APPENDIX 10.6 2012/2013 LABORATORY DATA PACKAGES AND ATA USABILITY SUMMARIES (DUS)

GROUNDWATER

SITE:	Exide Class II Landfill Frisco, Texas				
CLIENT:	Pastor, Behling & Wheeler, LLC (PBW) Round Rock, Texas				
EVENT:	Groundwater Sampling – March 2013				
INTENDED USE:	ENDED USE: Groundwater Monitoring and Affected Property Assessment				
LABORATORY:	TestAmerica – Houston, TX TLAP Certification T104704223 Work Orders: 600-69922-1, 600-70014-1				
TESTS/ METHODS:	Total Metals (As, Cd, Pb, Se)	SW846 3010A/6010B			
	Dissolved Metals (As, Cd, Pb, Se)	SW846 3010A/6010B			
SAMPLES:	7 groundwater samples, 1 field duplicate, 1 field MS/M (see Table 1 for a complete listing)	SD pair			

QAA completed a third-party 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).

All samples collected during the event were reviewed. QAA completed the review using the following laboratory and project submittals:

- Laboratory reportable data as defined in TRRP-13;
- Laboratory review checklists (LRCs) 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, QAA used the LRCs to evaluate the following QC parameters:

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

Criteria used for the data usability review are as follows:

- Inorganics: 70-130% spike recovery (and not less than 30% or data is rejected) and <u>+</u>MQL difference or 30% RPD (for laboratory duplicates) as recommended in TRRP-13
- Groundwater Samples: <u>+</u> 2x MQL difference (if either result is less than 5x MQL) or 30% 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 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 form. 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 1 to this DUS.

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 LRCs, an MDL study was performed for each analyte and the MDLs were checked for

reasonableness. The levels of required performance (LORPs) have been established by PBW as the protective concentration levels (PCLs) for residential use and a Class 3 groundwater classification. As needed per TRRP, the Unadjusted MQL stated by the laboratory is at or below the LORP for each analyte, and thus the analytical methods are appropriate and the results can be used to demonstrate conformance with critical PCLs.

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 non-detects as estimated with an unknown bias (UJ). Non-detects that are estimated can be used; however, the reported SDL may be either low or high. Additionally, results with a laboratory J-flag (i.e., between the SDL and MQL) should be considered estimates. The actual value for these results is not expected to exceed the sample MQL.

QAA Reviewer:

Taryn G. Scholz (Name) 4/19/13 (Date)

QC PARAMETER QC OUTCOME

 Data
 The laboratory data packages contain all necessary data (i.e., the laboratory reportable data per

 Completeness
 TRRP-13). No package revisions were required. The EDD required revision to add an identification to distinguish total metals results from dissolved metals results.

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 record is complete and agrees with that in the field notes and laboratory report and all tests results are reported as requested on the custody record, except as follows:

- For both work orders (600-69922-1 and 600-70014-1), Sulfate is requested on the custody record for every sample but the analyses were not performed because no container (unpreserved) was received for this test.
- 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.
- Field Procedures Readings for temperature, pH, specific conductivity, and turbidity were recorded in the field notes. Each well was either purged until the well conditions stabilized and sampled immediately or purged until dry and sampled the next day after recovery (for LMW-5, LMW-8, LMW-9, and LMW-22). Samples were collected in containers provided by the laboratory, placed on ice, and delivered to the laboratory by overnight courier. All dissolved sample aliquots were field-filtered using a 0.45-micron filter. Aliquots for total metals were filtered using a 10-micron filter for wells with a turbidity greater than 10-NTU (for LMW-5, LMW-8, and LMW-22). Only dedicated or disposable equipment was used. One field duplicate and one field MS/MSD pair was collected with the seven investigative samples.
- Results Reporting 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/L. 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.

None of the samples required dilution.

MQLs The LORPs for the samples have been defined by PBW as the Tier 1 PCLs for residential use and a Class 3 groundwater classification (i.e., ^{GW}GW_{Class} 3 in TCEQ Table 3 dated June 29, 2012). The Unadjusted MQLs are at or below the LORPs for all analytes.

MDLs According to the LRCs, 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 (DCSs) as required per TRRP-13. Results for the DCS are included in the laboratory data packages.

Laboratory Blanks No analytes are reported above the detection limit in the laboratory blanks, which confirms that no contamination was introduced in the laboratory.

Field QC Blanks No field QC blanks were collected with the samples.

QU FARAIVIETER	QC OUTCOME
Laboratory Control Spike Recovery	The laboratory prepared one laboratory control spike (LCS) for each analytical batch and the spike solution contained all of the analytes. The LCS recoveries are within the TRRP recommended limits, which indicates good accuracy for the preparation and analysis technique on a sample free of matrix effects.
Matrix Spike Recovery	The laboratory prepared one Matrix Spike (MS) and Matrix Spike Duplicate (MSD) for each analytical batch and the spike solution contained all of the analytes. Recoveries are reported for MS/MSD prepared using a sample from the site. One MS/MSD pair was prepared using sample PMW-20R for both total and dissolved metals and the recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on the given sample matrix.
Surrogate Recovery	Surrogates are not used for 6010B metals analysis.
Laboratory Duplicate Precision	The MS/MSD RPDs for all analytes are within the TRRP recommended limits, which indicates good precision for the preparation and analysis technique on the given sample matrix.
Field Duplicate Precision	One field duplicate was collected with the seven groundwater samples. Results are summarized in Table 3. RPDs (or the absolute difference between results for concentrations <5xMQL and for non-detects) are within the TRRP criteria for all analytes.
Instrument Tuning	Instrument tuning is not required for 6010B metals analysis.
Instrument Calibration	According to the LRCs, 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 follows:
	• The continuing calibration verification (CCV) for Cadmium and Selenium associated with batch 101814 recovered above the upper control limit.
	Per TRRP-13, the reviewer qualified the results, which are all non-detects, for the affected samples (i.e., those analyzed before or after the deficient CCV) as estimated (UJ).
Instrument Performance	According to the LRCs, the serial dilution and ICP interference check samples met method requirements, which indicates that no significant matrix interference exists.
Internal Standards	Internal standards are not used for 6010B metals analysis.
Total to Partial Balance	For each metal in every sample, the dissolved metal concentration is at or below the total metal concentration or the difference does not exceed the inherent analytical method error (i.e., \pm 2x MQL difference (if either result is less than 5x MQL) or 30% RPD).

TABLE 1 EXIDE CLASS II LANDFILL GROUNDWATER SAMPLING – MARCH 2013

SAMPLES ANALYZED

					QC Pr	ep Batch
	Field ID	Sample	Sample	Sample	Total Metals	Dissolved Metals
Labib	FIEID	Туре	Matrix	Date	(As, Cd, Pb, Se)	(As, Cd, Pb, Se)
					3010A/6010B	3010A/6010B
600-69922-001	LMW-17	INV	Water	3/12/13	101618	101618
600-69922-002	LMW-21	INV	Water	3/12/13	101618	101618
600-69922-003	Dup-1	FD of LMW-21	Water	3/12/13	101618	101618
600-70014-001	PMW-20R	INV	Water	3/12/13	101673	101618
600-70014-001	PMW-20R	MS	Water	3/12/13	101673	101618
600-70014-001	PMW-20R	MSD	Water	3/12/13	101673	101618
600-70014-002	LMW-9	INV	Water	3/13/13	101673	101618
600-70014-003	LMW-8	INV	Water	3/13/13	101673	101618
600-70014-004	LMW-22	INV	Water	3/13/13	101673	101618
600-70014-005	LMW-5	INV	Water	3/13/13	101673	101618

FD – Field Duplicate

INV - Investigative

MS - Matrix Spike

MSD – Matrix Spike Duplicate

TABLE 2 EXIDE CLASS II LANDFILL GROUNDWATER SAMPLING – MARCH 2013

QUALIFIED SAMPLE RESULTS

Field ID	Lab ID	Sample Date	Analyte	Lab Result			DVQ	QC_Comment
LMW-22	600-70014-004	3/13/13	Cadmium, Dissolved	0.00035	U ^	mg/L	UJ	CCV recovery above the upper
								control limit
LMW-22	600-70014-004	3/13/13	Selenium, Dissolved	0.00417	U ^	mg/L	UJ	CCV recovery above the upper
								control limit
LMW-5	600-70014-005	3/13/13	Cadmium, Dissolved	0.00035	U ^	mg/L	UJ	CCV recovery above the upper
								control limit
LMW-5	600-70014-005	3/13/13	Selenium, Dissolved	0.00417	U ^	mg/L	UJ	CCV recovery above the upper
								control limit
LMW-8	600-70014-003	3/13/13	Cadmium, Dissolved	0.00035	U ^	mg/L	UJ	CCV recovery above the upper
								control limit
LMW-9	600-70014-002	3/13/13	Cadmium, Dissolved	0.00035	U ^	mg/L	UJ	CCV recovery above the upper
								control limit
PMW-20R	600-70014-001	3/12/13	Cadmium, Dissolved	0.00035	U ^	mg/L	UJ	CCV recovery above the upper
								control limit

Note: In addition to the above results, all detects between the SDL and MQL (i.e., results with a laboratory J-flag) should be considered estimated since the reported concentration is below the calibration range.

