matrix: Solid

Date Received: 12/24/13 10:25

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			1.02 g	50 mL	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	124038	12/31/13 16:01	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-C2L-C05 (0-6)

Lab Sample ID: 600-84629-39

Date Collected: 12/20/13 13:21

Matrix: Solid

Date Received: 12/24/13 10:25

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			1.03 g	50 mL	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	124038	12/31/13 16:06	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-C2L-C06 (0-6)

Lab Sample ID: 600-84629-41

Date Collected: 12/20/13 13:31

Matrix: Solid

Date Received: 12/24/13 10:25

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			1.07 g	50 mL	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	124038	12/31/13 16:10	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-SDA-C05 (0-6)

Lab Sample ID: 600-84629-42

Date Collected: 12/20/13 15:05

Matrix: Solid

Date Received: 12/24/13 10:25

Percent Solids: 75.3

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	123983	12/30/13 16:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	124038	12/31/13 16:36	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84629-1

Client Sample ID: 2013-SDA-C06 (0-6)

Lab Sample ID: 600-84629-44

Date Collected: 12/20/13 15:12
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.08 g	50 mL	123983	12/30/13 16:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	124038	12/31/13 16:41	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: Rinse Blank Hand Auger

Lab Sample ID: 600-84629-46

Date Collected: 12/20/13 15:30
Matrix: Water
Date Received: 12/24/13 10:25

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	123903	12/30/13 08:50	NER	TAL HOU
Total/NA	Analysis	6010B		1	50 mL	50 mL	124030	12/31/13 12:47	DCL	TAL HOU

Client Sample ID: DUP-4

Lab Sample ID: 600-84629-47

Date Collected: 12/20/13 00:00
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.02 g	50 mL	123983	12/30/13 16:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	124038	12/31/13 16:46	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: DUP-5

Lab Sample ID: 600-84629-48

Date Collected: 12/20/13 00:00
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 82.8

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	123983	12/30/13 16:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	124038	12/31/13 16:48	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	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 Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84629-1

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

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: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 1 of 5
Company: Golder Associates Inc.				Job #: 13002086

Address	Due Date Requested:
500 Century Plaza Drive Suite 190	
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 Battery Plant - Frisco, TX	Project #: 60004794
Site:	SSOW#:

Analysis Requested

600-84629 Chain of Custody

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)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
2013-NDA-C16 (0-6)	12-20-13	0845	G	Solid			X			1	
2013-NDA-C16 (6-12)	12-20-13	0846	G	Solid			X			1	
2013-NDA-C18 (0-6)	12-20-13	0855	G	Solid			X			1	
2013-NDA-C18 (6-12)	12-20-13	0900	G	Solid			X			1	
2013-NDA-C17 (0-6)	12-20-13	0912	G	Solid			X			1	
2013-NDA-C17 (6-12)	12-20-13	0915	G	Solid			X			1	
2013-NDA-C19 (0-6)	12-20-13	0933	G	Solid			X			1	
2013-NDA-C19 (6-12)	12-20-13	0934	G	Solid			X			1	
2013-NDA-C20 (0-6)	12-20-13	0944	G	Solid			X			1	
2013-NDA-C20 (6-12)	12-20-13	0945	G	Solid			X			1	
2013-NDA-C21 (0-6)	12-20-13	1003	G	Solid			X			1	

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	Chris Trevino	12-20-13/1720	Golder	A McGowen	12/20/13 1720	TAL
2	A McGowen	12/20/13 1750	TAL		/	
3		/			12/23/13 1025	

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: Chris Trevino	Lab PM: Joiner Dean A	Carrier Tracking No(s):	COC No: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 2 of 5
Company: Golder Associates Inc.				Job #: 130 2086
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 Battery Plant - Frisco, TX	Project #: 60004794			
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)	Perform MS/MSD (Yes or No)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
2013-C2L-C06 (6-12)	12-20-13	1334	G	Solid				X		1	
2013-SDA-C01 (0-6)	12-20-13	1416	G	Solid			X			1	
2013-SDA-C01 (6-12)	12-20-13	1420	G	Solid			X			1	
2013-SDA-C02 (0-6)	12-20-13	1428	G	Solid			X			1	
2013-SDA-C02 (6-12)	12-20-13	1432	G	Solid			X			1	
2013-SDA-C02 (6-12) MS	12-20-13	1432	G	Solid		X	X			1	
2013-SDA-C02 (6-12) MSD	12-20-13	1432	G	Solid		X	X			1	
2013-SDA-C03 (0-6)	12-20-13	1444	G	Solid			X			1	
2013-SDA-C03 (6-12)	12-20-13	1446	G	Solid			X			1	
2013-SDA-C04 (0-6)	12-20-13	1453	G	Solid			X			1	
2013-SDA-C04 (6-12)	12-20-13	1455	G	Solid			X			1	

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	Chris Trevino	12-20-13/1720	Golder	[signature]	12/20/13 1720	TA
2	[signature]	12/20/13 1756			/	
3				[signature]	12/24/13 1025	

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: Chris Trevino	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 3 of 5
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 Battery Plant - Frisco, TX	Project #: 60004794	
Site:	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)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
2013-NDA-C21 (6-12)	12-20-13	1005	G	Solid			X			1	
2013-NDA-C22 (0-6)	12-20-13	1028	G	Solid			X			1	
2013-NDA-C22 (6-12)	12-20-13	1039	G	Solid			X			1	
2013-NDA-C23 (0-6)	12-20-13	~~1053~~ 1059	G	Solid			X			1	
2013-NDA-C23 (6-12)	12-20-13	1106	G	Solid			X			1	
2013-NDA-C23 (6-12) MS	12-20-13	1106	G	Solid		X	X			1	
2013-NDA-C23 (6-12) MSD	12-20-13	1106	G	Solid		X	X			1	
2013-NDA-C24 (0-6)	12-20-13	1121	G	Solid			X			1	
2013-NDA-C24 (6-12)	12-20-13	1123	G	Solid			X			1	
2013-NDA-C25 (0-6)	12-20-13	1133	G	Solid			X			1	
2013-NDA-C25 (6-12)	12-20-13	1134	G	Solid			X			1	

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	Chris Trevino	12-20-13/1720	Golder	[signature]	12/20/13 1720	[illegible]
2	[signature]	12/20/13 1750	[illegible]			
3				[signature]	12/24/13 1025	

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: Chris Trevino	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean joiner@testamericainc.com		Page: Page 4 of 5
Company: Golder Associates Inc.				Job #: 130 2086
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 Battery Plant - Frisco, TX	Project #: 60004794			
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)	Perform MS/MSD (Yes or No)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
2013-C2L-C01 (0-6)	12-20-13	1207	G	Solid				X		1	
2013-C2L-~~C02~~ C01 (6-12)	12-20-13	1208	G	Solid				X		1	
2013-C2L-C02 (0-6)	12-20-13	1226	G	Solid				X		1	
2013-C2L-C02 (6-12)	12-20-13	1228	G	Solid				X		1	
2013-C2L-C03 (0-6)	12-20-13	1237	G	Solid				X		1	
2013-C2L-C03 (6-12)	12-20-13	1238	G	Solid				X		1	
2013-C2L-C04 (0-6)	12-20-13	1304	G	Solid				X		1	
2013-C2L-C04 (6-12)	12-20-13	1307	G	Solid				X		1	
2013-C2L-C05 (0-6)	12-20-13	1321	G	Solid				X		1	
2013-C2L-C05 (6-12)	12-20-13	1323	G	Solid				X		1	
2013-C2L-C06 (0-6)	12-20-13	1331	G	Solid				X		1	

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	Chris Trevino	12-20-13 / 1720	Golder	[signature]	12/20/13 1720	TR
2	[signature]	12/20/13 1758	TR		/	
3		/		[signature]	12/21/13 1025	

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: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 5 of 5
Company: Golder Associates Inc.				Job #: 130 2086
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 Battery Plant - Frisco, TX	Project #: 60004794			
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)	Perform MS/MSD (Yes or No)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	N	N		
2013-SDA-C05 (0-6)	12-20-13	1505	G	Solid			X			1	
2013-SDA-C05 (6-12)	12-20-13	1506	G	Solid			X			1	
2013-SDA-C06 (0-6)	12-20-13	1512	G	Solid			X			1	
2013-SDA-C06 (6-12)	12-20-13	1514	G	Solid			X			1	
Rinse Blank Hand Auger	12-20-13	1530	G	Solid				X		1	
Dup-4	12-20-13		G	Solid			X			1	
Dup-5	12-20-13		G	Solid			X			1	
			G	Solid						1	
			G	Solid						1	
			G	Solid						1	
			G	Solid						1	

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
2	Chris Trevino	12-20-13/1720	Golder	[illegible]	12/20/13 1720	[illegible]
3	[illegible]	12/20/13 1750	[illegible]			
4					12/24/13 1025	

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

Cooler Temperature(s) °C and Other Remarks:

12/24/2013

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-84629-1

Login Number: 84629

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	4.1/4.6/4.4/3.0
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	Sample Rinse Black marked Solid but is a Water .
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Sample 2013-SDA-C05 (6-12) was received broken.
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: 600-84629-3
Client Project/Site: EXIDE Battery Plant - Frisco, TX

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

Attn: Christina Higginbotham

Authorized for release by:
1/29/2014 10:59:39 AM
Sophia Shah, Project Management Assistant I
sophia.shah@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 600-84629-3 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.

Sophia Shah		1/29/2014
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:	1/29/2014
Project Name:	EXIDE Battery Plant - Frisco, TX	Laboratory Job Number:	600-84629-3
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			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				
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:	1/29/2014
Project Name:	EXIDE Battery Plant - Frisco, TX	Laboratory Job Number:	600-84629-3
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.
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Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	1/29/2014
Project Name:	EXIDE Battery Plant - Frisco, TX	Laboratory Job Number:	600-84629-3
Reviewer Name:	Dean A Joiner		

ER #[1]	Description
R01A	One or more containers for the following sample was received broken or leaking upon arrival: 2013-SDA-C05-(6-12)
R07C	Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch123942 were outside control limits for Antimony. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.
R08C	Method 6010B: The matrix duplicate %RPD for Arsenic associated with batch 123942 was outside the control limits due to non homogeneity of the sample.

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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:	Soil
Method:	6010B
Preparation:	3050
Date Analyzed:	12/30/2013
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Tin	0.08729	0.15	0.19	1
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Zinc	0.108432	0.2	0.305	1.5

Job ID: 600-84629-3

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-84629-3

Comments
No additional comments.

Receipt
The samples were received on 12/24/2013 10:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 3.0º C, 4.1º C, 4.4º C and 4.6º C.

Method Summary

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84629-3

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 Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84629-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-84629-2	2013-NDA-C16 (6-12)	Solid	12/20/13 08:46	12/24/13 10:25
600-84629-4	2013-NDA-C18 (6-12)	Solid	12/20/13 09:00	12/24/13 10:25
600-84629-6	2013-NDA-C17 (6-12)	Solid	12/20/13 09:15	12/24/13 10:25
600-84629-8	2013-NDA-C19 (6-12)	Solid	12/20/13 09:34	12/24/13 10:25
600-84629-10	2013-NDA-C20 (6-12)	Solid	12/20/13 09:45	12/24/13 10:25
600-84629-15	2013-SDA-C01 (6-12)	Solid	12/20/13 14:20	12/24/13 10:25
600-84629-19	2013-SDA-C03 (6-12)	Solid	12/20/13 14:46	12/24/13 10:25
600-84629-21	2013-SDA-C04 (6-12)	Solid	12/20/13 14:55	12/24/13 10:25
600-84629-22	2013-NDA-C21 (6-12)	Solid	12/20/13 10:05	12/24/13 10:25
600-84629-24	2013-NDA-C22 (6-12)	Solid	12/20/13 10:39	12/24/13 10:25
600-84629-28	2013-NDA-C24 (6-12)	Solid	12/20/13 11:23	12/24/13 10:25
600-84629-30	2013-NDA-C25 (6-12)	Solid	12/20/13 11:34	12/24/13 10:25
600-84629-32	2013-C2L-C01 (6-12)	Solid	12/20/13 12:08	12/24/13 10:25
600-84629-43	2013-SDA-C05 (6-12)	Solid	12/20/13 15:06	12/24/13 10:25
600-84629-45	2013-SDA-C06 (6-12)	Solid	12/20/13 15:14	12/24/13 10:25

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84629-3

Client Sample ID: 2013-NDA-C16 (6-12)

Lab Sample ID: 600-84629-2
Date Collected: 12/20/13 08:46
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 82.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	667		0.584	0.122	mg/Kg	☼	12/30/13 12:46	12/31/13 13:32	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	82		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C18 (6-12)

Lab Sample ID: 600-84629-4
Date Collected: 12/20/13 09:00
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 77.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	42.8		0.641	0.134	mg/Kg	☼	12/30/13 12:46	12/31/13 13:37	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	77		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C17 (6-12)

Lab Sample ID: 600-84629-6
Date Collected: 12/20/13 09:15
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 78.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	726		0.592	0.124	mg/Kg	☼	12/30/13 12:46	12/31/13 13:42	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	78		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C19 (6-12)

Lab Sample ID: 600-84629-8
Date Collected: 12/20/13 09:34
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 82.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	386		0.559	0.117	mg/Kg	☼	12/30/13 12:46	12/31/13 13:47	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	82		1.0	1.0	%			12/26/13 14:58	1

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84629-3

Client Sample ID: 2013-NDA-C20 (6-12)

Lab Sample ID: 600-84629-10
Date Collected: 12/20/13 09:45
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 83.5

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	6850		5.76	1.21	mg/Kg	☼	12/30/13 12:46	01/02/14 10:48	10

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	84		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-SDA-C01 (6-12)

Lab Sample ID: 600-84629-15
Date Collected: 12/20/13 14:20
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 74.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	24.9		0.653	0.137	mg/Kg	☼	12/30/13 12:46	12/31/13 14:08	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	74		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-SDA-C03 (6-12)

Lab Sample ID: 600-84629-19
Date Collected: 12/20/13 14:46
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 82.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.714		0.290	0.0298	mg/Kg	☼	12/30/13 12:46	12/31/13 14:39	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3560		5.80	1.22	mg/Kg	☼	12/30/13 12:46	01/02/14 10:57	10

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	82		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-SDA-C04 (6-12)

Lab Sample ID: 600-84629-21
Date Collected: 12/20/13 14:55
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 79.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	328		0.596	0.125	mg/Kg	☼	12/30/13 12:46	12/31/13 14:43	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	79		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C21 (6-12)

Lab Sample ID: 600-84629-22
Date Collected: 12/20/13 10:05
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 83.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	24.8		0.299	0.0307	mg/Kg	☼	12/30/13 14:19	12/31/13 15:02	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	35800		12.0	2.51	mg/Kg	☼	12/30/13 14:19	01/02/14 10:59	20

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	84		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C22 (6-12)

Lab Sample ID: 600-84629-24
Date Collected: 12/20/13 10:39
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 80.9

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4110		5.83	1.22	mg/Kg	☼	12/30/13 14:19	01/02/14 11:02	10

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	81		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C24 (6-12)

Lab Sample ID: 600-84629-28
Date Collected: 12/20/13 11:23
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 83.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	3.23		0.288	0.0296	mg/Kg	☼	12/30/13 14:19	12/31/13 15:32	1
Lead	2010		0.577	0.121	mg/Kg	☼	12/30/13 14:19	12/31/13 15:32	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	83		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C25 (6-12)