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

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

- NS Not selected; Another result (from a secondary dilution, different analytical method, re-sampling, etc.) is selected for use based on QC outcomes and/or reported concentrations.
- R Rejected data; The data is unusable. Serious QC deficiencies make it impossible to verify the absence or presence of this analyte.
- U Not detected; The analyte was not detected >5x (10x for common contaminants) the level in an associated blank and thus should be considered not detected above the level of the associated numerical value (i.e., the reported sample concentration).
- UJ Estimated data; The analyte was not detected above the reported sample detection limit (SDL). The numerical value of the SDL is estimated and may be inaccurate.
- X7 The laboratory is not NELAC accredited under the Texas Laboratory Accreditation Program for this analyte in this matrix analyzed by this method. The TCEQ does not offer accreditation for this analyte, in this matrix, analyzed by this method.
- X8 The laboratory is not NELAC accredited under the Texas Laboratory Accreditation Program for this analyte in this matrix analyzed by this method. The TCEQ offers accreditation for this analyte in this matrix by this method, but the laboratory is not accredited for this analyte in this matrix by this method. The analyte result is validated and reported as part of a suite of analytes for the method.
- H Bias in sample result is likely to be high
- L Bias in sample result is likely to be low

NOTE: For multiple QC issues, the reviewer applied the most severe flag. (R >U >NJ >J >JL/JH for detects and R >UJ >UJL for non-detects)

TABLE 3 EXIDE CLASS II LANDFILL GROUNDWATER SAMPLING – MARCH 2013

FIELD DUPLICATE RESULTS

Field Duplicate	Original Sample	Sample Date	Method	Analyte	Field Du	olicate	Result	Original S	Sample	Result	RPD	Absolute Difference	2x MQL	Qualified
Dup-1	LMW-21	3/12/13	6010B	Arsenic	0.00328	U	mg/L	0.00328	U	mg/L	NA	0	0.03	no
Dup-1	LMW-21	3/12/13	6010B	Cadmium	0.00035	U	mg/L	0.00035	U	mg/L	NA	0	0.015	no
Dup-1	LMW-21	3/12/13	6010B	Lead	0.0029	U	mg/L	0.0029	U	mg/L	NA	0	0.03	no
Dup-1	LMW-21	3/12/13	6010B	Selenium	0.00417	U	mg/L	0.00417	U	mg/L	NA	0	0.12	no
Dup-1	LMW-21	3/12/13	6010B	Arsenic, Dissolved	0.00328	U	mg/L	0.00328	U	mg/L	NA	0	0.03	no
Dup-1	LMW-21	3/12/13	6010B	Cadmium, Dissolved	0.00035	U	mg/L	0.00035	U	mg/L	NA	0	0.015	no
Dup-1	LMW-21	3/12/13	6010B	Lead, Dissolved	0.0029	U	mg/L	0.0029	U	mg/L	NA	0	0.03	no
Dup-1	LMW-21	3/12/13	6010B	Selenium, Dissolved	0.00417	U	mg/L	0.00417	U	mg/L	NA	0	0.12	no

Note: The RPD test (<30%) applies if both results are greater than 5x MQL. Otherwise, the absolute difference test (< 2x MQL) applies.

ATTACHMENT 1

APPLICABLE PAGES OF THE LABORATORY ACCREDITATION CERTIFICATE



Texas Commission on Environmental Quality

NELAP - Recognized Laboratory Fields of Accreditation



TestAmerica Laboratories, Inc. - Houston

Certificate: Expiration Date: Issue Date: T104704223-12-9 10/31/2013 11/1/2012

6310 Rothway Drive Houston, TX 77040-5056

These fields of accreditation supercede all previous fields. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current accreditation status for particular methods and analyses.

Matrix: Non-Potable Water			
Method EPA 415.1 Analyte Total Organic Carbon (TOC)	AB TX	Analyte ID 2040	Method ID 10078407
Method FPA 420.2			
Analyte	AB	Analyte ID	Method ID
Total phenolics	ТХ	1905	10079808
Method EPA 420.4			
Analyte	AB	Analyte ID	Method ID
Total phenolics	ТХ	1905	10080203
Method EPA 425.1			
Analyte	AB	Analyte ID	Method ID
Surfactants - MBAS	ТХ	2025	10080601
Method EPA 6010			
Analyte	AB	Analyte ID	Method ID
Aluminum	ТХ	1000	10155609
Antimony	ТХ	1005	10155609
Arsenic	ТХ	1010	10155609
Barium	ТХ	1015	10155609
Beryllium	ТХ	1020	10155609
Boron	ТХ	1025	10155609
Cadmium	ТХ	1030	10155609
Calcium	ТХ	1035	10155609
Chromium	ТХ	1040	10155609
Cobalt	ТХ	1050	10155609
Copper	ТХ	1055	10155609
Iron	ТХ	1070	10155609
Lead	ТХ	1075	10155609
Magnesium	ТХ	1085	10155609
Manganese	ТХ	1090	10155609
Molybdenum	ТХ	1100	10155609
Nickel	ТХ	1105	10155609



Texas Commission on Environmental Quality



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	Certificate:	T104704223-12-9
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Matrix: Non-Potable Water			
Potassium	ΤX	1125	10155609
Selenium	ТХ	1140	10155609
Silica as SiO2	ТХ	1990	10155609
Silver	ТХ	1150	10155609
Sodium	ТХ	1155	10155609
Strontium	ТХ	1160	10155609
Thallium	ТХ	1165	10155609
Tin	ТΧ	1175	10155609
Titanium	ТХ	1180	10155609
Vanadium	ТХ	1185	10155609
Zinc	ТХ	1190	10155609
Method EPA 602			
Analyte	AB	Analyte ID	Method ID
Benzene	ТХ	4375	10102202
Ethylbenzene	ТХ	4765	10102202
m+p-xylene	ТХ	5240	10102202
o-Xylene	ТХ	5250	10102202
Toluene	ТХ	5140	10102202
Xylene (total)	ТХ	5260	10102202
Method EPA 608			
Analyte	AB	Analyte ID	Method ID
4,4'-DDD	ТХ	7355	10103603
4,4'-DDE	ТХ	7360	10103603
4,4'-DDT	ТХ	7365	10103603
Aldrin	ТХ	7025	10103603
alpha-BHC (alpha-Hexachlorocyclohexane)	ТХ	7110	10103603
alpha-Chlordane	ТХ	7240	10103603
Aroclor-1016 (PCB-1016)	ТХ	8880	10103603
Aroclor-1221 (PCB-1221)	ТХ	8885	10103603
Aroclor-1232 (PCB-1232)	ТХ	8890	10103603
Aroclor-1242 (PCB-1242)	ТХ	8895	10103603



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: 600-69922-1

Client Project/Site: Exide Recycling Center, Frisco TX Projec

For:

Pastor, Behling & Wheeler LLC 2201 Double Creek Dr Suite 4004 Round Rock, Texas 78664

Attn: Eric Pastor

Authorized for release by: 3/25/2013 11:25:10 AM Cathy Upton Data Delivery Analyst cathy.upton@testamericainc.com

Designee for

Sachin Kudchadkar Project Manager II sachin.kudchadkar@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

600-69922-1 Job Number: Exide Recycling Center, Frisco TX Project Project Name/Number: This Data Package consists of: This signature page, the laboratory review checklist, and the following Reportable Data: X R1 Field Chain-of-Custody Form X R2 Sample Identification Cross-reference; X 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). X R4 Surrogate Recovery Data including: a) Calculated recovery (%R), and b) The laboratory's surrogate QC limits. X R5 Test Reports/Summary Forms for Blank Samples; X 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 X

- 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
- X 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.
- List of method quantitation limit (MQL) and detectability check sample results for each analyte for each method and X R9 matrix;
- X 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 Name (printed) Data Delivery Analyst

Official Title (printed)

Signature

03/25/2013

Date

A	pper	ndix A (cont'd): Laboratory Review Checklis	t: Reportable Data					
Lab	orator	y Name: TestAmerica-Houston	LRC Date: 03/25/13					
Proj	ect N	ame: Exide Recycling Center, Frisco TX	Laboratory Job Number: 600-69922					
Rev	Reviewer Name: TWR Pren Batch Number(s): 600-101618- ICP							
#1	$\frac{\#^1}{4^2} = \frac{1}{2} \frac{1}{2$						NR^4	FR# ⁵
π	А	Chain-of-custody (C-O-C)		103	110	1111		LIC
R1	OI	Did complex meet the laboratory's standard conditions of comp	la accontability upon receipt?	v				
, ni	01	Were all departures from standard conditions described in an ex-	xception report?	Λ		v		
R2	OI	Sample and quality control (QC) identification				Λ		
	01	Are all field sample ID numbers cross-referenced to the laborat	ory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the correspondence	nding OC data?	X				
R3	OI	Test reports						
	-	Were all samples prepared and analyzed within holding times?		Х	1			
		Other than those results < MQL, were all other raw values brac	keted by calibration standards?	Х				
		Were calculations checked by a peer or supervisor?		Х				
		Were all analyte identifications checked by a peer or supervisor	r?	Х				
		Were sample detection limits reported for all analytes not detec	ted?	Х				
		Were all results for soil and sediment samples reported on a dry	weight basis?			Х		
		Were % moisture (or solids) reported for all soil and sediment s	samples?			Х		
		Were bulk soil/solid samples for volatile analysis extracted with	h methanol per SW846 Method 5035?			Х		
	-	If required for the project, TICs reported?			<u> </u>	X		
R4	0	Surrogate recovery data				NY.		
		Were surrogates added prior to extraction?				X		
D5	OT	Were surrogate percent recoveries in all samples within the laboratory QC limits?				X		
КЭ	OI	OI Test reports/summary forms for blank samples						
		Were appropriate type(s) of blanks analyzed?						
	Were mathed blanks taken through the entire analytical process in the line process in			A V				
	applicable cleanup procedures?		s, meruding preparation and, n	Λ				
		Were blank concentrations < MOL?		X				
R6	OI	Laboratory control samples (LCS):						
		Were all COCs included in the LCS?		Х				
		Was each LCS taken through the entire analytical procedure, in	cluding prep and cleanup steps?	Х				
		Were LCSs analyzed at the required frequency?		Х				
		Were LCS (and LCSD, if applicable) %Rs within the laborator	y QC limits?	Х				
		Does the detectability check sample data document the laborate	ory's capability to detect the COCs at	Х				
		the MDL used to calculate the SDLs?						
		Was the LCSD RPD within QC limits?				X		
K 7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data	11(0D)	X7				
		Were the project/method specified analytes included in the MS	and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	OC limite?	Λ			v	1
		Were MS (and MSD, if applicable) %KS within the faboratory (Were MS/MSD RPDs within laboratory OC limits?					A V	1
R8	OI	Analytical dunlicate data					1	1
	01	Were appropriate analytical duplicates analyzed for each matrix	x?	X				
		Were analytical duplicates analyzed at the appropriate frequence	ev?	X				
		Were RPDs or relative standard deviations within the laborator	y OC limits?				Х	2
R9	OI	Method quantitation limits (MQLs):						
		Are the MQLs for each method analyte included in the laborate	ory data package?	Х				
		Do the MQLs correspond to the concentration of the lowest nor	n-zero calibration standard?	Х				
		Are unadjusted MQLs and DCSs included in the laboratory dat	a package?	Χ				
R10	OI	Other problems/anomalies						
		Are all known problems/anomalies/special conditions noted in	this LRC and ER?	Х				
		Was applicable and available technology used to lower the SDI	to minimize the matrix interference	Х				
		affects on the sample results?		**				
1		Is the laboratory NELAC-accredited under the Texas Laborator	ry Accreditation Program for the	X		1		
I	Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items iden					ntifie	l l by the	

4. NR = Not reviewed;

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked). 5.