Lab Sample ID: 600-84629-30
Date Collected: 12/20/13 11:34
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 77.3

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4140		6.22	1.30	mg/Kg	☼	12/30/13 14:19	01/02/14 11:24	10

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	77		1.0	1.0	%			12/26/13 14:58	1

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84629-3

Client Sample ID: 2013-C2L-C01 (6-12)

Lab Sample ID: 600-84629-32
Date Collected: 12/20/13 12:08
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 77.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	17.2		1.29	0.282	mg/Kg	☼	12/30/13 14:19	12/31/13 15:42	1
Lead	93.8		0.646	0.135	mg/Kg	☼	12/30/13 14:19	12/31/13 15:42	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	77		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-SDA-C05 (6-12)

Lab Sample ID: 600-84629-43
Date Collected: 12/20/13 15:06
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 79.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	302		0.632	0.133	mg/Kg	☼	12/30/13 16:21	12/31/13 16:38	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	79		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-SDA-C06 (6-12)

Lab Sample ID: 600-84629-45
Date Collected: 12/20/13 15:14
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 84.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1580		0.578	0.121	mg/Kg	☼	12/30/13 16:21	12/31/13 16:43	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	16		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	84		1.0	1.0	%			12/26/13 14:58	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.
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 600-123942/1-A
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123942

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.218	U	1.00	0.218	mg/Kg		12/30/13 12:46	12/31/13 13:25	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/30/13 12:46	12/31/13 13:25	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/30/13 12:46	12/31/13 13:25	1

Lab Sample ID: LCSSRM 600-123942/2-A
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123942

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	99.6	100.3		mg/Kg		100.7	80.8 - 119.5
Cadmium	182	176.2		mg/Kg		96.8	81.9 - 118.1
Lead	115	115.3		mg/Kg		100.3	81.8 - 119.1
Selenium	150	153.3		mg/Kg		102.2	77.3 - 122.7

Lab Sample ID: 600-84629-15 MS
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: 2013-SDA-C01 (6-12)
Prep Type: Total/NA
Prep Batch: 123942

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	26.4		67.3	91.06		mg/Kg	☼	96	75 - 125
Cadmium	0.255		33.6	31.78		mg/Kg	☼	94	75 - 125
Lead	24.9		67.3	79.76		mg/Kg	☼	82	75 - 125
Selenium	0.522		67.3	63.54		mg/Kg	☼	94	75 - 125

Lab Sample ID: 600-84629-15 MSD
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: 2013-SDA-C01 (6-12)
Prep Type: Total/NA
Prep Batch: 123942

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	26.4		65.9	85.58		mg/Kg	☼	90	75 - 125	6	20
Cadmium	0.255		33.0	32.58		mg/Kg	☼	98	75 - 125	2	20
Lead	24.9		65.9	83.14		mg/Kg	☼	88	75 - 125	4	20
Selenium	0.522		65.9	65.31		mg/Kg	☼	98	75 - 125	3	20

Lab Sample ID: 600-84629-15 DU
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: 2013-SDA-C01 (6-12)
Prep Type: Total/NA
Prep Batch: 123942

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Arsenic	26.4		14.27	F	mg/Kg	☼	60	20
Cadmium	0.255		0.1508	J	mg/Kg	☼	51	20
Lead	24.9		24.07		mg/Kg	☼	3	20

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

Lab Sample ID: MB 600-123956/1-A
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123956

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.218	U	1.00	0.218	mg/Kg		12/30/13 14:19	12/31/13 14:58	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/30/13 14:19	12/31/13 14:58	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/30/13 14:19	12/31/13 14:58	1

Lab Sample ID: LCSSRM 600-123956/2-A
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123956

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	99.6	95.74		mg/Kg		96.1	80.8 - 119.5
Cadmium	182	167.0		mg/Kg		91.8	81.9 - 118.1
Lead	115	117.4		mg/Kg		102.1	81.8 - 119.1
Selenium	150	144.5		mg/Kg		96.3	77.3 - 122.7

Lab Sample ID: MB 600-123983/1-A
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123983

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.218	U	1.00	0.218	mg/Kg		12/30/13 16:21	12/31/13 16:31	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/30/13 16:21	12/31/13 16:31	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/30/13 16:21	12/31/13 16:31	1

Lab Sample ID: LCSSRM 600-123983/2-A
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123983

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	99.6	99.98		mg/Kg		100.4	80.8 - 119.5
Cadmium	182	169.9		mg/Kg		93.4	81.9 - 118.1
Lead	115	113.1		mg/Kg		98.3	81.8 - 119.1
Selenium	150	151.7		mg/Kg		101.1	77.3 - 122.7

Method: Moisture - Percent Moisture

Lab Sample ID: 600-84629-4 DU
Matrix: Solid
Analysis Batch: 123729

Client Sample ID: 2013-NDA-C18 (6-12)
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		%		0.9	20

Method: Moisture - Percent Moisture (Continued)

Lab Sample ID: 600-84629-15 DU
Matrix: Solid
Analysis Batch: 123729

Client Sample ID: 2013-SDA-C01 (6-12)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	26			25		%				2	20
Percent Solids	74			75		%				0.7	20

Lab Sample ID: 600-84629-45 DU
Matrix: Solid
Analysis Batch: 123729

Client Sample ID: 2013-SDA-C06 (6-12)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	16			19		%				17	20
Percent Solids	84			81		%				4	20

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84629-3

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

General Chemistry

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

Metals

Prep Batch: 123942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84629-2	2013-NDA-C16 (6-12)	Total/NA	Solid	3050B	
600-84629-4	2013-NDA-C18 (6-12)	Total/NA	Solid	3050B	
600-84629-6	2013-NDA-C17 (6-12)	Total/NA	Solid	3050B	
600-84629-8	2013-NDA-C19 (6-12)	Total/NA	Solid	3050B	
600-84629-10 - DL	2013-NDA-C20 (6-12)	Total/NA	Solid	3050B	
600-84629-15	2013-SDA-C01 (6-12)	Total/NA	Solid	3050B	
600-84629-15 DU	2013-SDA-C01 (6-12)	Total/NA	Solid	3050B	
600-84629-15 MS	2013-SDA-C01 (6-12)	Total/NA	Solid	3050B	
600-84629-15 MSD	2013-SDA-C01 (6-12)	Total/NA	Solid	3050B	
600-84629-19	2013-SDA-C03 (6-12)	Total/NA	Solid	3050B	
600-84629-19 - DL	2013-SDA-C03 (6-12)	Total/NA	Solid	3050B	
600-84629-21	2013-SDA-C04 (6-12)	Total/NA	Solid	3050B	
LCSSRM 600-123942/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-123942/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 123956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84629-22 - DL	2013-NDA-C21 (6-12)	Total/NA	Solid	3050B	
600-84629-22	2013-NDA-C21 (6-12)	Total/NA	Solid	3050B	
600-84629-24 - DL	2013-NDA-C22 (6-12)	Total/NA	Solid	3050B	
600-84629-28	2013-NDA-C24 (6-12)	Total/NA	Solid	3050B	
600-84629-30 - DL	2013-NDA-C25 (6-12)	Total/NA	Solid	3050B	
600-84629-32	2013-C2L-C01 (6-12)	Total/NA	Solid	3050B	
LCSSRM 600-123956/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-123956/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 123983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84629-43	2013-SDA-C05 (6-12)	Total/NA	Solid	3050B	
600-84629-45	2013-SDA-C06 (6-12)	Total/NA	Solid	3050B	
LCSSRM 600-123983/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-123983/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 124038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84629-2	2013-NDA-C16 (6-12)	Total/NA	Solid	6010B	123942
600-84629-4	2013-NDA-C18 (6-12)	Total/NA	Solid	6010B	123942
600-84629-6	2013-NDA-C17 (6-12)	Total/NA	Solid	6010B	123942
600-84629-8	2013-NDA-C19 (6-12)	Total/NA	Solid	6010B	123942
600-84629-15	2013-SDA-C01 (6-12)	Total/NA	Solid	6010B	123942
600-84629-15 DU	2013-SDA-C01 (6-12)	Total/NA	Solid	6010B	123942
600-84629-15 MS	2013-SDA-C01 (6-12)	Total/NA	Solid	6010B	123942
600-84629-15 MSD	2013-SDA-C01 (6-12)	Total/NA	Solid	6010B	123942
600-84629-19	2013-SDA-C03 (6-12)	Total/NA	Solid	6010B	123942
600-84629-21	2013-SDA-C04 (6-12)	Total/NA	Solid	6010B	123942
600-84629-22	2013-NDA-C21 (6-12)	Total/NA	Solid	6010B	123956
600-84629-28	2013-NDA-C24 (6-12)	Total/NA	Solid	6010B	123956
600-84629-32	2013-C2L-C01 (6-12)	Total/NA	Solid	6010B	123956
600-84629-43	2013-SDA-C05 (6-12)	Total/NA	Solid	6010B	123983
600-84629-45	2013-SDA-C06 (6-12)	Total/NA	Solid	6010B	123983
LCSSRM 600-123942/2-A	Lab Control Sample	Total/NA	Solid	6010B	123942

Metals (Continued)

Analysis Batch: 124038 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSSRM 600-123956/2-A	Lab Control Sample	Total/NA	Solid	6010B	123956
LCSSRM 600-123983/2-A	Lab Control Sample	Total/NA	Solid	6010B	123983
MB 600-123942/1-A	Method Blank	Total/NA	Solid	6010B	123942
MB 600-123956/1-A	Method Blank	Total/NA	Solid	6010B	123956
MB 600-123983/1-A	Method Blank	Total/NA	Solid	6010B	123983

Analysis Batch: 124095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84629-10 - DL	2013-NDA-C20 (6-12)	Total/NA	Solid	6010B	123942
600-84629-19 - DL	2013-SDA-C03 (6-12)	Total/NA	Solid	6010B	123942
600-84629-22 - DL	2013-NDA-C21 (6-12)	Total/NA	Solid	6010B	123956
600-84629-24 - DL	2013-NDA-C22 (6-12)	Total/NA	Solid	6010B	123956
600-84629-30 - DL	2013-NDA-C25 (6-12)	Total/NA	Solid	6010B	123956

General Chemistry

Analysis Batch: 123729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84629-2	2013-NDA-C16 (6-12)	Total/NA	Solid	Moisture	
600-84629-4	2013-NDA-C18 (6-12)	Total/NA	Solid	Moisture	
600-84629-4 DU	2013-NDA-C18 (6-12)	Total/NA	Solid	Moisture	
600-84629-6	2013-NDA-C17 (6-12)	Total/NA	Solid	Moisture	
600-84629-8	2013-NDA-C19 (6-12)	Total/NA	Solid	Moisture	
600-84629-10	2013-NDA-C20 (6-12)	Total/NA	Solid	Moisture	
600-84629-15	2013-SDA-C01 (6-12)	Total/NA	Solid	Moisture	
600-84629-15 DU	2013-SDA-C01 (6-12)	Total/NA	Solid	Moisture	
600-84629-19	2013-SDA-C03 (6-12)	Total/NA	Solid	Moisture	
600-84629-21	2013-SDA-C04 (6-12)	Total/NA	Solid	Moisture	
600-84629-22	2013-NDA-C21 (6-12)	Total/NA	Solid	Moisture	
600-84629-24	2013-NDA-C22 (6-12)	Total/NA	Solid	Moisture	
600-84629-28	2013-NDA-C24 (6-12)	Total/NA	Solid	Moisture	
600-84629-30	2013-NDA-C25 (6-12)	Total/NA	Solid	Moisture	
600-84629-32	2013-C2L-C01 (6-12)	Total/NA	Solid	Moisture	
600-84629-43	2013-SDA-C05 (6-12)	Total/NA	Solid	Moisture	
600-84629-45	2013-SDA-C06 (6-12)	Total/NA	Solid	Moisture	
600-84629-45 DU	2013-SDA-C06 (6-12)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84629-3

Client Sample ID: 2013-NDA-C16 (6-12)

Lab Sample ID: 600-84629-2

Date Collected: 12/20/13 08:46
Matrix: Solid
Date Received: 12/24/13 10:25
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	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	124038	12/31/13 13:32	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C18 (6-12)

Lab Sample ID: 600-84629-4

Date Collected: 12/20/13 09:00
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.01 g	50 mL	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	124038	12/31/13 13:37	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C17 (6-12)

Lab Sample ID: 600-84629-6

Date Collected: 12/20/13 09:15
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.08 g	50 mL	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	124038	12/31/13 13:42	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C19 (6-12)

Lab Sample ID: 600-84629-8

Date Collected: 12/20/13 09:34
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 82.1

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	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	124038	12/31/13 13:47	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C20 (6-12)

Lab Sample ID: 600-84629-10

Date Collected: 12/20/13 09:45
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B	DL		1.04 g	50 mL	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B	DL	10	1.04 g	50 mL	124095	01/02/14 10:48	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84629-3

Client Sample ID: 2013-SDA-C01 (6-12)

Lab Sample ID: 600-84629-15

Date Collected: 12/20/13 14:20
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 74.3

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	124038	12/31/13 14:08	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-SDA-C03 (6-12)

Lab Sample ID: 600-84629-19

Date Collected: 12/20/13 14:46
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 82.1

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	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	124038	12/31/13 14:39	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.05 g	50 mL	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B	DL	10	1.05 g	50 mL	124095	01/02/14 10:57	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-SDA-C04 (6-12)

Lab Sample ID: 600-84629-21

Date Collected: 12/20/13 14:55
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.06 g	50 mL	123942	12/30/13 12:46	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	124038	12/31/13 14:43	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C21 (6-12)

Lab Sample ID: 600-84629-22

Date Collected: 12/20/13 10:05
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 83.5

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.00 g	50 mL	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	124038	12/31/13 15:02	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.00 g	50 mL	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B	DL	20	1.00 g	50 mL	124095	01/02/14 10:59	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C22 (6-12)

Lab Sample ID: 600-84629-24

Date Collected: 12/20/13 10:39
Matrix: Solid
Date Received: 12/24/13 10:25
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	DL		1.06 g	50 mL	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B	DL	10	1.06 g	50 mL	124095	01/02/14 11:02	DCL	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84629-3

Client Sample ID: 2013-NDA-C22 (6-12)

Lab Sample ID: 600-84629-24

Date Collected: 12/20/13 10:39
Matrix: Solid
Date Received: 12/24/13 10:25

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			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C24 (6-12)

Lab Sample ID: 600-84629-28

Date Collected: 12/20/13 11:23
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 83.4

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	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	124038	12/31/13 15:32	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C25 (6-12)

Lab Sample ID: 600-84629-30

Date Collected: 12/20/13 11:34
Matrix: Solid
Date Received: 12/24/13 10:25
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	DL		1.04 g	50 mL	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B	DL	10	1.04 g	50 mL	124095	01/02/14 11:24	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-C2L-C01 (6-12)

Lab Sample ID: 600-84629-32

Date Collected: 12/20/13 12:08
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.00 g	50 mL	123956	12/30/13 14:19	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	124038	12/31/13 15:42	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-SDA-C05 (6-12)

Lab Sample ID: 600-84629-43

Date Collected: 12/20/13 15:06
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 79.1

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	123983	12/30/13 16:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	124038	12/31/13 16:38	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84629-3

Client Sample ID: 2013-SDA-C06 (6-12)
Date Collected: 12/20/13 15:14
Date Received: 12/24/13 10:25