Lab	orato	ry Name: TestAmerica-Houston LRC	C Date: 03/25/13					
Pro	ject N	Jame: Exide Recycling Center, Frisco TX Labo	oratory Job Number: 600-69922					
Por	iowo	r Nama: TWP	$\frac{1}{2}$	CD				
<i>u</i> 1	Reflection for the second seco						ND4	ED /
#'	A ²	Description		Yes	No	NA	NR '	ER#
<u>S1</u>	OI	Initial calibration (ICAL)						4
		Were response factors and/or relative response factors for each analy	te within QC limits?			X		_
		Were percent RSDs or correlation coefficient criteria met?				X		_
		Was the number of standards recommended in the method used for a	Ill analytes?	X				_
		Were all points generated between the lowest and highest standard us	sed to calculate the curve?			X		_
		Are ICAL data available for all instruments used?		X				
		Has the initial calibration curve been verified using an appropriate se	econd source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) a	and continuing calibration					
		Was the CCV analyzed at the method-required frequency?		Х				
		Were percent differences for each analyte within the method-required	d QC limits?	Х				
		Was the ICAL curve verified for each analyte?		Χ				
		Was the absolute value of the analyte concentration in the inorganic	CCB < MDL?	Х				
S3	0	Mass spectral tuning:						
		Was the appropriate compound for the method used for tuning?				Х		
		Were ion abundance data within the method-required QC limits?				Х		
S4	0	Internal standards (IS):						
		Were IS area counts and retention times within the method-required	OC limits?			Х		
S5	OI	Raw data (NELAC section 5.5.10)						
	-	Were the raw data (for example, chromatograms, spectral data) revie	wed by an analyst?	X				-
		Were data associated with manual integrations flagged on the raw da	nta?			X		-
S6	0	Dual column confirmation						
	-	Did dual column confirmation results meet the method-required OC?)			X		
S 7	0	Tentatively identified compounds (TICs):	•					
	0	If TICs were requested, were the mass spectra and TIC data subject t	to appropriate checks?			X		-
S 8	T	Interference Check Sample (ICS) results:	to uppropriate checks.					-
	-	Were percent recoveries within method OC limits?		X				-
<u>59</u>	T	Serial dilutions nost digestion spikes and method of standard ad	ditions	11				-
	1	Were percent differences, recoveries, and the linearity within the OC	limits specified in the method?				v	3
S10	OI	Method detection limit (MDL) studies	initia specifica în the method :				Λ	
510	01	Was a MDL study performed for each reported analyte?		v				-
		Is the MDL sittler adjusted or supported by the analysis of DCSc2		N V				-
\$11	OI	Proficioney test reports:		Λ				-
511	01	Was the laboratory's performance accentable on the applicable profic	pianay tasts or avaluation studios?	v				-
S1 2	OI	Stondards documentation	ciency tests of evaluation studies?	Λ				-
512	01	Standards documentation	an other announists sources?	v				-
C12	OT	Are an standards used in the analyses NIST-traceable of obtained ind	Sin other appropriate sources?	Λ				_
515	01	Compound/analyte identification procedures	9	v				-
C14	OT	Are the procedures for compound/analyte identification documented	? 	Λ				_
514	0I	Demonstration of analyst competency (DOC)		v				
		was DOC conducted consistent with NELAC Chapter 5?	2	A V				+
C1 -	07	is documentation of the analyst's competency up-to-date and on file	<u>/</u>	X				-
515	UI	verification/validation documentation for methods (NELAC Cha	apter 5)					
	ļ	Are all the methods used to generate the data documented, verified, a	and validated, where applicable?	X				+
S16	OI	Laboratory standard operating procedures (SOPs):						
		Are laboratory SOPs current and on file for each method performed?	2	Х				
		1 Terms (dent)(") d her de latter ("D") 1 111 (1 1 1 (1 1 1))	late and the submitted of the design of the	41. 77	DDD	<u> </u>	<u> </u>	

NR = Not Reviewed.

2 3 4

5

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

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable). NA = Not applicable.

Apper	Appendix A (cont'd): Laboratory Review Checklist: Exception Reports						
Laborat	Laboratory Name: TestAmerica-Houston LRC Date: 03/25/13						
Project	Name: Exide Recycling Center, Frisco TX	Laboratory Job Number: 600-69922					
Review	er Name: TWR	Prep Batch Number(s): 600-101618- ICP					
ER # ¹	DESCRIPTION						
1	The laboratory selected a sample from another group to p	perform as the MS/MSD.					
2	The laboratory selected a sample from another group to perform as the DUP.						
3	The laboratory selected a sample from another group to p	perform as the PDS and SD.					

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:	Water			
Method:	200.7/6010			
Preparation:	200.7P/3010			
Date Analyzed:	12/3/2012			
Date Prepared:	11/28/2012			
Instrument:	Thermo 6500			
TALs Batches:	94513, 94244(p	orep)		
Units:	mg/L			
Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.0197	0.5
Antimony	0.0063	0.01	0.0106	0.05
Arsenic	0.0033	0.01	0.0071	0.01
Barium	0.0022	0.005	0.0052	0.02
Beryllium	0.00134	0.002	0.0039	0.005
Boron	0.0077	0.02	0.0228	0.2
Cadmium	0.00073	0.001	0.001	0.005
Calcium	0.022	0.05	0.0916	1
Chromium	0.0016	0.002	0.0035	0.01
Cobalt	0.00063	0.001	0.0008	0.01
Copper	0.0014	0.002	0.0005	0.01
Iron	0.087	0.1	0.0965	0.4
Lithium	0.0024	0.005	0.0066	0.2
Lead	0.0029	0.005	0.0053	0.01
Selenium	0.0042	0.01	0.0105	0.04
Manganese	0.00084	0.002	0.0019	0.01
Molybdenum	0.0027	0.005	0.0057	0.01
Nickel	0.00179	0.005	0.0048	0.01
Silver	0.0012	0.0025	0.0026	0.01
Sodium	0.02	0.05	0.381	1
Strontium	0.0005	0.001	0.0015	0.005
Thallium	0.0078	0.02	0.0203	0.03
Tin	0.0028	0.005	0.0053	0.01
Titanium	0.0011	0.002	0.002	0.01
Vanadium	0.0017	0.002	0.0041	0.01
Zinc	0.0022	0.005	0.0058	0.01

Job ID: 600-69922-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative 600-69922-1

Comments

No additional comments.

Receipt

The samples were received on 3/13/2013 9:04 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.0° C.

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-69922-1

Client: Pastor, Behl Project/Site: Exide	ling & Wheeler LLC Recycling Center, Frisco TX Projec		TestAmerica Job IL	2 2 2 2 2 2
Lab Sample ID	Client Sample ID	Matrix	Collected	Received 3
600-69922-1	LMW-17	Water	03/12/13 10:40	03/13/13 09:04
600-69922-2	LMW-21	Water	03/12/13 14:45	03/13/13 09:04
600-69922-3	Dup-1	Water	03/12/13 00:00	03/13/13 09:04 5
				7
				8
				9
				13

TestAmerica Houston

Client Sample Results

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-69922-1

Lab Sample ID: 600-69922-1

Lab Sample ID: 600-69922-2

Lab Sample ID: 600-69922-3

Matrix: Water

Matrix: Water

Matrix: Water

CI	ie	nt	Sai	mp	ole	e I	D	: 1	LN	W	-17	
_		-										

Date Collected: 03/12/13 10:40 Date Received: 03/13/13 09:04

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00328	U	0.0100	0.00328	mg/L		03/13/13 16:55	03/14/13 14:56	1
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/13/13 16:55	03/14/13 14:56	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/13/13 16:55	03/14/13 14:56	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		03/13/13 16:55	03/14/13 14:56	1

wethou. ou tob - wetais (ICF) - I	Dissolveu								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00328	U	0.0100	0.00328	mg/L		03/13/13 16:55	03/14/13 14:59	1
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/13/13 16:55	03/14/13 14:59	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/13/13 16:55	03/14/13 14:59	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		03/13/13 16:55	03/14/13 14:59	1

Client Sample ID: LMW-21

Date Collected: 03/12/13 14:45 Date Received: 03/13/13 09:04

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		03/13/13 16:55	03/14/13 15:01	1
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/13/13 16:55	03/14/13 15:01	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/13/13 16:55	03/14/13 15:01	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		03/13/13 16:55	03/14/13 15:01	1
Method: 6010B - Metals (ICP) - D	issolved								
Method: 6010B - Metals (ICP) - D Analyte	i <mark>ssolved</mark> Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 6010B - Metals (ICP) - D Analyte Arsenic	issolved Result 0.00328	Qualifier U	MQL (Adj) 0.0100	SDL 0.00328	Unit mg/L	<u>D</u>	Prepared 03/13/13 16:55	Analyzed 03/14/13 15:04	Dil Fac
Method: 6010B - Metals (ICP) - D Analyte Arsenic Cadmium	Lissolved Result 0.00328 0.000350	Qualifier U U	MQL (Adj) 0.0100 0.00500	SDL 0.00328 0.000350	Unit mg/L mg/L	D	Prepared 03/13/13 16:55 03/13/13 16:55	Analyzed 03/14/13 15:04 03/14/13 15:04	Dil Fac
Method: 6010B - Metals (ICP) - D Analyte Arsenic Cadmium Lead	issolved <u>Result</u> 0.00328 0.000350 0.00290	Qualifier U U U	MQL (Adj) 0.0100 0.00500 0.0100	SDL 0.00328 0.000350 0.00290	Unit mg/L mg/L mg/L	<u>D</u>	Prepared 03/13/13 16:55 03/13/13 16:55 03/13/13 16:55	Analyzed 03/14/13 15:04 03/14/13 15:04 03/14/13 15:04	Dil Fac 1 1 1

Client Sample ID: Dup-1 Date Collected: 03/12/13 00:00

Date Received: 03/13/13 09:04

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		03/13/13 16:55	03/14/13 15:06	1
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/13/13 16:55	03/14/13 15:06	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/13/13 16:55	03/14/13 15:06	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		03/13/13 16:55	03/14/13 15:06	1
-									

Method: 6010B - Metals (ICP) - Dissolved											
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac		
Arsenic	0.00328	U	0.0100	0.00328	mg/L		03/13/13 16:55	03/14/13 15:09	1		
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/13/13 16:55	03/14/13 15:09	1		
Lead	0.00290	U	0.0100	0.00290	mg/L		03/13/13 16:55	03/14/13 15:09	1		
Selenium	0.00417	U	0.0400	0.00417	mg/L		03/13/13 16:55	03/14/13 15:09	1		

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Qualifiers

Metals

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

Glossary

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

2 3 nk 4 IA 18 5 1 6 1 7 1 8

10

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-101618/1-A Matrix: Water										Client Sa	Imple ID: Metho Prep Type: 1	d Blank otal/NA
Analysis Batch: 101709	MB	MB									Ргер ватст	101010
Analyte	Result	Qualifier	MQL (Adj)		SDL	Unit		D	P	repared	Analyzed	Dil Fac
Arsenic	0.00328	U	0.0100	0.00	0328	mg/L			03/1	3/13 16:55	03/14/13 14:52	1
Cadmium	0.000350	U	0.00500	0.000	0350	mg/L			03/1	3/13 16:55	03/14/13 14:52	1
Lead	0.00290	U	0.0100	0.00	0290	mg/L			03/1	3/13 16:55	03/14/13 14:52	1
Selenium	0.00417	U	0.0400	0.00)417	mg/L			03/1	3/13 16:55	03/14/13 14:52	1
 Lab Sample ID: LCS 600-101618/2-A								CI	lient	Sample	ID: Lab Control	Sample
Matrix: Water											Prep Type: 1	otal/NA
Analysis Batch: 101709											Prep Batch	101618
-			Spike	LCS	LCS						%Rec.	
Analyte			Added	Result	Quali	ifier	Unit		D	%Rec	Limits	
Arsenic			1.00	0.9977			mg/L		_	100	80 - 120	
Cadmium			0.500	0.4901			mg/L			98	80 - 120	
Lead			1.00	0.9532			mg/L			95	80 - 120	
Selenium			1.00	1.004			mg/L			100	80 - 120	

Unadjusted Detection Limits

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

5 11 12 13 14 15 16

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Arsenic	0.0100	0.00328	mg/L	6010B
Cadmium	0.00500	0.000350	mg/L	6010B
Lead	0.0100	0.00290	mg/L	6010B
Selenium	0.0400	0.00417	mg/L	6010B

Method: 6010B - Metals (ICP) - Dissolved

Analyte	MQL	MDL	Units	Method
Arsenic	0.0100	0.00328	mg/L	6010B
Cadmium	0.00500	0.000350	mg/L	6010B
Lead	0.0100	0.00290	mg/L	6010B
Selenium	0.0400	0.00417	mg/L	6010B

TestAmerica Houston

QC Association Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Metals

Prep Batch: 101618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-69922-1	LMW-17	Total/NA	Water	3010A	
600-69922-1	LMW-17	Dissolved	Water	3010A	
600-69922-2	LMW-21	Total/NA	Water	3010A	
600-69922-2	LMW-21	Dissolved	Water	3010A	
600-69922-3	Dup-1	Total/NA	Water	3010A	
600-69922-3	Dup-1	Dissolved	Water	3010A	
LCS 600-101618/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-101618/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 101709

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
600-69922-1	LMW-17	Total/NA	Water	6010B	101618
600-69922-1	LMW-17	Dissolved	Water	6010B	101618
600-69922-2	LMW-21	Total/NA	Water	6010B	101618
600-69922-2	LMW-21	Dissolved	Water	6010B	101618
600-69922-3	Dup-1	Total/NA	Water	6010B	101618
600-69922-3	Dup-1	Dissolved	Water	6010B	101618
LCS 600-101618/2-A	Lab Control Sample	Total/NA	Water	6010B	101618
MB 600-101618/1-A	Method Blank	Total/NA	Water	6010B	101618

Lab Sample ID: 600-69922-1

Lab Sample ID: 600-69922-2

Lab Sample ID: 600-69922-3

Matrix: Water

Matrix: Water

Matrix: Water

	Į	0		
	8			
1			3	2

Client Sample ID: LMW-17 Date Collected: 03/12/13 10:40

Date Received:	03/13/13 09:0)4						
	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			101618	03/13/13 16:55	NER	TAL HOU
Total/NA	Analysis	6010B		1	101709	03/14/13 14:56	DCL	TAL HOU
Dissolved	Prep	3010A			101618	03/13/13 16:55	NER	TAL HOU
Dissolved	Analysis	6010B		1	101709	03/14/13 14:59	DCL	TAL HOU
—								

Client Sample ID: LMW-21 Date Collected: 03/12/13 14:45 Date Received: 03/13/13 09:04

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			101618	03/13/13 16:55	NER	TAL HOU
Total/NA	Analysis	6010B		1	101709	03/14/13 15:01	DCL	TAL HOU
Dissolved	Prep	3010A			101618	03/13/13 16:55	NER	TAL HOU
Dissolved	Analysis	6010B		1	101709	03/14/13 15:04	DCL	TAL HOU

Client Sample ID: Dup-1 Date Collected: 03/12/13 00:00 Date Received: 03/13/13 09:04

_	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			101618	03/13/13 16:55	NER	TAL HOU
Total/NA	Analysis	6010B		1	101709	03/14/13 15:06	DCL	TAL HOU
Dissolved	Prep	3010A			101618	03/13/13 16:55	NER	TAL HOU
Dissolved	Analysis	6010B		1	101709	03/14/13 15:09	DCL	TAL HOU

Laboratory References:

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

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-69922-1

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	08-04-12
Louisiana	NELAP	6	01967	06-30-13
Oklahoma	State Program	6	9503	08-31-13
Texas	NELAP	6	T104704223-10-6-TX	10-31-13
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	GULF	10-31-13

TestAmerica Houston

Chain of	Temperature on Receipt	
	Drinking Water? Yes No THE LEADER, 600-6	9922 Chain of Custody
Client Pastor Rehling & Wheeler	Project Manager W:N V: Cuu	Date 13 Chain of Custody Number 3/12/13 225379
2201 Dan he Greek Dr. Sk Yooy	Telephone Number (Area Code)/Fax Number	Lab Number Page of
Can Barnd Rucht State Zie Code	Site Contact And Site Contact And Site Contact	ilysis (Attach list if s space is needed) 1 1 1 1 1 1 1
Project Name and Location (State)	Carrier/Waybill Number	Special Instructions/
Contract/Purchase Order/Quote No.	Matrix Containers &	Conditions of Receipt
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Air Aqueous Sed. Soli Unpres. H2SO4 HNO3 HCI NaOH ZNAC/ NaOH ZNAC/ NaOH	
LMW-17 3/2/13 11		Run all Supples
LMW-21 3/12/13/		for 26, cd, Aussmic,
Dup 1 3/12/13		af Sc
Possible Hazard Ioèntrication	Unknown	(A fee may be assessed if samples are retained Months longer than 1 month)
Tuny Around Time Required	OC Requirements (Specify)	
1. Relinquished By	3/2/13 15/10 1. Received By Manual 13	- Blialis Ime
2. Relinquished by MMCConce	Ster 3 UTW 2. Received By	are fine fine
3. Relinquished By	Date I Ime 3. Hecewed by	
DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays will	the Sample; PINK - Field Copy	
DISTRIBUTION: WHITE - Returned to Client with Report: CANART - Stays with	r ute odnipie, rrivn - rietu vupy	

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 Client: Pastor, Behling & Wheeler LLC

Login Number: 69922 List Number: 1

Creator: Pulumbarit, Josh

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.0
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.	True	

16

Job Number: 600-69922-1

List Source: TestAmerica Houston



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: 600-70014-1

Client Project/Site: Exide Recycling Center, Frisco TX Projec

For:

Pastor, Behling & Wheeler LLC 2201 Double Creek Dr Suite 4004 Round Rock, Texas 78664

Attn: Eric Pastor

Authorized for release by: 3/25/2013 10:38:33 AM Cathy Upton Data Delivery Analyst cathy.upton@testamericainc.com

Designee for

Sachin Kudchadkar Project Manager II sachin.kudchadkar@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

600-70014-1

Job Number:

Project Name/Number:

Exide Decycling Center I

Number: Exide Recycling Center, Frisco TX Project

This Data Package consists of:

X

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

- R1 Field Chain-of-Custody Form
- **X** R2 Sample Identification Cross-reference;
- **X** 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).
- **X** R4 Surrogate Recovery Data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- **X** 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 $\ensuremath{\%R}$ 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
- **R**8 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.
- **R**9 List of method quantitation limit (MQL) and detectability check sample results for each analyte for each method and matrix;
- **X** 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 Name (printed) Data Delivery Analyst

Official Title (printed)

Signature

03/25/2013

A	oper	ndix A (cont'd): Laboratory Review Checklis	t: Reportable Data					
Laboratory Name: TestAmerica-Houston LRC Date: 03/20/13								
Project Name: Exide Recycling Center, Frisco TX Laboratory Job Number: 600-70014								
Rev	iewer	Name: TWR	Prep Batch Number(s): 600-101673- I	CP				
$ \mathbf{\mu}^1 \mathbf{A}^2 $ Description					No	NA ³	NR^4	ER# ⁵
	Л	Chain-of-custody (C-O-C)		105	110	1.1.1		LICH
R1	OI	Did samples meet the laboratory's standard conditions of samp	la accontability upon receipt?	v				
	01	Were all departures from standard conditions described in an exception report?		Λ		x		
R2	OI	Sample and quality control (QC) identification				Λ		
	01	Are all field sample ID numbers cross-referenced to the laborat	ory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the correspo	nding QC data?	X				
R3	OI	Test reports						
		Were all samples prepared and analyzed within holding times?		Х		1	1	
		Other than those results < MQL, were all other raw values bracketed by calibration standards?						
		Were calculations checked by a peer or supervisor? Were all analyte identifications checked by a peer or supervisor? Were sample detection limits reported for all analytes not detected?						
		Were all results for soil and sediment samples reported on a dry	y weight basis?			Х		
		Were % moisture (or solids) reported for all soil and sediment s	samples?			Х		
		Were bulk soil/solid samples for volatile analysis extracted with	h methanol per SW846 Method 5035?			Х		
		If required for the project, TICs reported?				Х		
R4	0	Surrogate recovery data						
		Were surrogates added prior to extraction?				Х		
		Were surrogate percent recoveries in all samples within the lab	oratory 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	s, including preparation and, if	X				
		applicable, cleanup procedures?		v				
D4	OI	Were blank concentrations < MQL?		X				
ко	OI	Laboratory control samples (LCS):		v				
		Were all COCs included in the LCS? Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?				-		
		Were LCSs analyzed at the required frequency?						
		Does the detectability check sample data document the laboratory's consultity to detect the COCs						
		the MDL used to calculate the SDL s?	by scapability to detect the COCs at	Λ				
		Was the LCSD RPD within OC limits?				x		
R7	OI	Mastic ECOD KID while QC mints:						
		Were the project/method specified analytes included in the MS	and MSD?	X		1		
		Were MS/MSD analyzed at the appropriate frequency?		Х				
		Were MS (and MSD, if applicable) %Rs within the laboratory	QC limits?	Х				
		Were MS/MSD RPDs within laboratory QC limits?	~	Х		1		
R8	OI	Analytical duplicate data						
		Were appropriate analytical duplicates analyzed for each matrix	x?	Х				
		Were analytical duplicates analyzed at the appropriate frequence	cy?	Х				
		Were RPDs or relative standard deviations within the laborator	y QC limits?				Х	1
R9	OI	Method quantitation limits (MQLs):						
		Are the MQLs for each method analyte included in the laborate	ory data package?	Х				
		Do the MQLs correspond to the concentration of the lowest not	n-zero calibration standard?	Х				
		Are unadjusted MQLs and DCSs included in the laboratory dat	a package?	Х				
R10	OI	Other problems/anomalies						
		Are all known problems/anomalies/special conditions noted in	this LRC and ER?	Х		<u> </u>	ļ	
		Was applicable and available technology used to lower the SDI	L to minimize the matrix interference	Х	1	1		
1		attects on the sample results?			<u> </u>	 		
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the			1	1		
I	1	analytes, matrices and memous associated with this laboratory data package automated in the TDDD maying memory data package submitted in the TDDD memory data package submitted in the TDD memory data package submitte		nort(e)	Itor	ne ida	ntifie	hv th

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 NA = Not applicable;

4. NR = Not reviewed;

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked). 5.