Lab Sample ID: 600-84629-45
Matrix: Solid
Percent Solids: 84.0

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	123983	12/30/13 16:21	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	124038	12/31/13 16:43	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	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 Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84629-3

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 of Custody Record

TestAmerica

Client Information	Sampler: Chris Trevino	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 1 of 5
Company: Golder Associates Inc.				Job #: 13002086

Address	Due Date Requested:
500 Century Plaza Drive Suite 190	
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 Battery Plant - Frisco, TX	Project #: 60004794
Site:	SSOW#:

Analysis Requested

600-84629 Chain of Custody

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)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
2013-NDA-C16 (0-6)	12-20-13	0845	G	Solid			X			1	
2013-NDA-C16 (6-12)	12-20-13	0846	G	Solid			X			1	
2013-NDA-C18 (0-6)	12-20-13	0855	G	Solid			X			1	
2013-NDA-C18 (6-12)	12-20-13	0900	G	Solid			X			1	
2013-NDA-C17 (0-6)	12-20-13	0912	G	Solid			X			1	
2013-NDA-C17 (6-12)	12-20-13	0915	G	Solid			X			1	
2013-NDA-C19 (0-6)	12-20-13	0933	G	Solid			X			1	
2013-NDA-C19 (6-12)	12-20-13	0934	G	Solid			X			1	
2013-NDA-C20 (0-6)	12-20-13	0944	G	Solid			X			1	
2013-NDA-C20 (6-12)	12-20-13	0945	G	Solid			X			1	
2013-NDA-C21 (0-6)	12-20-13	1003	G	Solid			X			1	

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	Chris Trevino	12-20-13/1720	Golder	A McGowen	12/20/13 1720	TAL
2	A McGowen	12/20/13 1750	TAL		/	
3		/			12/23/13 1025	

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: Chris Trevino	Lab PM: Joiner Dean A	Carrier Tracking No(s):	COC No: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 2 of 5
Company: Golder Associates Inc.				Job #: 130 2086
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 Battery Plant - Frisco, TX	Project #: 60004794			
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)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
2013-C2L-C06 (6-12)	12-20-13	1334	G	Solid				X		1	
2013-SDA-C01 (0-6)	12-20-13	1416	G	Solid			X			1	
2013-SDA-C01 (6-12)	12-20-13	1420	G	Solid			X			1	
2013-SDA-C02 (0-6)	12-20-13	1428	G	Solid			X			1	
2013-SDA-C02 (6-12)	12-20-13	1432	G	Solid			X			1	
2013-SDA-C02 (6-12) MS	12-20-13	1432	G	Solid		X	X			1	
2013-SDA-C02 (6-12) MSD	12-20-13	1432	G	Solid		X	X			1	
2013-SDA-C03 (0-6)	12-20-13	1444	G	Solid			X			1	
2013-SDA-C03 (6-12)	12-20-13	1446	G	Solid			X			1	
2013-SDA-C04 (0-6)	12-20-13	1453	G	Solid			X			1	
2013-SDA-C04 (6-12)	12-20-13	1455	G	Solid			X			1	

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	Chris Trevino	12-20-13/1720	Golder	MMcLaren	12/20/13 1720	TA
2	MMcLaren	12/20/13 1756	TA		/	
3					12/24/13 1025	

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

Cooler Temperature(s) °C and Other Remarks

12/9/2014

Page 29 of 38

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: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 3 of 5
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 Battery Plant - Frisco, TX	Project #: 60004794			
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)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
2013-NDA-C21 (6-12)	12-20-13	1005	G	Solid			X			1	
2013-NDA-C22 (0-6)	12-20-13	1028	G	Solid			X			1	
2013-NDA-C22 (6-12)	12-20-13	1039	G	Solid			X			1	
2013-NDA-C23 (0-6)	12-20-13	~~1053~~ 1059	G	Solid			X			1	
2013-NDA-C23 (6-12)	12-20-13	1106	G	Solid			X			1	
2013-NDA-C23 (6-12) MS	12-20-13	1106	G	Solid		X	X			1	
2013-NDA-C23 (6-12) MSD	12-20-13	1106	G	Solid		X	X			1	
2013-NDA-C24 (0-6)	12-20-13	1121	G	Solid			X			1	
2013-NDA-C24 (6-12)	12-20-13	1123	G	Solid			X			1	
2013-NDA-C25 (0-6)	12-20-13	1133	G	Solid			X			1	
2013-NDA-C25 (6-12)	12-20-13	1134	G	Solid			X			1	

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	Chris Trevino	12-20-13/1720	Golder	[signature]	12/20/13 1720	
2	[signature]	12/20/13 1750				
3				[signature]	12/24/13 1025	

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: Chris Trevino	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean joiner@testamericainc.com		Page: Page 4 of 5
Company: Golder Associates Inc.				Job #: 130 2086
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 Battery Plant - Frisco, TX	Project #: 60004794			
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)	Perform MS/MSD (Yes or No)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
2013-C2L-C01 (0-6)	12-20-13	1207	G	Solid				X		1	
2013-C2L-~~C02~~ C01 (6-12)	12-20-13	1208	G	Solid				X		1	
2013-C2L-C02 (0-6)	12-20-13	1226	G	Solid				X		1	
2013-C2L-C02 (6-12)	12-20-13	1228	G	Solid				X		1	
2013-C2L-C03 (0-6)	12-20-13	1237	G	Solid				X		1	
2013-C2L-C03 (6-12)	12-20-13	1238	G	Solid				X		1	
2013-C2L-C04 (0-6)	12-20-13	1304	G	Solid				X		1	
2013-C2L-C04 (6-12)	12-20-13	1307	G	Solid				X		1	
2013-C2L-C05 (0-6)	12-20-13	1321	G	Solid				X		1	
2013-C2L-C05 (6-12)	12-20-13	1323	G	Solid				X		1	
2013-C2L-C06 (0-6)	12-20-13	1331	G	Solid				X		1	

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	Chris Trevino	12-20-13 1720	Golder	[illegible]	12/20/13 1720	TR
2	[illegible]	12/20/13 1758	TR			
3					12/24/13 1025	

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

Cooler Temperature(s) °C and Other Remarks:

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1/9/2014

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: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 5 of 5
Company: Golder Associates Inc.				Job #: 130 2086
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 Battery Plant - Frisco, TX	Project #: 60004794			
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)	Perform MS/MSD (Yes or No)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
2013-SDA-C05 (0-6)	12-20-13	1505	G	Solid			X			1	
2013-SDA-C05 (6-12)	12-20-13	1506	G	Solid			X			1	
2013-SDA-C06 (0-6)	12-20-13	1512	G	Solid			X			1	
2013-SDA-C06 (6-12)	12-20-13	1514	G	Solid			X			1	
Rinse Blank Hand Auger	12-20-13	1530	G	Solid				X		1	
Dup-4	12-20-13		G	Solid			X			1	
Dup-5	12-20-13		G	Solid			X			1	
			G	Solid						1	
			G	Solid						1	
			G	Solid						1	
			G	Solid						1	

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	Chris Trevino	12-20-13/1720	Golder	[illegible]	12/20/13 1720	[illegible]
2	[illegible]	12/20/13 1750	[illegible]			
3					12/24/13 1025	

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

12/9/2014

Login Sample Receipt Checklist

Client: Golder Associates Inc.

Job Number: 600-84629-3

Login Number: 84629

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	4.1/4.6/4.4/3.0
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	Sample Rinse Black marked Solid but is a Water .
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	False	Sample 2013-SDA-C05 (6-12) was received broken.
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: 600-84633-1
Client Project/Site: EXIDE Battery Plant - Frisco, TX
Revision: 1

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

Attn: Christina Higginbotham

Authorized for release by:
3/5/2014 5:00:01 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 600-84633-1 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 Battery Plant - Frisco, TX	Laboratory Job Number:	600-84633-1
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				
		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			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:	3/5/2014
Project Name:	EXIDE Battery Plant - Frisco, TX	Laboratory Job Number:	600-84633-1
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				
		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		
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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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:	3/5/2014
Project Name:	EXIDE Battery Plant - Frisco, TX	Laboratory Job Number:	600-84633-1
Reviewer Name:	Cathy Upton		

ER #[1]	Description
R05D	Method 6010B: The method blank for batch 124023 contained antimony 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 124050 contained Lead above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.
R07C	Method 6010B: 600-84633-16 MS failed the recovery criteria for the following analyte(s): Lead. Matrix interference is suspected. Method 6010B: 600-84633-16 MSD failed the recovery criteria for the following analyte(s): Lead. Matrix interference is suspected. Method 6010B: 600-84633-36 MS failed the recovery criteria for the following analyte(s): Cadmium, Lead. Matrix interference is suspected. Method 6010B: 600-84633-36 MSD failed the recovery criteria for the following analyte(s): Cadmium, Lead. Matrix interference is suspected. Method 6010B: 600-84633-41 MS failed the recovery criteria for the following analyte(s): Lead. Matrix interference is suspected. Method 6010B: 600-84633-41 MSD failed the recovery criteria for the following analyte(s): Lead. Matrix interference is suspected.
R07D	Method 6010B: 600-84633-16 MSD failed the RPD criteria for the following analyte(s): Cadmium, Lead. Non homogeneity of the sample is suspected. Method 6010B: 600-84633-36 MSD failed the RPD criteria for the following analyte(s): Cadmium, Lead. Non homogeneity of the sample is suspected. Method 6010B: 600-84633-41 MSD failed the RPD criteria for the following analyte(s): Lead. Non homogeneity of the sample is suspected.
R08C	Method 6010B: 600-84633-16 DU failed the RPD criteria for the following analyte(s): Selenium. Non homogeneity of the sample is suspected. Method 6010B: 600-84633-41 DU failed the RPD criteria for the following analyte(s): Cadmium, Lead. Non homogeneity of the sample is suspected. Method 6010B: 600-84633-36 DU failed the RPD criteria for the following analyte(s): Cadmium and Lead. Non homogeneity of the sample is suspected.
R10B	The lead SDLs were elevated in samples 84633-15, 16, 17, 18, 21, 22, 28 and 41 due to the dilutions necessary to bring this analyte to within linear dynamic range.
S02D	Cadmium was detected above the MDL in the CCB analyzed on 12/31/13 at 13:03. Since the concentration was below the MQL, 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.
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:	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:	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

Job ID: 600-84633-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative
600-84633-1

Comments

Please note that the designated MS/MSDs were reported on the 6-12 depths, so these samples were included in the report. The report was revised to include all 5 metals for sample 7. This final report replaces the one generated on 01/03/14.

Receipt

The samples were received on 12/24/2013 10:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 3.0º C, 4.1º C, 4.4º C and 4.6º C.

Method Summary

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-1

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 Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-84633-1	2013-SL-C12 (0-6)	Solid	12/19/13 08:42	12/24/13 10:25
600-84633-3	2013-SL-C13 (0-6)	Solid	12/19/13 08:56	12/24/13 10:25
600-84633-5	2013-SL-C16 (0-6)	Solid	12/19/13 09:12	12/24/13 10:25
600-84633-7	2013-SL-C15 (0-6)	Solid	12/19/13 09:33	12/24/13 10:25
600-84633-9	2013-SL-C14 (0-6)	Solid	12/19/13 09:54	12/24/13 10:25
600-84633-11	2013-NDA-C01 (0-6)	Solid	12/19/13 11:16	12/24/13 10:25
600-84633-13	2013-NDA-C02 (0-6)	Solid	12/19/13 11:40	12/24/13 10:25
600-84633-15	2013-NDA-C03 (0-6)	Solid	12/19/13 11:50	12/24/13 10:25
600-84633-16	2013-NDA-C03 (6-12)	Solid	12/19/13 11:52	12/24/13 10:25
600-84633-17	2013-NDA-C04 (0-6)	Solid	12/19/13 12:15	12/24/13 10:25
600-84633-19	2013-NDA-C05 (0-6)	Solid	12/19/13 12:37	12/24/13 10:25
600-84633-21	2013-NDA-C06 (0-6)	Solid	12/19/13 13:19	12/24/13 10:25
600-84633-23	2013-NDA-C07 (0-6)	Solid	12/19/13 13:28	12/24/13 10:25
600-84633-25	2013-NDA-C08 (0-6)	Solid	12/19/13 13:47	12/24/13 10:25
600-84633-27	2013-NDA-C09 (0-6)	Solid	12/19/13 14:03	12/24/13 10:25
600-84633-29	2013-NDA-C10 (0-6)	Solid	12/19/13 14:31	12/24/13 10:25
600-84633-31	2013-NDA-C11 (0-6)	Solid	12/19/13 14:46	12/24/13 10:25
600-84633-33	2013-NDA-C12 (0-6)	Solid	12/19/13 15:07	12/24/13 10:25
600-84633-35	2013-NDA-C13 (0-6)	Solid	12/19/13 15:23	12/24/13 10:25
600-84633-36	2013-NDA-C13 (6-12)	Solid	12/19/13 15:25	12/24/13 10:25
600-84633-37	2013-NDA-C14 (0-6)	Solid	12/19/13 15:44	12/24/13 10:25
600-84633-39	2013-NDA-C15 (0-6)	Solid	12/19/13 15:56	12/24/13 10:25
600-84633-41	DUP-2	Solid	12/19/13 00:00	12/24/13 10:25
600-84633-42	DUP-3	Solid	12/19/13 00:00	12/24/13 10:25
600-84633-43	Rinse Blank-Hand Auger	Water	12/19/13 16:20	12/24/13 10:25

Client Sample ID: 2013-SL-C12 (0-6)

Lab Sample ID: 600-84633-1
Date Collected: 12/19/13 08:42
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 82.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	1.71		0.292	0.0299	mg/Kg	☼	12/31/13 11:05	12/31/13 18:03	1
Lead	406		0.583	0.122	mg/Kg	☼	12/31/13 11:05	12/31/13 18:03	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		1.0	1.0	%			12/27/13 13:17	1
Percent Solids	82		1.0	1.0	%			12/27/13 13:17	1

Client Sample ID: 2013-SL-C13 (0-6)

Lab Sample ID: 600-84633-3
Date Collected: 12/19/13 08:56
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 78.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	3.76		0.318	0.0327	mg/Kg	☼	12/31/13 11:05	12/31/13 18:08	1
Lead	869		0.637	0.134	mg/Kg	☼	12/31/13 11:05	12/31/13 18:08	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			12/27/13 13:17	1
Percent Solids	79		1.0	1.0	%			12/27/13 13:17	1

Client Sample ID: 2013-SL-C16 (0-6)

Lab Sample ID: 600-84633-5
Date Collected: 12/19/13 09:12
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 77.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	2.13		0.297	0.0305	mg/Kg	☼	12/31/13 11:05	12/31/13 18:13	1
Lead	444		0.595	0.125	mg/Kg	☼	12/31/13 11:05	12/31/13 18:13	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			12/27/13 13:17	1
Percent Solids	78		1.0	1.0	%			12/27/13 13:17	1

Client Sample ID: 2013-SL-C15 (0-6)