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A	mor	div A (aant'd); I abaratary Daviery Charlitte D	anartabla Data					
Appendix A (cont.d): Laboratory Review Checklist: Reportable Data Laboratory Name: Test America-Houston LBC Date: 03/20/13								
Device Verse Fride Device Center Fride TV								
Project Name: Exide Recycling Center, Frisco IX Laboratory Job Number: 600-70014								
Reviewer Name: TWR Prep Batch Number(s): 600-101673-			CP					
#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 analy	te within QC limits?			Х		
		Were percent RSDs or correlation coefficient criteria met?				Χ		
		Was the number of standards recommended in the method used for a	ll analytes?	Х				
		Were all points generated between the lowest and highest standard used to calculate the curve?				Х		
		Are ICAL data available for all instruments used?		Х				
		Has the initial calibration curve been verified using an appropriate se	cond source standard?	Х				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration						
		Was the CCV analyzed at the method-required frequency?		Х				
		Were percent differences for each analyte within the method-required QC limits?			Х			2
		Was the ICAL curve verified for each analyte?		Х				
		Was the absolute value of the analyte concentration in the inorganic	CCB < MDL?	Х				
S 3	0	Mass spectral tuning:						
		Was the appropriate compound for the method used for tuning?				Х		
		Were ion abundance data within the method-required QC limits?				Х		
S4	0	Internal standards (IS):						
		Were IS area counts and retention times within the method-required	QC limits?			Х		
S5	OI	Raw data (NELAC section 5.5.10)						
		Were the raw data (for example, chromatograms, spectral data) review	wed by an analyst?	Х				
		Were data associated with manual integrations flagged on the raw data	ta?			Х		
S6	0	O Dual column confirmation						
		Did dual column confirmation results meet the method-required QC?				Х		
S7	0	Tentatively identified compounds (TICs):						
		f TICs were requested, were the mass spectra and TIC data subject to appropriate checks?				Х		
S8	Ι	Interference Check Sample (ICS) results:	results:					
		Were percent recoveries within method QC limits?		Х				
S9	Ι	Serial dilutions, post digestion spikes, and method of standard ad	lditions					
		Were percent differences, recoveries, and the linearity within the QC	limits specified in the method?	Х				
S10	OI	Method detection limit (MDL) studies						
		Was a MDL study performed for each reported analyte?		Х				
		Is the MDL either adjusted or supported by the analysis of DCSs?		Х				
S11	OI	Proficiency test reports:						
		Was the laboratory's performance acceptable on the applicable profic	ciency tests or evaluation studies?	Χ				
S12	OI	Standards documentation						
~		Are all standards used in the analyses NIST-traceable or obtained fro	om 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?	2	X				
S15	OI	Verification/validation documentation for methods (NELAC Cha	apter 5)					
		Are all the methods used to generate the data documented, verified, a	and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs):						
		Are laboratory SOPs current and on file for each method performed?		Х				
L		1 Items identified by the letter "R" should be included in the laboratory d	lata package submitted to the TCEQ in	the T	RRP	-require	ed repoi	rt(s).

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.

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable). NA = Not applicable.2

3

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).
4
5
8
9
13
16

Appe	Appendix A (cont'd): Laboratory Review Checklist: Exception Reports								
Labora	tory Name: TestAmerica-Houston	LRC Date: 03/20/13							
Project	Name: Exide Recycling Center, Frisco TX	Laboratory Job Number: 600-70014							
Reviewer Name: TWR Prep Batch Number(s): 600-101673- ICP									
ER # ¹	DESCRIPTION								
1	The laboratory selected a sample from another grou	p to perform as the DUP.							
2	The continuing calibration verification (CCV) for ca	admium and selenium associated with batch 101814 recovered							
	above the upper control limit. The samples associated with this CCV were non-detects for the affected analytes;								
	therefore, the data have been reported.								

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:	Water			
Method:	200.7/6010			
Preparation:	200.7P/3010			
Date Analyzed:	12/3/2012			
Date Prepared:	11/28/2012			
Instrument:	Thermo 6500			
TALs Batches:	94513, 94244(p	orep)		
Units:	mg/L			
Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.0197	0.5
Antimony	0.0063	0.01	0.0106	0.05
Arsenic	0.0033	0.01	0.0071	0.01
Barium	0.0022	0.005	0.0052	0.02
Beryllium	0.00134	0.002	0.0039	0.005
Boron	0.0077	0.02	0.0228	0.2
Cadmium	0.00073	0.001	0.001	0.005
Calcium	0.022	0.05	0.0916	1
Chromium	0.0016	0.002	0.0035	0.01
Cobalt	0.00063	0.001	0.0008	0.01
Copper	0.0014	0.002	0.0005	0.01
Iron	0.087	0.1	0.0965	0.4
Lithium	0.0024	0.005	0.0066	0.2
Lead	0.0029	0.005	0.0053	0.01
Selenium	0.0042	0.01	0.0105	0.04
Manganese	0.00084	0.002	0.0019	0.01
Molybdenum	0.0027	0.005	0.0057	0.01
Nickel	0.00179	0.005	0.0048	0.01
Silver	0.0012	0.0025	0.0026	0.01
Sodium	0.02	0.05	0.381	1
Strontium	0.0005	0.001	0.0015	0.005
Thallium	0.0078	0.02	0.0203	0.03
Tin	0.0028	0.005	0.0053	0.01
Titanium	0.0011	0.002	0.002	0.01
Vanadium	0.0017	0.002	0.0041	0.01
Zinc	0.0022	0.005	0.0058	0.01

Job ID: 600-70014-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative 600-70014-1

Comments

No additional comments.

Receipt

The samples were received on 3/14/2013 8:39 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.7° C.

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU

Protocol References:

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

Laboratory References:

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

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-70014-1

Project/Site: Exide	Recycling Center, Frisco TX Projec		TestAmerica Job IL	5: 600-70014-1	
Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
600-70014-1	PMW-20R	Water	03/12/13 15:50	03/14/13 08:39	
600-70014-2	LMW-9	Water	03/13/13 09:10	03/14/13 08:39	
600-70014-3	LMW-8	Water	03/13/13 09:40	03/14/13 08:39	5
600-70014-4	LMW-22	Water	03/13/13 10:10	03/14/13 08:39	Ð
600-70014-5	LMW-5	Water	03/13/13 10:50	03/14/13 08:39	
					7
					8
					9
				1	3

TestAmerica Houston

Client Sample Results

MQL (Adj)

0.0100

0.00500

0.0100

0.0400

MQL (Adj)

0.0100

0.00500

0.0100

0.0400

SDL Unit

0.00328 mg/L

0.000350 mg/L

0.00290 mg/L

0.00417 mg/L

SDL Unit

0.00328 mg/L

0.000350 mg/L

0.00290 mg/L

0.00417 mg/L

D

D

Prepared

03/14/13 12:17

03/14/13 12:17

03/14/13 12:17

03/14/13 12:17

Prepared

03/14/13 12:17

03/14/13 12:17

03/14/13 12:17

03/14/13 12:17

Result Qualifier

Result Qualifier

0.00328 U

0.000350 U

0.00290 U

0.00931 J

0.00328 U

0.000350 U^

0.00290 U

0.00509 J

0.00290 U

0.00570 J

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Client Sample ID: PMW-20R

Date Collected: 03/12/13 15:50

Date Received: 03/14/13 08:39

Method: 6010B - Metals (ICP)

Client Sample ID: LMW-9

Date Collected: 03/13/13 09:10

Method: 6010B - Metals (ICP) - Dissolved

Analyte

Arsenic

Lead

Cadmium

Selenium

Analyte

Arsenic

Lead

Cadmium

Selenium

TestAmerica Job ID: 600-70014-1

Lab Sample ID: 600-70014-1

Analyzed

03/15/13 18:27

03/15/13 18:27

03/15/13 18:27

03/15/13 18:27

Analyzed

03/15/13 19:14

03/15/13 19:14

03/15/13 19:14

03/18/13 13:42

Matrix: Water

Dil Fac

Dil Fac

1

1

1

1

1

1

1

Lab Sample ID: 600-70014-2

Lab Sample ID: 600-70014-3

03/15/13 19:29

03/18/13 13:54

Matrix: Water

Dil Fac

Dil Fac

Matrix: Water

1

Date Received: 03/14/13 08:	39							
Method: 6010B - Metals (IC	: P)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed
Arsenic	0.00328	U	0.0100	0.00328	mg/L		03/14/13 12:17	03/15/13 18:39
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/14/13 12:17	03/15/13 18:39
Lead	0.00290	U	0.0100	0.00290	mg/L		03/14/13 12:17	03/15/13 18:39
Selenium	0.491		0.0400	0.00417	mg/L		03/14/13 12:17	03/15/13 18:39
Method: 6010B - Metals (IC	P) - Dissolved							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed
Arsenic	0.00328	U	0.0100	0.00328	mg/L		03/14/13 12:17	03/15/13 19:25

-			· •			•	-	
Arsenic	0.00328	U	0.0100	0.00328	mg/L	 03/14/13 12:17	03/15/13 19:25	1
Cadmium	0.000350	U ^	0.00500	0.000350	mg/L	03/14/13 12:17	03/15/13 19:25	1
Lead	0.00290	U	0.0100	0.00290	mg/L	03/14/13 12:17	03/15/13 19:25	1
Selenium	0.489		0.0400	0.00417	mg/L	03/14/13 12:17	03/15/13 19:25	1