Lab Sample ID: 600-84633-7
Date Collected: 12/19/13 09:33
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 82.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.756	J b	2.95	0.273	mg/Kg	☼	12/31/13 11:05	12/31/13 18:18	1
Arsenic	12.1		1.18	0.257	mg/Kg	☼	12/31/13 11:05	12/31/13 18:18	1
Cadmium	2.10		0.295	0.0303	mg/Kg	☼	12/31/13 11:05	12/31/13 18:18	1
Lead	476		0.590	0.124	mg/Kg	☼	12/31/13 11:05	12/31/13 18:18	1
Selenium	0.767	J	2.36	0.306	mg/Kg	☼	12/31/13 11:05	12/31/13 18:18	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	18		1.0	1.0	%			12/27/13 13:17	1

Client Sample ID: 2013-SL-C15 (0-6)

Lab Sample ID: 600-84633-7
Date Collected: 12/19/13 09:33
Matrix: Solid
Date Received: 12/24/13 10:25

General Chemistry (Continued)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	82		1.0	1.0	%			12/27/13 13:17	1

Client Sample ID: 2013-SL-C14 (0-6)

Lab Sample ID: 600-84633-9
Date Collected: 12/19/13 09:54
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 78.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	9.11		0.311	0.0319	mg/Kg	☼	12/31/13 11:05	12/31/13 18:23	1
Lead	2690		0.621	0.130	mg/Kg	☼	12/31/13 11:05	12/31/13 18:23	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			12/27/13 13:17	1
Percent Solids	79		1.0	1.0	%			12/27/13 13:17	1

Client Sample ID: 2013-NDA-C01 (0-6)

Lab Sample ID: 600-84633-11
Date Collected: 12/19/13 11:16
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 78.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.80		0.319	0.0327	mg/Kg	☼	12/31/13 11:05	12/31/13 18:35	1
Lead	1330		0.638	0.134	mg/Kg	☼	12/31/13 11:05	12/31/13 18:35	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			12/27/13 13:17	1
Percent Solids	78		1.0	1.0	%			12/27/13 13:17	1

Client Sample ID: 2013-NDA-C02 (0-6)

Lab Sample ID: 600-84633-13
Date Collected: 12/19/13 11:40
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 75.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	7.09		0.332	0.0341	mg/Kg	☼	12/31/13 11:05	12/31/13 18:40	1
Lead	1130		0.665	0.139	mg/Kg	☼	12/31/13 11:05	12/31/13 18:40	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	25		1.0	1.0	%			12/27/13 13:17	1
Percent Solids	75		1.0	1.0	%			12/27/13 13:17	1

Client Sample ID: 2013-NDA-C03 (0-6)

Lab Sample ID: 600-84633-15
Date Collected: 12/19/13 11:50
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 79.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	21.5		0.298	0.0305	mg/Kg	☼	12/31/13 11:05	12/31/13 18:45	1

Client Sample ID: 2013-NDA-C03 (0-6)

Lab Sample ID: 600-84633-15
Date Collected: 12/19/13 11:50
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 79.2

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	5260		5.96	1.25	mg/Kg	☼	12/31/13 11:05	01/02/14 11:27	10

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			12/27/13 13:17	1
Percent Solids	79		1.0	1.0	%			12/27/13 13:17	1

Client Sample ID: 2013-NDA-C03 (6-12)

Lab Sample ID: 600-84633-16
Date Collected: 12/19/13 11:52
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 80.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	4.49		0.303	0.0311	mg/Kg	☼	12/31/13 11:05	12/31/13 18:47	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	805		3.03	0.636	mg/Kg	☼	12/31/13 11:05	01/02/14 11:29	5

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	80		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C04 (0-6)

Lab Sample ID: 600-84633-17
Date Collected: 12/19/13 12:15
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 78.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	33.6		0.294	0.0302	mg/Kg	☼	12/31/13 11:05	12/31/13 18:57	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	4010		5.88	1.23	mg/Kg	☼	12/31/13 11:05	01/02/14 11:45	10

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	78		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C05 (0-6)

Lab Sample ID: 600-84633-19
Date Collected: 12/19/13 12:37
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 80.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	22.4		0.304	0.0312	mg/Kg	☼	12/31/13 11:05	12/31/13 19:09	1
Lead	2220		0.609	0.128	mg/Kg	☼	12/31/13 11:05	12/31/13 19:09	1

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-1

Client Sample ID: 2013-NDA-C05 (0-6)

Lab Sample ID: 600-84633-19
Matrix: Solid
Date Collected: 12/19/13 12:37
Date Received: 12/24/13 10:25

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	81		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C06 (0-6)

Lab Sample ID: 600-84633-21
Matrix: Solid
Date Collected: 12/19/13 13:19
Date Received: 12/24/13 10:25
Percent Solids: 78.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	15.6		0.299	0.0306	mg/Kg	☼	12/31/13 12:32	01/02/14 12:30	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	3180		5.97	1.25	mg/Kg	☼	12/31/13 12:32	01/02/14 14:49	10

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	78		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C07 (0-6)

Lab Sample ID: 600-84633-23
Matrix: Solid
Date Collected: 12/19/13 13:28
Date Received: 12/24/13 10:25
Percent Solids: 78.0

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	13.6		0.314	0.0322	mg/Kg	☼	12/31/13 12:32	01/02/14 12:35	1
Lead	2220		0.629	0.132	mg/Kg	☼	12/31/13 12:32	01/02/14 12:35	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	78		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C08 (0-6)

Lab Sample ID: 600-84633-25
Matrix: Solid
Date Collected: 12/19/13 13:47
Date Received: 12/24/13 10:25
Percent Solids: 79.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	2.63		0.301	0.0308	mg/Kg	☼	12/31/13 12:32	01/02/14 12:54	1
Lead	419		0.601	0.126	mg/Kg	☼	12/31/13 12:32	01/02/14 12:54	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	79		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C09 (0-6)

Lab Sample ID: 600-84633-27
Date Collected: 12/19/13 14:03
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 78.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	10.5		0.296	0.0303	mg/Kg	☼	12/31/13 12:32	01/02/14 12:59	1
Lead	1850		0.591	0.124	mg/Kg	☼	12/31/13 12:32	01/02/14 12:59	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	78		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C10 (0-6)

Lab Sample ID: 600-84633-29
Date Collected: 12/19/13 14:31
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 78.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.93		0.311	0.0319	mg/Kg	☼	12/31/13 12:32	01/02/14 13:05	1
Lead	683		0.622	0.130	mg/Kg	☼	12/31/13 12:32	01/02/14 13:05	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	79		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C11 (0-6)

Lab Sample ID: 600-84633-31
Date Collected: 12/19/13 14:46
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 74.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	9.42		0.317	0.0325	mg/Kg	☼	12/31/13 12:32	01/02/14 13:09	1
Lead	963		0.635	0.133	mg/Kg	☼	12/31/13 12:32	01/02/14 13:09	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	26		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	74		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C12 (0-6)

Lab Sample ID: 600-84633-33
Date Collected: 12/19/13 15:07
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 78.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	11.5		0.309	0.0317	mg/Kg	☼	12/31/13 12:32	01/02/14 13:21	1
Lead	1450		0.619	0.130	mg/Kg	☼	12/31/13 12:32	01/02/14 13:21	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	78		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C13 (0-6)

Lab Sample ID: 600-84633-35
Date Collected: 12/19/13 15:23
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 76.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	6.21		0.301	0.0309	mg/Kg	☼	12/31/13 12:32	01/02/14 13:26	1
Lead	997		0.602	0.126	mg/Kg	☼	12/31/13 12:32	01/02/14 13:26	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	76		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C13 (6-12)

Lab Sample ID: 600-84633-36
Date Collected: 12/19/13 15:25
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 76.2

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	2.08		0.309	0.0317	mg/Kg	☼	12/31/13 12:32	01/02/14 13:28	1
Lead	240		0.619	0.130	mg/Kg	☼	12/31/13 12:32	01/02/14 13:28	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	76		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C14 (0-6)

Lab Sample ID: 600-84633-37
Date Collected: 12/19/13 15:44
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 76.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	2.91		0.301	0.0309	mg/Kg	☼	12/31/13 12:32	01/02/14 13:38	1
Lead	435		0.603	0.126	mg/Kg	☼	12/31/13 12:32	01/02/14 13:38	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	77		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C15 (0-6)

Lab Sample ID: 600-84633-39
Date Collected: 12/19/13 15:56
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 77.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	7.45		0.314	0.0322	mg/Kg	☼	12/31/13 12:32	01/02/14 13:50	1
Lead	2160		0.627	0.132	mg/Kg	☼	12/31/13 12:32	01/02/14 14:31	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	23		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	77		1.0	1.0	%			12/26/13 14:58	1

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-1

Client Sample ID: DUP-2

Lab Sample ID: 600-84633-41
Date Collected: 12/19/13 00:00
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 80.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	4.88		0.302	0.0310	mg/Kg	☼	12/31/13 14:18	01/02/14 11:54	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	37100	b	12.1	2.53	mg/Kg	☼	12/31/13 14:18	01/02/14 14:40	20

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	80		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: DUP-3

Lab Sample ID: 600-84633-42
Date Collected: 12/19/13 00:00
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 78.8

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	9.81		0.302	0.0310	mg/Kg	☼	12/31/13 14:18	01/02/14 12:04	1
Lead	700	b	0.604	0.127	mg/Kg	☼	12/31/13 14:18	01/02/14 12:04	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	79		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: Rinse Blank-Hand Auger

Lab Sample ID: 600-84633-43
Date Collected: 12/19/13 16:20
Matrix: Water
Date Received: 12/24/13 10:25

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		12/30/13 08:50	12/31/13 12:55	1
Lead	0.00290	U	0.0100	0.00290	mg/L		12/30/13 08:50	12/31/13 12:55	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.
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
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
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 600-123903/1-A
Matrix: Water
Analysis Batch: 123949

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123903

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		12/30/13 08:50	12/30/13 15:44	1
Lead	0.00290	U	0.0100	0.00290	mg/L		12/30/13 08:50	12/30/13 15:44	1

Lab Sample ID: MB 600-123903/1-A
Matrix: Water
Analysis Batch: 124030

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 123903

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		12/30/13 08:50	12/31/13 12:21	1
Lead	0.00290	U	0.0100	0.00290	mg/L		12/30/13 08:50	12/31/13 12:21	1

Lab Sample ID: LCS 600-123903/2-A
Matrix: Water
Analysis Batch: 124030

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 123903

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	0.500	0.5323		mg/L		106	80 - 120
Lead	1.00	1.084		mg/L		108	80 - 120

Lab Sample ID: MB 600-124023/1-A
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124023

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.4150	J	2.50	0.232	mg/Kg		12/31/13 11:05	12/31/13 17:52	1
Arsenic	0.218	U	1.00	0.218	mg/Kg		12/31/13 11:05	12/31/13 17:52	1
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/31/13 11:05	12/31/13 17:52	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/31/13 11:05	12/31/13 17:52	1
Selenium	0.259	U	2.00	0.259	mg/Kg		12/31/13 11:05	12/31/13 17:52	1

Lab Sample ID: LCSSRM 600-124023/2-A
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124023

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	88.2	65.55		mg/Kg		74.3	45.4 - 231.3
Arsenic	99.6	97.33		mg/Kg		97.7	80.8 - 119.5
Cadmium	182	175.1		mg/Kg		96.2	81.9 - 118.1
Lead	115	109.7		mg/Kg		95.4	81.8 - 119.1
Selenium	150	152.4		mg/Kg		101.6	77.3 - 122.7

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

Lab Sample ID: 600-84633-16 MS
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: 2013-NDA-C03 (6-12)
Prep Type: Total/NA
Prep Batch: 124023

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	4.49		28.7	38.65		mg/Kg	☼	119	75 - 125

Lab Sample ID: 600-84633-16 MSD
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: 2013-NDA-C03 (6-12)
Prep Type: Total/NA
Prep Batch: 124023

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	4.49		29.3	30.55	N	mg/Kg	☼	89	75 - 125	23	20

Lab Sample ID: 600-84633-16 DU
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: 2013-NDA-C03 (6-12)
Prep Type: Total/NA
Prep Batch: 124023

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Antimony	3.52		3.020		mg/Kg	☼	15	20
Arsenic	17.4		18.37		mg/Kg	☼	5	20
Cadmium	4.49		5.404		mg/Kg	☼	18	20
Lead	830		776.0		mg/Kg	☼	7	20
Selenium	0.879		1.272	J	mg/Kg	☼	37	20

Lab Sample ID: 600-84633-36 MS
Matrix: Solid
Analysis Batch: 124095

Client Sample ID: 2013-NDA-C13 (6-12)
Prep Type: Total/NA
Prep Batch: 124037

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	2.08		30.8	24.67	N	mg/Kg	☼	73	75 - 125
Lead	240		61.5	362.9	N	mg/Kg	☼	199	75 - 125

Lab Sample ID: 600-84633-36 MSD
Matrix: Solid
Analysis Batch: 124095

Client Sample ID: 2013-NDA-C13 (6-12)
Prep Type: Total/NA
Prep Batch: 124037

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	2.08		30.4	16.66	N	mg/Kg	☼	48	75 - 125	39	20
Lead	240		60.8	282.7	N	mg/Kg	☼	70	75 - 125	25	20

Lab Sample ID: 600-84633-36 DU
Matrix: Solid
Analysis Batch: 124095

Client Sample ID: 2013-NDA-C13 (6-12)
Prep Type: Total/NA
Prep Batch: 124037

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cadmium	2.08		3.001	F	mg/Kg	☼	36	20
Lead	240		335.5	F	mg/Kg	☼	33	20

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

Lab Sample ID: MB 600-124050/1-A
Matrix: Solid
Analysis Batch: 124095

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124050

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/31/13 14:18	01/02/14 11:49	1
Lead	0.7250		0.500	0.105	mg/Kg		12/31/13 14:18	01/02/14 11:49	1

Lab Sample ID: LCSSRM 600-124050/2-A
Matrix: Solid
Analysis Batch: 124095

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124050

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	182	182.4		mg/Kg		100.2	81.9 - 118.1
Lead	115	110.4		mg/Kg		96.0	81.8 - 119.1

Lab Sample ID: 600-84633-41 MS
Matrix: Solid
Analysis Batch: 124095

Client Sample ID: DUP-2
Prep Type: Total/NA
Prep Batch: 124050

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	4.88		30.8	34.76		mg/Kg	☼	97	75 - 125

Lab Sample ID: 600-84633-41 MSD
Matrix: Solid
Analysis Batch: 124095

Client Sample ID: DUP-2
Prep Type: Total/NA
Prep Batch: 124050

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	4.88		28.5	31.70		mg/Kg	☼	94	75 - 125	9	20

Lab Sample ID: 600-84633-41 DU
Matrix: Solid
Analysis Batch: 124095

Client Sample ID: DUP-2
Prep Type: Total/NA
Prep Batch: 124050

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cadmium	4.88		3.853	F	mg/Kg	☼	24	20

Method: 6010B - Metals (ICP) - DL

Lab Sample ID: 600-84633-16 MS
Matrix: Solid
Analysis Batch: 124095

Client Sample ID: 2013-NDA-C03 (6-12)
Prep Type: Total/NA
Prep Batch: 124023

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead - DL	805		57.4	3527	4	mg/Kg	☼	4743	75 - 125

Lab Sample ID: 600-84633-16 MSD
Matrix: Solid
Analysis Batch: 124095

Client Sample ID: 2013-NDA-C03 (6-12)
Prep Type: Total/NA
Prep Batch: 124023

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead - DL	805		58.7	510.6	4 N	mg/Kg	☼	-501	75 - 125	151	20

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

Lab Sample ID: 600-84633-16 DU — **Client Sample ID: 2013-NDA-C03 (6-12)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 124095 — **Prep Batch: 124023**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead - DL	805		747.3		mg/Kg	☼	7	20

Lab Sample ID: 600-84633-41 MS — **Client Sample ID: DUP-2**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 124095 — **Prep Batch: 124050**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead - DL	37100	b	61.6	24760	4	mg/Kg	☼	-19988	75 - 125

Lab Sample ID: 600-84633-41 MSD — **Client Sample ID: DUP-2**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 124095 — **Prep Batch: 124050**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead - DL	37100	b	57.1	9727	4 N	mg/Kg	☼	-47910	75 - 125	87	20

Lab Sample ID: 600-84633-41 DU — **Client Sample ID: DUP-2**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 124095 — **Prep Batch: 124050**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Lead - DL	37100	b	22840	F	mg/Kg	☼	47	20

Method: Moisture - Percent Moisture

Lab Sample ID: 600-84633-17 DU — **Client Sample ID: 2013-NDA-C04 (0-6)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 123729

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	22		24		%		8	20
Percent Solids	78		76		%		2	20

Lab Sample ID: 600-84633-37 DU — **Client Sample ID: 2013-NDA-C14 (0-6)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 123729

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	23		23		%		1	20
Percent Solids	77		77		%		0.3	20

Lab Sample ID: 600-84633-1 DU — **Client Sample ID: 2013-SL-C12 (0-6)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 123832

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	18		18		%		3	20
Percent Solids	82		82		%		0.6	20

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-1

Lab Sample ID: 600-84633-11 DU
Matrix: Solid
Analysis Batch: 123832

Client Sample ID: 2013-NDA-C01 (0-6)
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	22			21		%				2	20
Percent Solids	78			79		%				0.6	20

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-1

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
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

Metals

Prep Batch: 123903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84633-43	Rinse Blank-Hand Auger	Total/NA	Water	3010A	
LCS 600-123903/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-123903/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 123949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 600-123903/1-A	Method Blank	Total/NA	Water	6010B	123903

Prep Batch: 124023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84633-1	2013-SL-C12 (0-6)	Total/NA	Solid	3050B	
600-84633-3	2013-SL-C13 (0-6)	Total/NA	Solid	3050B	
600-84633-5	2013-SL-C16 (0-6)	Total/NA	Solid	3050B	
600-84633-7	2013-SL-C15 (0-6)	Total/NA	Solid	3050B	
600-84633-9	2013-SL-C14 (0-6)	Total/NA	Solid	3050B	
600-84633-11	2013-NDA-C01 (0-6)	Total/NA	Solid	3050B	
600-84633-13	2013-NDA-C02 (0-6)	Total/NA	Solid	3050B	
600-84633-15 - DL	2013-NDA-C03 (0-6)	Total/NA	Solid	3050B	
600-84633-15	2013-NDA-C03 (0-6)	Total/NA	Solid	3050B	
600-84633-16 - DL	2013-NDA-C03 (6-12)	Total/NA	Solid	3050B	
600-84633-16	2013-NDA-C03 (6-12)	Total/NA	Solid	3050B	
600-84633-16 DU	2013-NDA-C03 (6-12)	Total/NA	Solid	3050B	
600-84633-16 DU - DL	2013-NDA-C03 (6-12)	Total/NA	Solid	3050B	
600-84633-16 MS	2013-NDA-C03 (6-12)	Total/NA	Solid	3050B	
600-84633-16 MS - DL	2013-NDA-C03 (6-12)	Total/NA	Solid	3050B	
600-84633-16 MSD - DL	2013-NDA-C03 (6-12)	Total/NA	Solid	3050B	
600-84633-16 MSD	2013-NDA-C03 (6-12)	Total/NA	Solid	3050B	
600-84633-17 - DL	2013-NDA-C04 (0-6)	Total/NA	Solid	3050B	
600-84633-17	2013-NDA-C04 (0-6)	Total/NA	Solid	3050B	
600-84633-19	2013-NDA-C05 (0-6)	Total/NA	Solid	3050B	
LCSSRM 600-124023/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-124023/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 124030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84633-43	Rinse Blank-Hand Auger	Total/NA	Water	6010B	123903
LCS 600-123903/2-A	Lab Control Sample	Total/NA	Water	6010B	123903
MB 600-123903/1-A	Method Blank	Total/NA	Water	6010B	123903

Prep Batch: 124037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84633-21 - DL	2013-NDA-C06 (0-6)	Total/NA	Solid	3050B	
600-84633-21	2013-NDA-C06 (0-6)	Total/NA	Solid	3050B	
600-84633-23	2013-NDA-C07 (0-6)	Total/NA	Solid	3050B	
600-84633-25	2013-NDA-C08 (0-6)	Total/NA	Solid	3050B	
600-84633-27	2013-NDA-C09 (0-6)	Total/NA	Solid	3050B	
600-84633-29	2013-NDA-C10 (0-6)	Total/NA	Solid	3050B	
600-84633-31	2013-NDA-C11 (0-6)	Total/NA	Solid	3050B	
600-84633-33	2013-NDA-C12 (0-6)	Total/NA	Solid	3050B	
600-84633-35	2013-NDA-C13 (0-6)	Total/NA	Solid	3050B	
600-84633-36	2013-NDA-C13 (6-12)	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 124037 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84633-36 DU	2013-NDA-C13 (6-12)	Total/NA	Solid	3050B	
600-84633-36 MS	2013-NDA-C13 (6-12)	Total/NA	Solid	3050B	
600-84633-36 MSD	2013-NDA-C13 (6-12)	Total/NA	Solid	3050B	
600-84633-37	2013-NDA-C14 (0-6)	Total/NA	Solid	3050B	
600-84633-39	2013-NDA-C15 (0-6)	Total/NA	Solid	3050B	

Analysis Batch: 124038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84633-1	2013-SL-C12 (0-6)	Total/NA	Solid	6010B	124023
600-84633-3	2013-SL-C13 (0-6)	Total/NA	Solid	6010B	124023
600-84633-5	2013-SL-C16 (0-6)	Total/NA	Solid	6010B	124023
600-84633-7	2013-SL-C15 (0-6)	Total/NA	Solid	6010B	124023
600-84633-9	2013-SL-C14 (0-6)	Total/NA	Solid	6010B	124023
600-84633-11	2013-NDA-C01 (0-6)	Total/NA	Solid	6010B	124023
600-84633-13	2013-NDA-C02 (0-6)	Total/NA	Solid	6010B	124023
600-84633-15	2013-NDA-C03 (0-6)	Total/NA	Solid	6010B	124023
600-84633-16	2013-NDA-C03 (6-12)	Total/NA	Solid	6010B	124023
600-84633-16 DU	2013-NDA-C03 (6-12)	Total/NA	Solid	6010B	124023
600-84633-16 MS	2013-NDA-C03 (6-12)	Total/NA	Solid	6010B	124023
600-84633-16 MSD	2013-NDA-C03 (6-12)	Total/NA	Solid	6010B	124023
600-84633-17	2013-NDA-C04 (0-6)	Total/NA	Solid	6010B	124023
600-84633-19	2013-NDA-C05 (0-6)	Total/NA	Solid	6010B	124023
LCSSRM 600-124023/2-A	Lab Control Sample	Total/NA	Solid	6010B	124023
MB 600-124023/1-A	Method Blank	Total/NA	Solid	6010B	124023

Prep Batch: 124050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84633-41	DUP-2	Total/NA	Solid	3050B	
600-84633-41 - DL	DUP-2	Total/NA	Solid	3050B	
600-84633-41 DU - DL	DUP-2	Total/NA	Solid	3050B	
600-84633-41 DU	DUP-2	Total/NA	Solid	3050B	
600-84633-41 MS - DL	DUP-2	Total/NA	Solid	3050B	
600-84633-41 MS	DUP-2	Total/NA	Solid	3050B	
600-84633-41 MSD	DUP-2	Total/NA	Solid	3050B	
600-84633-41 MSD - DL	DUP-2	Total/NA	Solid	3050B	
600-84633-42	DUP-3	Total/NA	Solid	3050B	
LCSSRM 600-124050/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-124050/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 124095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84633-15 - DL	2013-NDA-C03 (0-6)	Total/NA	Solid	6010B	124023
600-84633-16 - DL	2013-NDA-C03 (6-12)	Total/NA	Solid	6010B	124023
600-84633-16 DU - DL	2013-NDA-C03 (6-12)	Total/NA	Solid	6010B	124023
600-84633-16 MS - DL	2013-NDA-C03 (6-12)	Total/NA	Solid	6010B	124023
600-84633-16 MSD - DL	2013-NDA-C03 (6-12)	Total/NA	Solid	6010B	124023
600-84633-17 - DL	2013-NDA-C04 (0-6)	Total/NA	Solid	6010B	124023
600-84633-21	2013-NDA-C06 (0-6)	Total/NA	Solid	6010B	124037
600-84633-21 - DL	2013-NDA-C06 (0-6)	Total/NA	Solid	6010B	124037
600-84633-23	2013-NDA-C07 (0-6)	Total/NA	Solid	6010B	124037
600-84633-25	2013-NDA-C08 (0-6)	Total/NA	Solid	6010B	124037

Metals (Continued)

Analysis Batch: 124095 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84633-27	2013-NDA-C09 (0-6)	Total/NA	Solid	6010B	124037
600-84633-29	2013-NDA-C10 (0-6)	Total/NA	Solid	6010B	124037
600-84633-31	2013-NDA-C11 (0-6)	Total/NA	Solid	6010B	124037
600-84633-33	2013-NDA-C12 (0-6)	Total/NA	Solid	6010B	124037
600-84633-35	2013-NDA-C13 (0-6)	Total/NA	Solid	6010B	124037
600-84633-36	2013-NDA-C13 (6-12)	Total/NA	Solid	6010B	124037
600-84633-36 DU	2013-NDA-C13 (6-12)	Total/NA	Solid	6010B	124037
600-84633-36 MS	2013-NDA-C13 (6-12)	Total/NA	Solid	6010B	124037
600-84633-36 MSD	2013-NDA-C13 (6-12)	Total/NA	Solid	6010B	124037
600-84633-37	2013-NDA-C14 (0-6)	Total/NA	Solid	6010B	124037
600-84633-39	2013-NDA-C15 (0-6)	Total/NA	Solid	6010B	124037
600-84633-39	2013-NDA-C15 (0-6)	Total/NA	Solid	6010B	124037
600-84633-41	DUP-2	Total/NA	Solid	6010B	124050
600-84633-41 - DL	DUP-2	Total/NA	Solid	6010B	124050
600-84633-41 DU	DUP-2	Total/NA	Solid	6010B	124050
600-84633-41 DU - DL	DUP-2	Total/NA	Solid	6010B	124050
600-84633-41 MS	DUP-2	Total/NA	Solid	6010B	124050
600-84633-41 MS - DL	DUP-2	Total/NA	Solid	6010B	124050
600-84633-41 MSD	DUP-2	Total/NA	Solid	6010B	124050
600-84633-41 MSD - DL	DUP-2	Total/NA	Solid	6010B	124050
600-84633-42	DUP-3	Total/NA	Solid	6010B	124050
LCSSRM 600-124050/2-A	Lab Control Sample	Total/NA	Solid	6010B	124050
MB 600-124050/1-A	Method Blank	Total/NA	Solid	6010B	124050

General Chemistry

Analysis Batch: 123729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84633-16	2013-NDA-C03 (6-12)	Total/NA	Solid	Moisture	
600-84633-16 MS	2013-NDA-C03 (6-12)	Total/NA	Solid	Moisture	
600-84633-16 MSD	2013-NDA-C03 (6-12)	Total/NA	Solid	Moisture	
600-84633-17	2013-NDA-C04 (0-6)	Total/NA	Solid	Moisture	
600-84633-17 DU	2013-NDA-C04 (0-6)	Total/NA	Solid	Moisture	
600-84633-19	2013-NDA-C05 (0-6)	Total/NA	Solid	Moisture	
600-84633-21	2013-NDA-C06 (0-6)	Total/NA	Solid	Moisture	
600-84633-23	2013-NDA-C07 (0-6)	Total/NA	Solid	Moisture	
600-84633-25	2013-NDA-C08 (0-6)	Total/NA	Solid	Moisture	
600-84633-27	2013-NDA-C09 (0-6)	Total/NA	Solid	Moisture	
600-84633-29	2013-NDA-C10 (0-6)	Total/NA	Solid	Moisture	
600-84633-31	2013-NDA-C11 (0-6)	Total/NA	Solid	Moisture	
600-84633-33	2013-NDA-C12 (0-6)	Total/NA	Solid	Moisture	
600-84633-35	2013-NDA-C13 (0-6)	Total/NA	Solid	Moisture	
600-84633-36	2013-NDA-C13 (6-12)	Total/NA	Solid	Moisture	
600-84633-36 MS	2013-NDA-C13 (6-12)	Total/NA	Solid	Moisture	
600-84633-36 MSD	2013-NDA-C13 (6-12)	Total/NA	Solid	Moisture	
600-84633-37	2013-NDA-C14 (0-6)	Total/NA	Solid	Moisture	
600-84633-37 DU	2013-NDA-C14 (0-6)	Total/NA	Solid	Moisture	
600-84633-39	2013-NDA-C15 (0-6)	Total/NA	Solid	Moisture	
600-84633-41	DUP-2	Total/NA	Solid	Moisture	
600-84633-42	DUP-3	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 123832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84633-1	2013-SL-C12 (0-6)	Total/NA	Solid	Moisture	
600-84633-1 DU	2013-SL-C12 (0-6)	Total/NA	Solid	Moisture	
600-84633-3	2013-SL-C13 (0-6)	Total/NA	Solid	Moisture	
600-84633-5	2013-SL-C16 (0-6)	Total/NA	Solid	Moisture	
600-84633-7	2013-SL-C15 (0-6)	Total/NA	Solid	Moisture	
600-84633-9	2013-SL-C14 (0-6)	Total/NA	Solid	Moisture	
600-84633-11	2013-NDA-C01 (0-6)	Total/NA	Solid	Moisture	
600-84633-11 DU	2013-NDA-C01 (0-6)	Total/NA	Solid	Moisture	
600-84633-13	2013-NDA-C02 (0-6)	Total/NA	Solid	Moisture	
600-84633-15	2013-NDA-C03 (0-6)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-1

Client Sample ID: 2013-SL-C12 (0-6)

Lab Sample ID: 600-84633-1

Date Collected: 12/19/13 08:42
Matrix: Solid
Date Received: 12/24/13 10:25
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	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	124038	12/31/13 18:03	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123832	12/27/13 13:17	AYS	TAL HOU

Client Sample ID: 2013-SL-C13 (0-6)

Lab Sample ID: 600-84633-3

Date Collected: 12/19/13 08:56
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.00 g	50 mL	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	124038	12/31/13 18:08	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123832	12/27/13 13:17	AYS	TAL HOU

Client Sample ID: 2013-SL-C16 (0-6)

Lab Sample ID: 600-84633-5

Date Collected: 12/19/13 09:12
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 77.9

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	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	124038	12/31/13 18:13	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123832	12/27/13 13:17	AYS	TAL HOU

Client Sample ID: 2013-SL-C15 (0-6)

Lab Sample ID: 600-84633-7

Date Collected: 12/19/13 09:33
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 82.2

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	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	124038	12/31/13 18:18	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123832	12/27/13 13:17	AYS	TAL HOU