Client Sample ID: LMW-8 Date Collected: 03/13/13 09:40

Date Received: 03/14/13 08:39

Lead

Selenium

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		03/14/13 12:17	03/15/13 18:43	1
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/14/13 12:17	03/15/13 18:43	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/14/13 12:17	03/15/13 18:43	1
Selenium	0.0104	J	0.0400	0.00417	mg/L		03/14/13 12:17	03/15/13 18:43	1
_ Method: 6010B - Metals (ICP) - I	Dissolved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00328	U	0.0100	0.00328	mg/L		03/14/13 12:17	03/15/13 19:29	1
Cadmium	0.000350	U ^	0.00500	0.000350	mg/L		03/14/13 12:17	03/15/13 19:29	1

0.0100

0.0400

0.00290 mg/L

0.00417 mg/L

03/14/13 12:17

03/14/13 12:17

TestAmerica Houston

1

1

TestAmerica Job ID: 600-70014-1

Lab Sample ID: 600-70014-5

Matrix: Water

Client Sample ID: LMW-22 Date Collected: 03/13/13 10:10 Date Received: 03/14/13 08:39

Method: 6010B - Metals	(ICP)	0 117				_	<u> </u>		
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00328	U	0.0100	0.00328	mg/L		03/14/13 12:17	03/15/13 18:47	1
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/14/13 12:17	03/15/13 18:47	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/14/13 12:17	03/15/13 18:47	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		03/14/13 12:17	03/15/13 18:47	1
Method: 6010B - Metals	(ICP) - Dissolved								
Analyte	Result	Qualifier	(ibA) IOM	SDI	Unit	п	Prenared	Analyzed	Dil Fac

Analyte	Result	Quaimer	MQL (Adj)	SDL	Unit	U	Prepared	Analyzed	Dirrac
Arsenic	0.00328	U	0.0100	0.00328	mg/L		03/14/13 12:17	03/15/13 19:33	1
Cadmium	0.000350	U ^	0.00500	0.000350	mg/L		03/14/13 12:17	03/15/13 19:33	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/14/13 12:17	03/15/13 19:33	1
Selenium	0.00417	U ^	0.0400	0.00417	mg/L		03/14/13 12:17	03/15/13 19:33	1

Client Sample ID: LMW-5

Date Collected: 03/13/13 10:50 Date Received: 03/14/13 08:39

Method: 6010B - Metals (ICF	[*]) Decult	Qualifian		601	11		Dremened	Analyzad	
Analyte	Result	Quaimer	WQL (Adj)	SDL	Unit	U	Prepared	Analyzed	DIFac
Arsenic	0.00328	U	0.0100	0.00328	mg/L		03/14/13 12:17	03/15/13 18:50	1
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/14/13 12:17	03/15/13 18:50	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/14/13 12:17	03/15/13 18:50	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		03/14/13 12:17	03/15/13 18:50	1
Method: 6010B - Metals (ICF	r) - Dissolved								

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.00328	U	0.0100	0.00328	mg/L		03/14/13 12:17	03/15/13 19:37	1
Cadmium	0.000350	U ^	0.00500	0.000350	mg/L		03/14/13 12:17	03/15/13 19:37	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/14/13 12:17	03/15/13 19:37	1
Selenium	0.00417	U ^	0.0400	0.00417	mg/L		03/14/13 12:17	03/15/13 19:37	1

Definitions/Glossary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Qualifiers

Μ	et	al	S

Qualifier	S	3
Metals		
Qualifier	Qualifier Description	
U	Analyte was not detected at or above the SDL.	- 5
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.	5
٨	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.	

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.		
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis		8
%R	Percent Recovery	_	
CNF	Contains no Free Liquid		9
DER	Duplicate error ratio (normalized absolute difference)		
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)		2
ND	Not detected at the reporting limit (or MDL or EDL if shown)		P
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)		6
TEO	Toxicity Equivalent Quotient (Dioxin)		

MQL (Adj)

0.0100

0.00500

0.0100

0.0400

SDL Unit

0.00328 mg/L

0.000350 mg/L

0.00290 mg/L

0.00417 mg/L

D

Prepared

MB MB

0.00328 U

0.00290 U

0.00417 U

0.000350 U

Result Qualifier

Method: 6010B - Metals (ICP)

Matrix: Water

Analyte

Arsenic

Lead

Cadmium

Selenium

Matrix: Water

Analysis Batch: 101814

Analysis Batch: 101898

Lab Sample ID: MB 600-101673/1-A

Lab Sample ID: MB 600-101673/1-A

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 101673 10

Dil Fac

1

03/14/13 12:17 03/15/13 18:20 03/14/13 12:17 03/15/13 18:20 1 03/14/13 12:17 03/15/13 18:20 1 03/14/13 12:17 03/15/13 18:20 1 **Client Sample ID: Method Blank**

Analyzed

Prep Type: Total/NA
Prep Batch: 101673

	MB	МВ							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.00417	U	0.0400	0.00417	mg/L		03/14/13 12:17	03/18/13 13:27	1

Lab Sample ID: LCS 600-101673/2-A Matrix: Water Analysis Batch: 101814					Client	t Sample	e ID: Lab Control Sample Prep Type: Total/N/ Prep Batch: 10167		
-	Spike	LCS	LCS				%Rec.		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Arsenic	1.00	1.075		mg/L		107	80 - 120		
Cadmium	0.500	0.5479		mg/L		110	80 - 120		
Lead	1.00	1.085		mg/L		109	80 - 120		
Selenium	1.00	1.097		mg/L		110	80 - 120		

_ Lab Sample ID: LCS 600-101673/2-A					Client	t Sample	D: Lab C	ontrol Sample
Matrix: Water							Prep 1	Type: Total/NA
Analysis Batch: 101898							Prep	Batch: 101673
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Selenium	1.00	1.033		mg/L		103	80 - 120	

Lab Sample ID: 600-70014-1 MS								Clie	ent Sample	D: PMW-20R
Matrix: Water									Prep 1	Type: Total/NA
Analysis Batch: 101814									Prep	Batch: 101673
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Arsenic	0.00328	U	1.00	1.123		mg/L		112	75 - 125	
Cadmium	0.000350	U	0.500	0.5485		mg/L		110	75 - 125	
Lead	0.00290	U	1.00	1.100		mg/L		110	75 - 125	
Selenium	0.00931	J	1.00	1.131		mg/L		112	75 ₋ 125	

Lab Sample ID: 600-70014-1 MSD Matrix: Water Analysis Batch: 101814								Clie	ent Sample Prep 1 Prep I	ID: PMV Type: Tot Batch: 1	V-20R al/NA 01673
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	0.00328	U	1.00	1.142		mg/L		114	75 - 125	2	20
Cadmium	0.000350	U	0.500	0.5573		mg/L		111	75 ₋ 125	2	20
Lead	0.00290	U	1.00	1.117		mg/L		112	75 ₋ 125	2	20
Selenium	0.00931	J	1.00	1.152		mg/L		114	75 ₋ 125	2	20

TestAmerica Houston

1 2 3 4 5 6 7 8 9 10 11

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

Lab Sample ID: 600-70014-1 MS Matrix: Water Analysis Batch: 101814	Sample	Samolo	Snike	MS	MS			Clie	ent Sample Prep Ty Prep I	ID: PMV pe: Diss Batch: 1	V-20R olved 01673
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Arsenic	0.00328	U	1.00	1.132		mg/L		113	75 - 125		
Cadmium	0.000350	U ^	0.500	0.5533		mg/L		111	75 ₋ 125		
Lead	0.00290	U	1.00	1.103		mg/L		110	75 ₋ 125		
Selenium _	0.00437		1.00	1.143		mg/L		114	75 ₋ 125		
Lab Sample ID: 600-70014-1 MSD								Clie	ent Sample	ID: PMV	V-20R
Matrix: Water									Prep Ty	pe: Diss	olved
Analysis Batch: 101814									Prep I	Batch: 1	01673
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	0.00328	U	1.00	1.124		mg/L		112	75 _ 125	1	20
Cadmium	0.000350	U ^	0.500	0.5477		mg/L		110	75 _ 125	1	20
Lead	0.00290	U	1.00	1.091		mg/L		109	75 - 125	1	20
Selenium	0.00437		1.00	1.131		mg/L		113	75 ₋ 125	1	20

Unadjusted Detection Limits

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method	
Arsenic	0.0100	0.00328	mg/L	6010B	
Cadmium	0.00500	0.000350	mg/L	6010B	
Lead	0.0100	0.00290	mg/L	6010B	
Selenium	0.0400	0.00417	mg/L	6010B	

Method: 6010B - Metals (ICP) - Dissolved

Analyte	MQL	MDL	Units	Method	
Arsenic	0.0100	0.00328	mg/L	6010B	
Cadmium	0.00500	0.000350	mg/L	6010B	
Lead	0.0100	0.00290	mg/L	6010B	
Selenium	0.0400	0.00417	mg/L	6010B	

TestAmerica Houston

QC Association Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Metals

Prep Batch: 101673

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-70014-1	PMW-20R	Total/NA	Water	3010A	
600-70014-1	PMW-20R	Dissolved	Water	3010A	
600-70014-1 MS	PMW-20R	Total/NA	Water	3010A	
600-70014-1 MS	PMW-20R	Dissolved	Water	3010A	
600-70014-1 MSD	PMW-20R	Total/NA	Water	3010A	
600-70014-1 MSD	PMW-20R	Dissolved	Water	3010A	
600-70014-2	LMW-9	Total/NA	Water	3010A	
600-70014-2	LMW-9	Dissolved	Water	3010A	
600-70014-3	LMW-8	Total/NA	Water	3010A	
600-70014-3	LMW-8	Dissolved	Water	3010A	
600-70014-4	LMW-22	Total/NA	Water	3010A	
600-70014-4	LMW-22	Dissolved	Water	3010A	
600-70014-5	LMW-5	Total/NA	Water	3010A	
600-70014-5	LMW-5	Dissolved	Water	3010A	
LCS 600-101673/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-101673/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 101814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-70014-1	PMW-20R	Total/NA	Water	6010B	101673
600-70014-1	PMW-20R	Dissolved	Water	6010B	101673
600-70014-1 MS	PMW-20R	Total/NA	Water	6010B	101673
600-70014-1 MS	PMW-20R	Dissolved	Water	6010B	101673
600-70014-1 MSD	PMW-20R	Total/NA	Water	6010B	101673
600-70014-1 MSD	PMW-20R	Dissolved	Water	6010B	101673
600-70014-2	LMW-9	Total/NA	Water	6010B	101673
600-70014-2	LMW-9	Dissolved	Water	6010B	101673
600-70014-3	LMW-8	Total/NA	Water	6010B	101673
600-70014-3	LMW-8	Dissolved	Water	6010B	101673
600-70014-4	LMW-22	Total/NA	Water	6010B	101673
600-70014-4	LMW-22	Dissolved	Water	6010B	101673
600-70014-5	LMW-5	Total/NA	Water	6010B	101673
600-70014-5	LMW-5	Dissolved	Water	6010B	101673
LCS 600-101673/2-A	Lab Control Sample	Total/NA	Water	6010B	101673
MB 600-101673/1-A	Method Blank	Total/NA	Water	6010B	101673

Analysis Batch: 101898

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
600-70014-1	PMW-20R	Dissolved	Water	6010B	101673
600-70014-3	LMW-8	Dissolved	Water	6010B	101673
LCS 600-101673/2-A	Lab Control Sample	Total/NA	Water	6010B	101673
MB 600-101673/1-A	Method Blank	Total/NA	Water	6010B	101673

Client Samp	le ID: PMW- I: 03/12/13 15:	20R						Lab Sample	ID: 600-70014-1 Matrix: Water
Date Received	1: 03/14/13 08:3	39							
	Batch	Batch		Dilution	Batch	Prepared			
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3010A			101673	03/14/13 12:17	NER	TAL HOU	
Total/NA	Analysis	6010B		1	101814	03/15/13 18:27	TWR	TAL HOU	
Dissolved	Prep	3010A			101673	03/14/13 12:17	NER	TAL HOU	
Dissolved	Analysis	6010B		1	101814	03/15/13 19:14	TWR	TAL HOU	
Dissolved	Analysis	6010B		1	101898	03/18/13 13:42	DCL	TAL HOU	
Client Samp	le ID: LMW-	9						Lab Sample	ID: 600-70014-2
Date Collected	l: 03/13/13 09:'	10							Matrix: Water
Date Received	I: 03/14/13 08:3	39							

	Batch	Batch		Dilution	Batch	Prepared		
Prep Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			101673	03/14/13 12:17	NER	TAL HOU
Total/NA	Analysis	6010B		1	101814	03/15/13 18:39	TWR	TAL HOU
Dissolved	Prep	3010A			101673	03/14/13 12:17	NER	TAL HOU
Dissolved	Analysis	6010B		1	101814	03/15/13 19:25	TWR	TAL HOU

Client Sample ID: LMW-8

Date Collected: 03/13/13 09:40 Date Received: 03/14/13 08:39

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			101673	03/14/13 12:17	NER	TAL HOU
Total/NA	Analysis	6010B		1	101814	03/15/13 18:43	TWR	TAL HOU
Dissolved	Prep	3010A			101673	03/14/13 12:17	NER	TAL HOU
Dissolved	Analysis	6010B		1	101814	03/15/13 19:29	TWR	TAL HOU
Dissolved	Analysis	6010B		1	101898	03/18/13 13:54	DCL	TAL HOU

Client Sample ID: LMW-22 Date Collected: 03/13/13 10:10 Date Received: 03/14/13 08:39

Lab Sample ID: 6	600-70014-4
	Matrix: Water

Lab Sample ID: 600-70014-3

Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			101673	03/14/13 12:17	NER	TAL HOU
Total/NA	Analysis	6010B		1	101814	03/15/13 18:47	TWR	TAL HOU
Dissolved	Prep	3010A			101673	03/14/13 12:17	NER	TAL HOU
Dissolved	Analysis	6010B		1	101814	03/15/13 19:33	TWR	TAL HOU

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Lab Sample ID: 600-70014-5

Matrix: Water

Client Sample ID: LMW-5 Date Collected: 03/13/13 10:50

Date Received: 03/14/13 08:39

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			101673	03/14/13 12:17	NER	TAL HOU
Total/NA	Analysis	6010B		1	101814	03/15/13 18:50	TWR	TAL HOU
Dissolved	Prep	3010A			101673	03/14/13 12:17	NER	TAL HOU
Dissolved	Analysis	6010B		1	101814	03/15/13 19:37	TWR	TAL HOU

Laboratory References:

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

TestAmerica Houston

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-70014-1

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	08-04-12
Louisiana	NELAP	6	01967	06-30-13
Oklahoma	State Program	6	9503	08-31-13
Texas	NELAP	6	T104704223-10-6-TX	10-31-13
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	GULF	10-31-13

TestAmerica Houston

Chain of Custody Becord	Temperature on Receipt	<u>e</u>	0014 Chain of Custody	600-7
Custoay necord	Drinking Water? Yes		EADE	
Client PB W	Project Manager	g)	3/13/13	Chain of Custody Number 295378
Address Address Dauk Lor Ste	400 V (572) 62-1-34	Eax Number	Lab Number	Page of
Chy State Zp Co	206 Site Contact LI	ab Contact	Analysis (Attach list if more space is needed)	
Project Name and Location (State) Exide (FWONE Derive Toca	Carrier/Waybill Number		2 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2	Special Instructions/
Contract Purchase Order/Duote No. 5 70+8-2-4 1856	Matrix	Containers & Preservatives	(-5-) 	Conditions of Receipt
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date Time Air	NªOH N¥UZ N0 [€] OH HCI HCO3 HNC3 HNC3	N S 02.70 A 01	
PMW-ZOR 3	× 12/13 1550 ×	2	XXX	Whals Rr
PMW-ZORMS 3	3/12/13 1550 X	2	XXX	each sup k
H PMW-20R MSD 3	1121131550 X	2	XXX	include 26 cd
S.MW	10/13 0910 ×	2	XX	assinic Se
S ~ M W /	1/13 /13 0940 X	2	X X X	-
8 22-MM / 22	3/13/13 2010 X	2	XXX	
LMW-5 B	13/13/050 X	0	XXX	
TATAN E				
				-
Possible Hazard Identification	Poison B Unknown Return To Client	Disposal By Lab	(A fee may be ass Archive For Months longer than 1 mor	essed if samples are retained th)
Tup Around Time Required	s 🗌 21 Days 🗌 Other	OC Requirements (Specify		
1 Belinguistical By	Z/13/13 1950	$\frac{1. \text{Received By}}{\sqrt{1 \text{CC}}}$	ante-	2/13/13 17me
E FAIINGUERABEL ACCUNAN	2012 17me	2. Rečeived By	°	2 14 43 E3 4
3. Relinquished By	Date 1 Time	3. Received By		Date I me
Comments				
	AMADV Store with the Cample: DIALY - Field Crow			

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DISTRIBUTION: WHITE - Returned to Client with Report, CANARY - Stays with the Sample; PINK - Field Copy

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15

Client: Pastor, Behling & Wheeler LLC

Login Number: 70014 List Number: 1

Creator: Pulumbarit, Josh

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.7
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.	True	

Job Number: 600-70014-1

List Source: TestAmerica Houston

DATA USABILITY SUMMARY

SITE:	Exide Former Operating Plant Frisco, Texas	
CLIENT:	Pastor, Behling & Wheeler, LLC (PBW) Round Rock, Texas	
EVENT:	Groundwater Sampling – March 2013	
INTENDED USE:	Affected Property Assessment	
LABORATORY:	TestAmerica – Houston, TX TLAP Certification T104704223 Work Order: 600-70016-1, 600-70223-1, 600-70259-1,	600-70437-1, 600-70496-1
TESTS/ METHODS:	Total Metals (As, Cd, Pb, and/or Se) Dissolved Metals (As, Cd, Pb, and/or Se) Sulfate (SO4)	SW846 3010A/6010B SW846 3010A/6010B EPA 300.0
SAMPLES:	15 groundwater samples, 3 MS/MSD pairs (see Table 1 for a complete listing)	

QAA completed a third-party 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).

All samples collected during the event were reviewed. QAA completed the review using the following laboratory and project submittals:

- Laboratory reportable data as defined in TRRP-13;
- Laboratory review checklists (LRCs) 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, QAA used the LRCs to evaluate the following QC parameters:

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

Criteria used for the data usability review are as follows:

 Inorganics: 70-130% spike recovery (and not less than 30% or data is rejected) and <u>+MQL</u> difference or 30% RPD (for laboratory 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.

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 form. 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 1 to this DUS.

USABILITY SUMMARY

 Usability of Unqualified Non-Detects – Non-detects are reported at the sample detection limit (SDL) as required per TRRP. Additionally, according to the LRCs, an MDL study was performed for each analyte and the MDLs were checked for reasonableness. The levels of required performance (LORPs) have been established by PBW as the ^{GW}GW_{Class 3} PCLs. As

DATA USABILITY SUMMARY

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.

Usability of Qualified Data – No QC deficiencies were noted that resulted in the reviewer applying data quality flags. Thus, all
results are acceptable for the intended use. Results with a laboratory J-flag (i.e., between the SDL and MQL) should be
considered estimates. The actual value for these results is not expected to exceed the sample MQL.

QAA Reviewer:

Taryn G. Scholz (Name) 4/19/13 (Date)

DATA USABILITY SUMMARY

QC PARAMETER QC OUTCOME

 Data
 The laboratory data package contains all necessary data (i.e., the laboratory reportable data per

 Completeness
 TRRP-13). No package revisions were required. The EDD required revision to add an identification to distinguish total metals results from dissolved metals results.

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 record is complete and agrees with that in the field notes and laboratory report, except as follows:

- For work order 600-70223-1, the laboratory receipt date is shown as 3/18/13 on the custody record. The actual receipt date is 3/19/13 after overnight shipment on 3/18/13 as shown on the laboratory report.
- For work order 600-70496-1, the laboratory receipt date is shown as 3/25/13 on the laboratory report. The actual receipt date is Saturday, 3/23/13 as shown on the custody record. The samples were logged in at the laboratory on Monday, 3/25/13.

These are considered minor issues and thus no further action was taken.

The reviewer also confirmed that all tests are reported as requested on the custody record and found the following changes:

- For work order 600-70016-1, Sulfate is requested on the custody record for each sample but the analyses were not performed because no containers (unpreserved) were received for this test.
- 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.
- Field Procedures Readings for temperature, pH, specific conductivity, and turbidity were recorded in the field notes. Each well was either purged until the well conditions stabilized and sampled immediately or purged until dry and sampled the next day after recovery (for B4R, MW-23, MW-25, and P-2). Samples were collected in containers provided by the laboratory, placed on ice, and delivered to the laboratory by overnight courier. All dissolved sample aliquots were field-filtered using a 0.45-micron filter. Aliquots for total metals were filtered using a 10-micron filter for wells with a turbidity greater than 10-NTU (for B4R, B5N, B7N, MW-13, MW-14, MW-17, MW-23, MW-24, MW-25, and P-2). Only dedicated or disposable equipment was used. No field QC samples (duplicates or blanks) were collected with these investigative samples.
- Results Reporting 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/L. 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.

Each of the sulfate samples required dilution due to a high concentration of this analyte. There are no elevated reporting limits for non-detects.