Client Sample ID: 2013-SL-C14 (0-6)

Lab Sample ID: 600-84633-9

Date Collected: 12/19/13 09:54
Matrix: Solid
Date Received: 12/24/13 10:25
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	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	124038	12/31/13 18:23	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123832	12/27/13 13:17	AYS	TAL HOU

Client Sample ID: 2013-NDA-C01 (0-6)

Lab Sample ID: 600-84633-11

Date Collected: 12/19/13 11:16
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.00 g	50 mL	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	124038	12/31/13 18:35	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123832	12/27/13 13:17	AYS	TAL HOU

Client Sample ID: 2013-NDA-C02 (0-6)

Lab Sample ID: 600-84633-13

Date Collected: 12/19/13 11:40
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.00 g	50 mL	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.00 g	50 mL	124038	12/31/13 18:40	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123832	12/27/13 13:17	AYS	TAL HOU

Client Sample ID: 2013-NDA-C03 (0-6)

Lab Sample ID: 600-84633-15

Date Collected: 12/19/13 11:50
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.06 g	50 mL	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	124038	12/31/13 18:45	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.06 g	50 mL	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B	DL	10	1.06 g	50 mL	124095	01/02/14 11:27	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123832	12/27/13 13:17	AYS	TAL HOU

Client Sample ID: 2013-NDA-C03 (6-12)

Lab Sample ID: 600-84633-16

Date Collected: 12/19/13 11:52
Matrix: Solid
Date Received: 12/24/13 10:25
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	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	124038	12/31/13 18:47	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.03 g	50 mL	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B	DL	5	1.03 g	50 mL	124095	01/02/14 11:29	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C04 (0-6)

Lab Sample ID: 600-84633-17

Date Collected: 12/19/13 12:15
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.09 g	50 mL	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	124038	12/31/13 18:57	DCL	TAL HOU

Client Sample ID: 2013-NDA-C04 (0-6)

Lab Sample ID: 600-84633-17

Date Collected: 12/19/13 12:15
Matrix: Solid
Date Received: 12/24/13 10:25
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	DL		1.09 g	50 mL	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B	DL	10	1.09 g	50 mL	124095	01/02/14 11:45	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C05 (0-6)

Lab Sample ID: 600-84633-19

Date Collected: 12/19/13 12:37
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.02 g	50 mL	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	124038	12/31/13 19:09	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C06 (0-6)

Lab Sample ID: 600-84633-21

Date Collected: 12/19/13 13:19
Matrix: Solid
Date Received: 12/24/13 10:25
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	DL		1.07 g	50 mL	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B	DL	10	1.07 g	50 mL	124095	01/02/14 14:49	DCL	TAL HOU
Total/NA	Prep	3050B			1.07 g	50 mL	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	124095	01/02/14 12:30	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C07 (0-6)

Lab Sample ID: 600-84633-23

Date Collected: 12/19/13 13:28
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.02 g	50 mL	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	124095	01/02/14 12:35	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C08 (0-6)

Lab Sample ID: 600-84633-25

Date Collected: 12/19/13 13:47
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.05 g	50 mL	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	124095	01/02/14 12:54	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C09 (0-6) — **Lab Sample ID: 600-84633-27**
Date Collected: 12/19/13 14:03 — **Matrix: Solid**
Date Received: 12/24/13 10:25 — **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			1.08 g	50 mL	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	124095	01/02/14 12:59	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C10 (0-6) — **Lab Sample ID: 600-84633-29**
Date Collected: 12/19/13 14:31 — **Matrix: Solid**
Date Received: 12/24/13 10:25 — **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			1.02 g	50 mL	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	124095	01/02/14 13:05	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C11 (0-6) — **Lab Sample ID: 600-84633-31**
Date Collected: 12/19/13 14:46 — **Matrix: Solid**
Date Received: 12/24/13 10:25 — **Percent Solids: 74.3**

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	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	124095	01/02/14 13:09	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C12 (0-6) — **Lab Sample ID: 600-84633-33**
Date Collected: 12/19/13 15:07 — **Matrix: Solid**
Date Received: 12/24/13 10:25 — **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			1.03 g	50 mL	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	124095	01/02/14 13:21	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C13 (0-6) — **Lab Sample ID: 600-84633-35**
Date Collected: 12/19/13 15:23 — **Matrix: Solid**
Date Received: 12/24/13 10:25 — **Percent Solids: 76.1**

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	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	124095	01/02/14 13:26	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C13 (6-12)

Lab Sample ID: 600-84633-36

Date Collected: 12/19/13 15:25
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.06 g	50 mL	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.06 g	50 mL	124095	01/02/14 13:28	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C14 (0-6)

Lab Sample ID: 600-84633-37

Date Collected: 12/19/13 15:44
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.08 g	50 mL	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	124095	01/02/14 13:38	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C15 (0-6)

Lab Sample ID: 600-84633-39

Date Collected: 12/19/13 15:56
Matrix: Solid
Date Received: 12/24/13 10:25
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	Analysis	6010B		1	1.03 g	50 mL	124095	01/02/14 13:50	DCL	TAL HOU
Total/NA	Prep	3050B			1.03 g	50 mL	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	124095	01/02/14 14:31	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: DUP-2

Lab Sample ID: 600-84633-41

Date Collected: 12/19/13 00:00
Matrix: Solid
Date Received: 12/24/13 10:25
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	DL		1.03 g	50 mL	124050	12/31/13 14:18	NER	TAL HOU
Total/NA	Analysis	6010B	DL	20	1.03 g	50 mL	124095	01/02/14 14:40	DCL	TAL HOU
Total/NA	Prep	3050B			1.03 g	50 mL	124050	12/31/13 14:18	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	124095	01/02/14 11:54	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: DUP-3

Lab Sample ID: 600-84633-42

Date Collected: 12/19/13 00:00
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.05 g	50 mL	124050	12/31/13 14:18	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	124095	01/02/14 12:04	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-1

Client Sample ID: Rinse Blank-Hand Auger
Date Collected: 12/19/13 16:20
Date Received: 12/24/13 10:25

Lab Sample ID: 600-84633-43
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	123903	12/30/13 08:50	NER	TAL HOU
Total/NA	Analysis	6010B		1	50 mL	50 mL	124030	12/31/13 12:55	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 Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-1

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

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: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 1 of 5
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 Battery Plant - Frisco, TX	Project #: 60004794			
Site:	SSOW#:			

Analysis Requested

600-84633 Chain of Custody

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)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
2013-SL-C12(0-6)	12-19-13	0842	G	Solid			X			1	
2013-SL-C12 (6-12)	12-19-13	0846	G	Solid			X			1	
2013-SL-C13 (0-6)	12-19-13	0856	G	Solid			X			1	
2013-SL-C13 (6-12)	12-19-13	0858	G	Solid			X			1	
2013-SL-C16 (0-6)	12-19-13	0912	G	Solid			X			1	
2013-SL-C16 (6-12)	12-19-13	0920	G	Solid			X			1	
2013-SL-C15 (0-6)	12-19-13	0933	G	Solid			X			1	
2013-SL-C15 (6-12)	12-19-13	0935	G	Solid			X			1	
2013-SL-C14 (0-6)	12-19-13	0954	G	Solid			X			1	
2013-SL-C14 (6-12)	12-19-13	0956	G	Solid			X			1	
2013-NDA-C01 (0-6)	12-19-13	1116	G	Solid			X			1	

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	Chris Trevino	12-20-13/1530	Golder	AMcGinnes	12/20/13 1532	TAL
2	AMcGinnes	12/20/13 1750	TAL	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 12/24/13 1025	Company

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

Cooler Temperature(s) °C and Other Remarks:

3/5/2014

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

Chain of Custody Record

TestAmerica

3/5/2014

Client Information	Sampler: Chris Trevino	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 2 of 5
Company: Golder Associates Inc.				Job #: 13020086

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 Battery Plant - Frisco, TX	Project #: 60004794		
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)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	N	X	
2013 - NDA - C01 (6-12)	12-19-13	1120	G	Solid			X			1	
2013 - NDA - C02 (0-6)	12-19-13	1140	G	Solid			X			1	
2013 - NDA - C02 (6-12)	12-19-13	1142	G	Solid			X			1	
2013 - NDA - C03 (0-6)	12-19-13	1150	G	Solid			X			1	
2013 - NDA - C03 (6-12)	12-19-13	1152	G	Solid			X			1	
2013 - NDA - C03 (6-12) MS	12-19-13	1152	G	Solid		X	X			1	
2013 - NDA - C03 (6-12) MSD	12-19-13	1152	G	Solid		X	X			1	
2013 - NDA - C04 (0-6)	12-19-13	1215	G	Solid			X			1	
2013 - NDA - C04 (6-12)	12-19-13	1217	G	Solid			X			1	
2013 - NDA - C05 (0-6)	12-19-13	1237	G	Solid			X			1	
2013 - NDA - C05 (6-12)	12-19-13	1253	G	Solid			X			1	

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
Chris Trevino	12-20-13 1530	Golder	[signature]	12/20/13 1530	TAL
[signature]	12/20/13 1750	TAL			
			[signature]	1025 12/24/13	

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

3/5/2014

Client Information	Sampler: Chris Trevino	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0570	E-Mail: dean.joiner@testamericainc.com		Page: Page 3 OF 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 Battery Plant - Frisco, TX	Project #: 60004794			
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)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
2013-NDA-C06 (0-6)	12-19-13	1319	G	Solid			X			1	
2013-NDA-C06 (6-12)	12-19-13	1320	G	Solid			X			1	
2013-NDA-C07 (0-6)	12-19-13	1328	G	Solid			X			1	
2013-NDA-C07 (6-12)	12-19-13	1331	G	Solid			X			1	
2013-NDA-C08 (0-6)	12-19-13	1347	G	Solid			X			1	
2013-NDA-C08 (6-12)	12-19-13	1348	G	Solid			X			1	
2013-NDA-C09 (0-6)	12-19-13	1403	G	Solid			X			1	
2013-NDA-C09 (6-12)	12-19-13	1404	G	Solid			X			1	
2013-NDA-C10 (0-6)	12-19-13	1431	G	Solid			X			1	
2013-NDA-C10 (6-12)	12-19-13	1432	G	Solid			X			1	
2013-NDA-C11 (0-6)	12-19-13	1446	G	Solid			X			1	

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	Chris Trevino	12-20-13 1530	Golder	[signature]	12/20/13 1530	TAL
2	[signature]	12/20/13 1758	TAL	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 12/24/13 1025	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

3/5/2014

Client Information	Sampler: Chris Trevino	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 1302086 4 of 5
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 Battery Plant - Frisco, TX	Project #: 60004794
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)	Perform MS/MSD (Yes or No)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
2013-NDA-C11 (6-12)	12-19-13	1450	G	Solid			X			1	
2013-NDA-C12 (0-6)	12-19-13	1507	G	Solid			X			1	
2013-NDA-C12 (6-12)	12-19-13	1509	G	Solid			X			1	
2013-NDA-C13 (0-6)	12-19-13	1523	G	Solid			X			1	
2013-NDA-C13 (6-12)	12-19-13	1525	G	Solid			X			1	
2013-NDA-C13 (6-12) MS	12-19-13	1525	G	Solid		X	X			1	
2013-NDA-C13 (6-12) MSD	12-19-13	1525	G	Solid		X	X			1	
2013-NDA-C14 (0-6)	12-19-13	1544	G	Solid			X			1	
2013-NDA-C14 (6-12)	12-19-13	1546	G	Solid			X			1	
2013-NDA-C15 (0-6)	12-19-13	1556	G	Solid			X			1	
2013-NDA-C15 (6-12)	12-19-13	1558	G	Solid			X			1	

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: Chris Trevino	Date/Time: 12-20-13 / 1530	Company: Golder	Received by: [signature]	Date/Time: 12/20/13 1530	Company: ~~1530~~ TAL
Relinquished by: [signature]	Date/Time: 12/20/13 1750	Company: TAL	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 12/24/13 1025	Company

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

Cooler Temperature(s) °C and Other Remarks: 6

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

Chain of Custody Record

TestAmerica

3/5/2014

Client Information	Sampler: Chris Trevino	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 5 of 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				Other:
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: EXIDE Battery Plant - Frisco, TX	Project #: 60004794			
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)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	6010B - Cd,Pb	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	D		
DUP-2	12-19-13		G	Solid			X				1	
DUP-3	12-19-13		G	Solid			X				1	
Rinse Blank - Hand Auger	12-19-13	1620	G	W ~~Solid~~						X	1	
			G	Solid							1	
			G	Solid							1	
			G	Solid							1	
			G	Solid							1	
			G	Solid							1	
			G	Solid							1	
			G	Solid							1	
			G	Solid							1	

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	Chris Trevino	12-20-13 1530	Golder	[signature]	12/20/13 1530	TAL
2	[signature]	12/20/13 1750	TAL	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by: [signature] 12/24/13	Date/Time: 1025	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**

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: 600-84633-1

Login Number: 84633

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	4.1/4.6/4.4/3.0
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.	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: 600-84633-3
Client Project/Site: EXIDE Battery Plant - Frisco, TX

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

Attn: Christina Higginbotham

Authorized for release by:
1/29/2014 11:16:25 AM
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 600-84633-3 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.

Sophia Shah		1/29/2014
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:	1/29/2014
Project Name:	EXIDE Battery Plant - Frisco, TX	Laboratory Job Number:	600-84633-3
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			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:	1/29/2014
Project Name:	EXIDE Battery Plant - Frisco, TX	Laboratory Job Number:	600-84633-3
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				

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Laboratory Review Checklist: Exception Reports - Page 4 of 4

Laboratory Name:	TestAmerica Houston	LRC Date:	1/29/2014
Project Name:	EXIDE Battery Plant - Frisco, TX	Laboratory Job Number:	600-84633-3
Reviewer Name:	Dean A Joiner		

ER #[1]	Description
R05D	Method 6010B: The method blank for batch 124037 contained Lead above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.
R07C	Method 6010B: 600-84633-20 MS and MSD failed the recovery criteria for the following analyte(s): Lead. Matrix interference is suspected. Method 6010B: 600-84633-24 MS and MSD failed the recovery criteria for the following analyte(s): Lead. Matrix interference is suspected.
R07D	Method 6010B: 600-84633-20 DU failed the RPD criteria for the following analyte(s): Cadmium. Matrix interference is suspected. Method 6010B: 600-84633-20 MSD failed the RPD criteria for the following analyte(s): Lead. Matrix interference is suspected.
R08C	Method 6010B: The matrix duplicate %RPD for Cadmium and Lead associated with batch 124037 was outside the control limits due to non homogeneity of the sample.

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:	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

Method Summary

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-3

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 Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-84633-2	2013-SL-C12 (6-12)	Solid	12/19/13 08:46	12/24/13 10:25
600-84633-4	2013-SL-C13 (6-12)	Solid	12/19/13 08:58	12/24/13 10:25
600-84633-6	2013-SL-C16 (6-12)	Solid	12/19/13 09:20	12/24/13 10:25
600-84633-8	2013-SL-C15 (6-12)	Solid	12/19/13 09:35	12/24/13 10:25
600-84633-10	2013-SL-C14 (6-12)	Solid	12/19/13 09:56	12/24/13 10:25
600-84633-12	2013-NDA-C01 (6-12)	Solid	12/19/13 11:20	12/24/13 10:25
600-84633-14	2013-NDA-C02 (6-12)	Solid	12/19/13 11:42	12/24/13 10:25
600-84633-18	2013-NDA-C04 (6-12)	Solid	12/19/13 12:17	12/24/13 10:25
600-84633-20	2013-NDA-C05 (6-12)	Solid	12/19/13 12:53	12/24/13 10:25
600-84633-22	2013-NDA-C06 (6-12)	Solid	12/19/13 13:20	12/24/13 10:25
600-84633-24	2013-NDA-C07 (6-12)	Solid	12/19/13 13:31	12/24/13 10:25
600-84633-26	2013-NDA-C08 (6-12)	Solid	12/19/13 13:48	12/24/13 10:25
600-84633-28	2013-NDA-C09 (6-12)	Solid	12/19/13 14:04	12/24/13 10:25
600-84633-30	2013-NDA-C10 (6-12)	Solid	12/19/13 14:32	12/24/13 10:25
600-84633-32	2013-NDA-C11 (6-12)	Solid	12/19/13 14:50	12/24/13 10:25
600-84633-34	2013-NDA-C12 (6-12)	Solid	12/19/13 15:09	12/24/13 10:25
600-84633-38	2013-NDA-C14 (6-12)	Solid	12/19/13 15:46	12/24/13 10:25
600-84633-40	2013-NDA-C15 (6-12)	Solid	12/19/13 15:58	12/24/13 10:25

Client Sample ID: 2013-SL-C12 (6-12)

Lab Sample ID: 600-84633-2
Date Collected: 12/19/13 08:46
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 79.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	240		0.603	0.127	mg/Kg	☼	12/31/13 11:05	12/31/13 18:05	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			12/27/13 13:17	1
Percent Solids	80		1.0	1.0	%			12/27/13 13:17	1

Client Sample ID: 2013-SL-C13 (6-12)

Lab Sample ID: 600-84633-4
Date Collected: 12/19/13 08:58
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 80.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	315		0.582	0.122	mg/Kg	☼	12/31/13 11:05	12/31/13 18:11	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			12/27/13 13:17	1
Percent Solids	80		1.0	1.0	%			12/27/13 13:17	1

Client Sample ID: 2013-SL-C16 (6-12)

Lab Sample ID: 600-84633-6
Date Collected: 12/19/13 09:20
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 75.9

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	39.3		0.646	0.135	mg/Kg	☼	12/31/13 11:05	12/31/13 18:15	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24		1.0	1.0	%			12/27/13 13:17	1
Percent Solids	76		1.0	1.0	%			12/27/13 13:17	1

Client Sample ID: 2013-SL-C15 (6-12)

Lab Sample ID: 600-84633-8
Date Collected: 12/19/13 09:35
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 77.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	63.6		0.638	0.134	mg/Kg	☼	12/31/13 11:05	12/31/13 18:20	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			12/27/13 13:17	1
Percent Solids	78		1.0	1.0	%			12/27/13 13:17	1

Client Sample ID: 2013-SL-C14 (6-12)

Lab Sample ID: 600-84633-10
Date Collected: 12/19/13 09:56
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 80.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	407		0.612	0.128	mg/Kg	☼	12/31/13 11:05	12/31/13 18:25	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			12/27/13 13:17	1
Percent Solids	80		1.0	1.0	%			12/27/13 13:17	1

Client Sample ID: 2013-NDA-C01 (6-12)

Lab Sample ID: 600-84633-12
Date Collected: 12/19/13 11:20
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 81.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	446		0.605	0.127	mg/Kg	☼	12/31/13 11:05	12/31/13 18:37	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			12/27/13 13:17	1
Percent Solids	81		1.0	1.0	%			12/27/13 13:17	1

Client Sample ID: 2013-NDA-C02 (6-12)

Lab Sample ID: 600-84633-14
Date Collected: 12/19/13 11:42
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 77.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	190		0.613	0.129	mg/Kg	☼	12/31/13 11:05	12/31/13 18:42	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			12/27/13 13:17	1
Percent Solids	78		1.0	1.0	%			12/27/13 13:17	1

Client Sample ID: 2013-NDA-C04 (6-12)

Lab Sample ID: 600-84633-18
Date Collected: 12/19/13 12:17
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 81.4

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	2.43		0.298	0.0306	mg/Kg	☼	12/31/13 11:05	12/31/13 19:07	1

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	14700		11.9	2.50	mg/Kg	☼	12/31/13 11:05	01/02/14 11:47	20

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	81		1.0	1.0	%			12/26/13 14:58	1

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-3

Client Sample ID: 2013-NDA-C05 (6-12)

Lab Sample ID: 600-84633-20
Date Collected: 12/19/13 12:53
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 82.6

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	845		0.555	0.116	mg/Kg	☼	12/31/13 11:05	12/31/13 19:12	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	83		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C06 (6-12)

Lab Sample ID: 600-84633-22
Date Collected: 12/19/13 13:20
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 82.6

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	7960	b	11.9	2.49	mg/Kg	☼	12/31/13 12:32	01/02/14 14:51	20

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	17		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	83		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C07 (6-12)

Lab Sample ID: 600-84633-24
Date Collected: 12/19/13 13:31
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 79.7

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	713	b	0.581	0.122	mg/Kg	☼	12/31/13 12:32	01/02/14 12:37	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	80		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C08 (6-12)

Lab Sample ID: 600-84633-26
Date Collected: 12/19/13 13:48
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 80.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	384	b	0.597	0.125	mg/Kg	☼	12/31/13 12:32	01/02/14 12:57	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	81		1.0	1.0	%			12/26/13 14:58	1

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-3

Client Sample ID: 2013-NDA-C09 (6-12)

Lab Sample ID: 600-84633-28
Date Collected: 12/19/13 14:04
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 81.4

Method: 6010B - Metals (ICP) - DL

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	46000	b	11.5	2.41	mg/Kg	☼	12/31/13 12:32	01/02/14 15:01	20

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	81		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C10 (6-12)

Lab Sample ID: 600-84633-30
Date Collected: 12/19/13 14:32
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 81.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	379	b	0.611	0.128	mg/Kg	☼	12/31/13 12:32	01/02/14 13:07	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	19		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	81		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C11 (6-12)

Lab Sample ID: 600-84633-32
Date Collected: 12/19/13 14:50
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 75.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	508	b	0.649	0.136	mg/Kg	☼	12/31/13 12:32	01/02/14 13:19	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	24		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	76		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C12 (6-12)

Lab Sample ID: 600-84633-34
Date Collected: 12/19/13 15:09
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 80.5

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1170	b	0.575	0.121	mg/Kg	☼	12/31/13 12:32	01/02/14 13:24	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	20		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	80		1.0	1.0	%			12/26/13 14:58	1

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-3

Client Sample ID: 2013-NDA-C14 (6-12)

Lab Sample ID: 600-84633-38

Date Collected: 12/19/13 15:46
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 79.1

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	5.78		0.293	0.0300	mg/Kg	☼	12/31/13 12:32	01/02/14 13:40	1
Lead	819	b	0.585	0.123	mg/Kg	☼	12/31/13 12:32	01/02/14 13:40	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	21		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	79		1.0	1.0	%			12/26/13 14:58	1

Client Sample ID: 2013-NDA-C15 (6-12)

Lab Sample ID: 600-84633-40

Date Collected: 12/19/13 15:58
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 78.3

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	1150	b	0.597	0.125	mg/Kg	☼	12/31/13 12:32	01/02/14 14:33	1

General Chemistry

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture	22		1.0	1.0	%			12/26/13 14:58	1
Percent Solids	78		1.0	1.0	%			12/26/13 14:58	1

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-3

Qualifiers

Metals

Qualifier	Qualifier Description
F	Duplicate RPD exceeds the control limit
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
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 600-124023/1-A
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124023

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/31/13 11:05	12/31/13 17:52	1
Lead	0.105	U	0.500	0.105	mg/Kg		12/31/13 11:05	12/31/13 17:52	1

Lab Sample ID: LCSSRM 600-124023/2-A
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 124023

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	182	175.1		mg/Kg		96.2	81.9 - 118.1
Lead	115	109.7		mg/Kg		95.4	81.8 - 119.1

Lab Sample ID: 600-84633-20 MS
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: 2013-NDA-C05 (6-12)
Prep Type: Total/NA
Prep Batch: 124023

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	6.23		28.8	33.85		mg/Kg	☼	96	75 - 125
Lead	845		57.6	1074	4	mg/Kg	☼	397	75 - 125

Lab Sample ID: 600-84633-20 MSD
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: 2013-NDA-C05 (6-12)
Prep Type: Total/NA
Prep Batch: 124023

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	6.23		28.3	29.86		mg/Kg	☼	84	75 - 125	13	20
Lead	845		56.5	866.2	4 N	mg/Kg	☼	37	75 - 125	21	20

Lab Sample ID: 600-84633-20 DU
Matrix: Solid
Analysis Batch: 124038

Client Sample ID: 2013-NDA-C05 (6-12)
Prep Type: Total/NA
Prep Batch: 124023

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cadmium	6.23		7.759	F	mg/Kg	☼	22	20
Lead	845		1035		mg/Kg	☼	20	20

Lab Sample ID: MB 600-124037/1-A
Matrix: Solid
Analysis Batch: 124095

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 124037

Analyte	MB Result	MB Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.0256	U	0.250	0.0256	mg/Kg		12/31/13 12:32	01/02/14 12:25	1
Lead	3.130		0.500	0.105	mg/Kg		12/31/13 12:32	01/02/14 12:25	1

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

Lab Sample ID: LCSSRM 600-124037/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 124095 — **Prep Batch: 124037**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	182	185.3		mg/Kg		101.8	81.9 - 118.1
Lead	115	111.5		mg/Kg		97.0	81.8 - 119.1

Lab Sample ID: 600-84633-24 MS — **Client Sample ID: 2013-NDA-C07 (6-12)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 124095 — **Prep Batch: 124037**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cadmium	5.34		29.3	36.57		mg/Kg	☼	107	75 - 125
Lead	713	b	58.6	1028	4	mg/Kg	☼	536	75 - 125

Lab Sample ID: 600-84633-24 MSD — **Client Sample ID: 2013-NDA-C07 (6-12)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 124095 — **Prep Batch: 124037**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cadmium	5.34		29.0	35.58		mg/Kg	☼	104	75 - 125	3	20
Lead	713	b	58.1	1214	4	mg/Kg	☼	862	75 - 125	17	20

Lab Sample ID: 600-84633-24 DU — **Client Sample ID: 2013-NDA-C07 (6-12)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 124095 — **Prep Batch: 124037**

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cadmium	5.34		6.534		mg/Kg	☼	20	20
Lead	713	b	957.6	F	mg/Kg	☼	29	20

Method: Moisture - Percent Moisture

Lab Sample ID: 600-84633-26 DU — **Client Sample ID: 2013-NDA-C08 (6-12)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 123729

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Percent Moisture	19		19		%		2	20
Percent Solids	81		81		%		0.4	20

Unadjusted Detection Limits

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-3

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: 124023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84633-2	2013-SL-C12 (6-12)	Total/NA	Solid	3050B	
600-84633-4	2013-SL-C13 (6-12)	Total/NA	Solid	3050B	
600-84633-6	2013-SL-C16 (6-12)	Total/NA	Solid	3050B	
600-84633-8	2013-SL-C15 (6-12)	Total/NA	Solid	3050B	
600-84633-10	2013-SL-C14 (6-12)	Total/NA	Solid	3050B	
600-84633-12	2013-NDA-C01 (6-12)	Total/NA	Solid	3050B	
600-84633-14	2013-NDA-C02 (6-12)	Total/NA	Solid	3050B	
600-84633-18	2013-NDA-C04 (6-12)	Total/NA	Solid	3050B	
600-84633-18 - DL	2013-NDA-C04 (6-12)	Total/NA	Solid	3050B	
600-84633-20	2013-NDA-C05 (6-12)	Total/NA	Solid	3050B	
600-84633-20 DU	2013-NDA-C05 (6-12)	Total/NA	Solid	3050B	
600-84633-20 MS	2013-NDA-C05 (6-12)	Total/NA	Solid	3050B	
600-84633-20 MSD	2013-NDA-C05 (6-12)	Total/NA	Solid	3050B	
LCSSRM 600-124023/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-124023/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 124037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84633-22 - DL	2013-NDA-C06 (6-12)	Total/NA	Solid	3050B	
600-84633-24	2013-NDA-C07 (6-12)	Total/NA	Solid	3050B	
600-84633-24 DU	2013-NDA-C07 (6-12)	Total/NA	Solid	3050B	
600-84633-24 MS	2013-NDA-C07 (6-12)	Total/NA	Solid	3050B	
600-84633-24 MSD	2013-NDA-C07 (6-12)	Total/NA	Solid	3050B	
600-84633-26	2013-NDA-C08 (6-12)	Total/NA	Solid	3050B	
600-84633-28 - DL	2013-NDA-C09 (6-12)	Total/NA	Solid	3050B	
600-84633-30	2013-NDA-C10 (6-12)	Total/NA	Solid	3050B	
600-84633-32	2013-NDA-C11 (6-12)	Total/NA	Solid	3050B	
600-84633-34	2013-NDA-C12 (6-12)	Total/NA	Solid	3050B	
600-84633-38	2013-NDA-C14 (6-12)	Total/NA	Solid	3050B	
600-84633-40	2013-NDA-C15 (6-12)	Total/NA	Solid	3050B	
LCSSRM 600-124037/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 600-124037/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 124038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84633-2	2013-SL-C12 (6-12)	Total/NA	Solid	6010B	124023
600-84633-4	2013-SL-C13 (6-12)	Total/NA	Solid	6010B	124023
600-84633-6	2013-SL-C16 (6-12)	Total/NA	Solid	6010B	124023
600-84633-8	2013-SL-C15 (6-12)	Total/NA	Solid	6010B	124023
600-84633-10	2013-SL-C14 (6-12)	Total/NA	Solid	6010B	124023
600-84633-12	2013-NDA-C01 (6-12)	Total/NA	Solid	6010B	124023
600-84633-14	2013-NDA-C02 (6-12)	Total/NA	Solid	6010B	124023
600-84633-18	2013-NDA-C04 (6-12)	Total/NA	Solid	6010B	124023
600-84633-20	2013-NDA-C05 (6-12)	Total/NA	Solid	6010B	124023
600-84633-20 DU	2013-NDA-C05 (6-12)	Total/NA	Solid	6010B	124023
600-84633-20 MS	2013-NDA-C05 (6-12)	Total/NA	Solid	6010B	124023
600-84633-20 MSD	2013-NDA-C05 (6-12)	Total/NA	Solid	6010B	124023
LCSSRM 600-124023/2-A	Lab Control Sample	Total/NA	Solid	6010B	124023
MB 600-124023/1-A	Method Blank	Total/NA	Solid	6010B	124023

Metals (Continued)

Analysis Batch: 124095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84633-18 - DL	2013-NDA-C04 (6-12)	Total/NA	Solid	6010B	124023
600-84633-22 - DL	2013-NDA-C06 (6-12)	Total/NA	Solid	6010B	124037
600-84633-24	2013-NDA-C07 (6-12)	Total/NA	Solid	6010B	124037
600-84633-24 DU	2013-NDA-C07 (6-12)	Total/NA	Solid	6010B	124037
600-84633-24 MS	2013-NDA-C07 (6-12)	Total/NA	Solid	6010B	124037
600-84633-24 MSD	2013-NDA-C07 (6-12)	Total/NA	Solid	6010B	124037
600-84633-26	2013-NDA-C08 (6-12)	Total/NA	Solid	6010B	124037
600-84633-28 - DL	2013-NDA-C09 (6-12)	Total/NA	Solid	6010B	124037
600-84633-30	2013-NDA-C10 (6-12)	Total/NA	Solid	6010B	124037
600-84633-32	2013-NDA-C11 (6-12)	Total/NA	Solid	6010B	124037
600-84633-34	2013-NDA-C12 (6-12)	Total/NA	Solid	6010B	124037
600-84633-38	2013-NDA-C14 (6-12)	Total/NA	Solid	6010B	124037
600-84633-40	2013-NDA-C15 (6-12)	Total/NA	Solid	6010B	124037
LCSSRM 600-124037/2-A	Lab Control Sample	Total/NA	Solid	6010B	124037
MB 600-124037/1-A	Method Blank	Total/NA	Solid	6010B	124037

General Chemistry

Analysis Batch: 123729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84633-18	2013-NDA-C04 (6-12)	Total/NA	Solid	Moisture	
600-84633-20	2013-NDA-C05 (6-12)	Total/NA	Solid	Moisture	
600-84633-22	2013-NDA-C06 (6-12)	Total/NA	Solid	Moisture	
600-84633-24	2013-NDA-C07 (6-12)	Total/NA	Solid	Moisture	
600-84633-26	2013-NDA-C08 (6-12)	Total/NA	Solid	Moisture	
600-84633-26 DU	2013-NDA-C08 (6-12)	Total/NA	Solid	Moisture	
600-84633-28	2013-NDA-C09 (6-12)	Total/NA	Solid	Moisture	
600-84633-30	2013-NDA-C10 (6-12)	Total/NA	Solid	Moisture	
600-84633-32	2013-NDA-C11 (6-12)	Total/NA	Solid	Moisture	
600-84633-34	2013-NDA-C12 (6-12)	Total/NA	Solid	Moisture	
600-84633-38	2013-NDA-C14 (6-12)	Total/NA	Solid	Moisture	
600-84633-40	2013-NDA-C15 (6-12)	Total/NA	Solid	Moisture	

Analysis Batch: 123832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-84633-2	2013-SL-C12 (6-12)	Total/NA	Solid	Moisture	
600-84633-4	2013-SL-C13 (6-12)	Total/NA	Solid	Moisture	
600-84633-6	2013-SL-C16 (6-12)	Total/NA	Solid	Moisture	
600-84633-8	2013-SL-C15 (6-12)	Total/NA	Solid	Moisture	
600-84633-10	2013-SL-C14 (6-12)	Total/NA	Solid	Moisture	
600-84633-12	2013-NDA-C01 (6-12)	Total/NA	Solid	Moisture	
600-84633-14	2013-NDA-C02 (6-12)	Total/NA	Solid	Moisture	

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-3

Client Sample ID: 2013-SL-C12 (6-12)

Lab Sample ID: 600-84633-2

Date Collected: 12/19/13 08:46
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.04 g	50 mL	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	124038	12/31/13 18:05	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123832	12/27/13 13:17	AYS	TAL HOU

Client Sample ID: 2013-SL-C13 (6-12)

Lab Sample ID: 600-84633-4

Date Collected: 12/19/13 08:58
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.07 g	50 mL	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	124038	12/31/13 18:11	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123832	12/27/13 13:17	AYS	TAL HOU

Client Sample ID: 2013-SL-C16 (6-12)

Lab Sample ID: 600-84633-6

Date Collected: 12/19/13 09:20
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.02 g	50 mL	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	124038	12/31/13 18:15	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123832	12/27/13 13:17	AYS	TAL HOU

Client Sample ID: 2013-SL-C15 (6-12)

Lab Sample ID: 600-84633-8

Date Collected: 12/19/13 09:35
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.01 g	50 mL	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	124038	12/31/13 18:20	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123832	12/27/13 13:17	AYS	TAL HOU

Client Sample ID: 2013-SL-C14 (6-12)

Lab Sample ID: 600-84633-10

Date Collected: 12/19/13 09:56
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.02 g	50 mL	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	124038	12/31/13 18:25	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123832	12/27/13 13:17	AYS	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-3

Client Sample ID: 2013-NDA-C01 (6-12)

Lab Sample ID: 600-84633-12

Date Collected: 12/19/13 11:20
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 81.1

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	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	124038	12/31/13 18:37	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123832	12/27/13 13:17	AYS	TAL HOU

Client Sample ID: 2013-NDA-C02 (6-12)

Lab Sample ID: 600-84633-14

Date Collected: 12/19/13 11:42
Matrix: Solid
Date Received: 12/24/13 10:25
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	Prep	3050B			1.05 g	50 mL	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.05 g	50 mL	124038	12/31/13 18:42	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123832	12/27/13 13:17	AYS	TAL HOU

Client Sample ID: 2013-NDA-C04 (6-12)

Lab Sample ID: 600-84633-18

Date Collected: 12/19/13 12:17
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.03 g	50 mL	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.03 g	50 mL	124038	12/31/13 19:07	DCL	TAL HOU
Total/NA	Prep	3050B	DL		1.03 g	50 mL	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B	DL	20	1.03 g	50 mL	124095	01/02/14 11:47	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C05 (6-12)

Lab Sample ID: 600-84633-20

Date Collected: 12/19/13 12:53
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.09 g	50 mL	124023	12/31/13 11:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.09 g	50 mL	124038	12/31/13 19:12	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C06 (6-12)

Lab Sample ID: 600-84633-22

Date Collected: 12/19/13 13:20
Matrix: Solid
Date Received: 12/24/13 10:25
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	DL		1.02 g	50 mL	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B	DL	20	1.02 g	50 mL	124095	01/02/14 14:51	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-3

Client Sample ID: 2013-NDA-C07 (6-12)

Lab Sample ID: 600-84633-24

Date Collected: 12/19/13 13:31
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.08 g	50 mL	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	124095	01/02/14 12:37	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C08 (6-12)

Lab Sample ID: 600-84633-26

Date Collected: 12/19/13 13:48
Matrix: Solid
Date Received: 12/24/13 10:25
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			1.04 g	50 mL	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.04 g	50 mL	124095	01/02/14 12:57	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C09 (6-12)

Lab Sample ID: 600-84633-28

Date Collected: 12/19/13 14:04
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 81.4

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B	DL		1.07 g	50 mL	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B	DL	20	1.07 g	50 mL	124095	01/02/14 15:01	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C10 (6-12)

Lab Sample ID: 600-84633-30

Date Collected: 12/19/13 14:32
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 81.1

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			1.01 g	50 mL	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.01 g	50 mL	124095	01/02/14 13:07	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C11 (6-12)

Lab Sample ID: 600-84633-32

Date Collected: 12/19/13 14:50
Matrix: Solid
Date Received: 12/24/13 10:25
Percent Solids: 75.5

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	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.02 g	50 mL	124095	01/02/14 13:19	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Lab Chronicle

Client: Golder Associates Inc.
Project/Site: EXIDE Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-3

Client Sample ID: 2013-NDA-C12 (6-12)

Date Collected: 12/19/13 15:09
Date Received: 12/24/13 10:25

Lab Sample ID: 600-84633-34
Matrix: Solid
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			1.08 g	50 mL	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	124095	01/02/14 13:24	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C14 (6-12)

Date Collected: 12/19/13 15:46
Date Received: 12/24/13 10:25

Lab Sample ID: 600-84633-38
Matrix: Solid
Percent Solids: 79.1

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	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.08 g	50 mL	124095	01/02/14 13:40	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	AYS	TAL HOU

Client Sample ID: 2013-NDA-C15 (6-12)

Date Collected: 12/19/13 15:58
Date Received: 12/24/13 10:25

Lab Sample ID: 600-84633-40
Matrix: Solid
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			1.07 g	50 mL	124037	12/31/13 12:32	NER	TAL HOU
Total/NA	Analysis	6010B		1	1.07 g	50 mL	124095	01/02/14 14:33	DCL	TAL HOU
Total/NA	Analysis	Moisture		1			123729	12/26/13 14:58	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 Battery Plant - Frisco, TX

TestAmerica Job ID: 600-84633-3

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 of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

1/29/2014

Client Information	Sampler: Chris Trevino	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 1 of 5
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 Battery Plant - Frisco, TX	Project #: 60004794	
Site:	SSOW#:	

600-84633 Chain of Custody

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)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
2013-SL-C12(0-6)	12-19-13	0842	G	Solid			X			1	
2013-SL-C12 (6-12)	12-19-13	0846	G	Solid			X			1	
2013-SL-C13 (0-6)	12-19-13	0856	G	Solid			X			1	
2013-SL-C13 (6-12)	12-19-13	0858	G	Solid			X			1	
2013-SL-C16 (0-6)	12-19-13	0912	G	Solid			X			1	
2013-SL-C16 (6-12)	12-19-13	0920	G	Solid			X			1	
2013-SL-C15 (0-6)	12-19-13	0933	G	Solid			X			1	
2013-SL-C15 (6-12)	12-19-13	0935	G	Solid			X			1	
2013-SL-C14 (0-6)	12-19-13	0954	G	Solid			X			1	
2013-SL-C14 (6-12)	12-19-13	0956	G	Solid			X			1	
2013-NDA-C01 (0-6)	12-19-13	1116	G	Solid			X			1	

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	Chris Trevino	12-20-13/1530	Golder	AMcGinnes	12/20/13 1532	TAL
2	AMcGinnes	12/20/13 1750	TAL	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 12/24/13 1025	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

1/29/2014

Client Information	Sampler: Chris Trevino	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 2 of 5
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 Battery Plant - Frisco, TX	Project #: 60004794	
Site:	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)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	N	X	
2013 - NDA - C01 (6-12)	12-19-13	1120	G	Solid			X			1	
2013 - NDA - C02 (0-6)	12-19-13	1140	G	Solid			X			1	
2013 - NDA - C02 (6-12)	12-19-13	1142	G	Solid			X			1	
2013 - NDA - C03 (0-6)	12-19-13	1150	G	Solid			X			1	
2013 - NDA - C03 (6-12)	12-19-13	1152	G	Solid			X			1	
2013 - NDA - C03 (6-12) MS	12-19-13	1152	G	Solid		X	X			1	
2013 - NDA - C03 (6-12) MSD	12-19-13	1152	G	Solid		X	X			1	
2013 - NDA - C04 (0-6)	12-19-13	1215	G	Solid			X			1	
2013 - NDA - C04 (6-12)	12-19-13	1217	G	Solid			X			1	
2013 - NDA - C05 (0-6)	12-19-13	1237	G	Solid			X			1	
2013 - NDA - C05 (6-12)	12-19-13	1253	G	Solid			X			1	

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	Chris Trevino	12-20-13 1530	Golder	[signature]	12/20/13 1530	TAL
2	[signature]	12/20/13 1750	TAL	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by: [signature] 1025	Date/Time: 12/24/13	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

1/29/2014

Client Information	Sampler: Chris Trevino	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0570	E-Mail: dean.joiner@testamericainc.com		Page: Page 3 OF 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 Battery Plant - Frisco, TX	Project #: 60004794			
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)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
2013-NDA-C06 (0-6)	12-19-13	1319	G	Solid			X			1	
2013-NDA-C06 (6-12)	12-19-13	1320	G	Solid			X			1	
2013-NDA-C07 (0-6)	12-19-13	1328	G	Solid			X			1	
2013-NDA-C07 (6-12)	12-19-13	1331	G	Solid			X			1	
2013-NDA-C08 (0-6)	12-19-13	1347	G	Solid			X			1	
2013-NDA-C08 (6-12)	12-19-13	1348	G	Solid			X			1	
2013-NDA-C09 (0-6)	12-19-13	1403	G	Solid			X			1	
2013-NDA-C09 (6-12)	12-19-13	1404	G	Solid			X			1	
2013-NDA-C10 (0-6)	12-19-13	1431	G	Solid			X			1	
2013-NDA-C10 (6-12)	12-19-13	1432	G	Solid			X			1	
2013-NDA-C11 (0-6)	12-19-13	1446	G	Solid			X			1	

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	Chris Trevino	12-20-13 1530	Golder	[signature]	12/20/13 1530	TAL
2	[signature]	12/20/13 1758	TAL			
3				[signature]	12/24/13 1025	

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

1/29/2014

Client Information	Sampler: Chris Trevino	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 1302086 4 of 5
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 Battery Plant - Frisco, TX	Project #: 60004794			
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)	Perform MS/MSD (Yes or No)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N		
2013-NDA-C11 (6-12)	12-19-13	1450	G	Solid			X			1	
2013-NDA-C12 (0-6)	12-19-13	1507	G	Solid			X			1	
2013-NDA-C12 (6-12)	12-19-13	1509	G	Solid			X			1	
2013-NDA-C13 (0-6)	12-19-13	1523	G	Solid			X			1	
2013-NDA-C13 (6-12)	12-19-13	1525	G	Solid			X			1	
2013-NDA-C13 (6-12) MS	12-19-13	1525	G	Solid		X	X			1	
2013-NDA-C13 (6-12) MSD	12-19-13	1525	G	Solid		X	X			1	
2013-NDA-C14 (0-6)	12-19-13	1544	G	Solid			X			1	
2013-NDA-C14 (6-12)	12-19-13	1546	G	Solid			X			1	
2013-NDA-C15 (0-6)	12-19-13	1556	G	Solid			X			1	
2013-NDA-C15 (6-12)	12-19-13	1558	G	Solid			X			1	

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: Chris Trevino	Date/Time: 12-20-13 / 1530	Company: Golder	Received by: [signature] Date/Time: 12/20/13 1530 Company: ~~1530~~ TAL
Relinquished by: [signature]	Date/Time: 12/20/13 1750	Company: TAL	Received by: Date/Time: Company
Relinquished by:	Date/Time:	Company	Received by: [signature] Date/Time: 12/24/13 1025 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

1/29/2014

Client Information	Sampler: Chris Trevino	Lab PM: Joiner, Dean A	Carrier Tracking No(s):	COC No: 600-24900-8957.1
Client Contact: Christina Higginbotham	Phone: 817-281-0510	E-Mail: dean.joiner@testamericainc.com		Page: Page 5 of 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				Other:
Phone: 281-821-6868(Tel) 281-821-6870(Fax)	PO #: Purchase Order Requested			
Email: Christina_Higginbotham@golder.com	WO #:			
Project Name: EXIDE Battery Plant - Frisco, TX	Project #: 60004794			
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)	6010B - Cd,Pb	6010B - As,Cd,Pb,Se	moisture	60103 - Cd,Pb	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	D		
DUP-2	12-19-13		G	Solid			X				1	
DUP-3	12-19-13		G	Solid			X				1	
Rinse Blank - Hand Auger	12-19-13	1620	G	W ~~Solid~~						X	1	
			G	Solid							1	
			G	Solid							1	
			G	Solid							1	
			G	Solid							1	
			G	Solid							1	
			G	Solid							1	
			G	Solid							1	
			G	Solid							1	

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	Chris Trevino	12-20-13 1530	Golder	[signature]	12/20/13 1530	TAL
2	[signature]	12/20/13 1750	TAL	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by: [signature] 12/24/13	Date/Time: 1025	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: 600-84633-3

Login Number: 84633

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	4.1/4.6/4.4/3.0
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.	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.