QC PARAMETER QC OUTCOME

- MQLs The LORPs have been established by PBW as the ^{GW}GW_{Class 3} PCLs. The Unadjusted MQLs are at or below the LORPs for the applicable analytes.
- MDLs According to the LRCs, 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 (DCSs) as required per TRRP-13. Results for the DCS are included in the laboratory data package.

Note: For work order 600-70223-1, the laboratory included DCS results for Sulfide by method SM4500 rather than for Sulfate by method EPA 300.0. The DCS results for Sulfate by method EPA 300.0 are included in the other work orders, and thus no further action was taken. Additionally, for 600-70437-001 and 600-70496-001, the laboratory included DCS results for 6010B metals dated 3/28/13, which is after the samples were analyzed. The DCS results for metals analyzed prior to the samples (on 11/28/12) are included in the other work orders, and thus no further action was taken.

Laboratory Blanks No analytes are reported above the detection limit in the laboratory blanks, which confirms that no contamination was introduced in the laboratory, except as follows:

Blank Type	QC Batch	Analyte	Blank Concentration
Method	102180	Sulfate	0.4504 J mg/kg

Results for samples prepared in the same QC batch as a contaminated method blank may be biased high due to laboratory contamination. However, none of the samples associated with the above blank have a concentration similar to the blank (i.e., within five times that measured in the blank), and thus no data qualification is required.

Field QC Blanks No field QC blanks were collected with the samples.

- Laboratory Control The laboratory prepared one laboratory control spike (LCS) for each analytical batch and the spike solution contained all of the analytes. The LCS recoveries are within the TRRP recommended limits, which indicates good accuracy for the preparation and analysis technique on a sample free of matrix effects.
- Matrix Spike
 The laboratory prepared one Matrix Spike (MS) and Matrix Spike Duplicate (MSD) for each analytical

 Recovery
 batch and the spike solution contained all of the analytes. Recoveries are reported for MS/MSD prepared using a sample from the site.

MS/MSD pairs were prepared using sample MW-18 for Total Metals and Dissolved Metals and using samples MW-10 and B1R for Sulfate. The recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on the given sample matrix.

Surrogate Surrogates are not used for methods SW846 6010B or EPA 300.0.

Recovery

LaboratoryThe laboratories prepared one Matrix Spike Duplicate (MSD) for each analytical batch. Additionally, theDuplicatelaboratory prepared one Matrix Duplicate (MD) with each metals analytical batch. RPDs are reportedPrecisionfor MSD and MD prepared using a sample from the site.

MSD and/or MD were prepared using sample MW-18 for Total Metals and Dissolved Metals and using samples MW-10 and B1R for Sulfate. The RPDs are within the TRRP recommended criteria, which indicates good precision for the preparation and analysis technique on the given sample matrix.

DATA USABILITY SUMMARY

QC PARAMETER	QC OUTCOME
Field Duplicate Precision	No field duplicates were collected with the samples.
Instrument Tuning	Instrument tuning is not required for methods SW846 6010B or EPA 300.0.
Instrument Calibration	According to the LRCs, 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 follows:
	• For the continuing calibration verification standard (CCV) analyzed with QC batch 101814, Cadmium was recovered above the upper control limit.
	This indicates a potential high bias for detects in samples associated with this CCV. The associated samples (i.e., those analyzed before or after this CCV) are non-detect for Cadmium, and thus no data qualification is required.
Instrument Performance	According to the LRCs, the serial dilution and ICP interference check samples met method requirements, which indicates that no significant matrix interference exists.
Internal Standards	Internal standards are not used for methods SW846 6010B or EPA 300.0.
Total to Partial Balance	For each metal in every sample, the dissolved metal concentration is at or below the total metal concentration or the difference does not exceed the inherent analytical method error (i.e., \pm 2x MQL difference (if either result is less than 5x MQL) or 30% RPD).

TABLE 1 EXIDE FORMER OPERATING PLANT GROUNDWATER SAMPLING – MARCH 2013

SAMPLES ANALYZED

					QC Prep Batch			
Lah ID	Field ID	Sample	Sample	Sample	Total Metals	Dissolved Metals	Sulfate	
	Field ID	Туре	Matrix	Date	(Cd, Pb)	(Cd, Pb)	(SO4)	
					3010A/6010B	3010A/6010B	300.0	
600-70016-001	MW-13	INV	Water	3/13/13	101673	101673	NA	
600-70016-002	MW-14	INV	Water	3/13/13	101673	101673	NA	
600-70016-003	MW-12	INV	Water	3/13/13	101673	101673	NA	
600-70223-001	MW-10	INV	Water	3/18/13	102039	102039	102180	
600-70223-001	MW-10	MS	Water	3/18/13	NA	NA	102180	
600-70223-001	MW-10	MSD	Water	3/18/13	NA	NA	102180	
600-70223-002	B7N	INV	Water	3/18/13	102039	102039	102180	
600-70259-001	MW-18	INV	Water	3/18/13	102122	102122	102180	
600-70259-001	MW-18	MS	Water	3/18/13	102122	102122	NA	
600-70259-001	MW-18	MSD	Water	3/18/13	102122	102122	NA	
600-70259-001	MW-18	MD	Water	3/18/13	102122	102122	NA	
600-70259-002	MW-24	INV	Water	3/18/13	102122	102122	102180	
600-70259-003	P2	INV	Water	3/19/13	102122	102122	102180	
600-70259-004	B4R	INV	Water	3/19/13	102122	102122	102180	
600-70259-005	MW-25	INV	Water	3/19/13	102122	102122	102180	
600-70259-006	MW-23	INV	Water	3/19/13	102122	102122	102180	
600-70437-001	MW-28	INV	Water	3/21/13	102417 ⁽¹⁾	102417 ⁽¹⁾	NA	
600-70496-001	MW-17	INV	Water	3/22/13	102459	102459	102605	
600-70496-002	B5N	INV	Water	3/22/13	102459	102459	102605	
600-70496-003	B1R	INV	Water	3/22/13	102459	102459	102605	
600-70496-003	B1R	MS	Water	3/22/13	NA NA 10		102605	
600-70496-003	B1R	MSD	Water	3/22/13	NA	NA	102605	

INV - Investigative

MD - Matrix Duplicate

MS – Matrix Spike

MSD - Matrix Spike Duplicate

NA – Not Analyzed

(1) Total and Dissolved Arsenic and Selenium also requested and reported for this sample.

ATTACHMENT 1

APPLICABLE PAGES OF THE LABORATORY ACCREDITATION CERTIFICATE



Texas Commission on Environmental Quality



NELAP - Recognized Laboratory Fields of Accreditation

	Certificate:	T104704223-12-9
TestAmerica Laboratories, Inc Houston	Expiration Date:	10/31/2013
6310 Rothway Drive Houston, TX 77040-5056	Issue Date:	11/1/2012

These fields of accreditation supercede all previous fields. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current accreditation status for particular methods and analyses.

Matrix: Non-Potable Water			
Sodium	ТХ	1155	10013806
Strontium	ТХ	1160	10013806
Thallium	ТХ	1165	10013806
Tin	ТХ	1175	10013806
Titanium	ТХ	1180	10013806
Vanadium	ТХ	1185	10013806
Zinc	ТХ	1190	10013806
Method EPA 245.1			
Analyte	AB	Analyte ID	Method ID
Mercury	ТХ	1095	10036609
Method EPA 300.0			
Analyte	AB	Analyte ID	Method ID
Bromide	ТХ	1540	10053006
Chloride	ТХ	1575	10053006
Fluoride	ТХ	1730	10053006
Nitrate as N	ТХ	1810	10053006
Nitrate-nitrite	ТХ	1820	10053006
Nitrite as N	ТХ	1840	10053006
Sulfate	ТХ	2000	10053006
Method EPA 305.1			
Analyte	AB	Analyte ID	Method ID
Acidity, as CaCO3	ТХ	1500	10054203
Method EPA 310.1			
Analyte	AB	Analyte ID	Method ID
Alkalinity as CaCO3	ТХ	1505	10054805
Method EPA 330.4			
Analyte	AB	Analyte ID	Method ID
Total residual chlorine	IX	1940	10059208
Method EPA 335.1			
Analyte	AB	Analyte ID	Method ID
Amenable cyanide	IX	1510	10060001



Texas Commission on Environmental Quality

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Matrix: Non-Potable Water			
Method EPA 415.1 Analyte Total Organic Carbon (TOC)	AB TX	Analyte ID 2040	Method ID 10078407
Method FPA 420.2			
Analyte	AB	Analyte ID	Method ID
Total phenolics	ТХ	1905	10079808
Method EPA 420.4			
Analyte	AB	Analyte ID	Method ID
Total phenolics	ТХ	1905	10080203
Method EPA 425.1			
Analyte	AB	Analyte ID	Method ID
Surfactants - MBAS	ТХ	2025	10080601
Method EPA 6010			
Analyte	AB	Analyte ID	Method ID
Aluminum	ТХ	1000	10155609
Antimony	ТХ	1005	10155609
Arsenic	ТХ	1010	10155609
Barium	ТХ	1015	10155609
Beryllium	ТХ	1020	10155609
Boron	ТХ	1025	10155609
Cadmium	ТХ	1030	10155609
Calcium	ТХ	1035	10155609
Chromium	ТХ	1040	10155609
Cobalt	ТХ	1050	10155609
Copper	ТХ	1055	10155609
Iron	ТХ	1070	10155609
Lead	ТХ	1075	10155609
Magnesium	ТХ	1085	10155609
Manganese	ТХ	1090	10155609
Molybdenum	ТХ	1100	10155609
Nickel	ТХ	1105	10155609



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Matrix: Non-Potable Water			
Potassium	ΤX	1125	10155609
Selenium	ТХ	1140	10155609
Silica as SiO2	ТХ	1990	10155609
Silver	ТХ	1150	10155609
Sodium	ТХ	1155	10155609
Strontium	ТХ	1160	10155609
Thallium	ТХ	1165	10155609
Tin	ТΧ	1175	10155609
Titanium	ТХ	1180	10155609
Vanadium	ТХ	1185	10155609
Zinc	ТХ	1190	10155609
Method EPA 602			
Analyte	AB	Analyte ID	Method ID
Benzene	ТΧ	4375	10102202
Ethylbenzene	ТХ	4765	10102202
m+p-xylene	ТХ	5240	10102202
o-Xylene	ТХ	5250	10102202
Toluene	ТХ	5140	10102202
Xylene (total)	ТХ	5260	10102202
Method EPA 608			
Analyte	AB	Analyte ID	Method ID
4,4'-DDD	ТХ	7355	10103603
4,4'-DDE	ТХ	7360	10103603
4,4'-DDT	ТΧ	7365	10103603
Aldrin	ТΧ	7025	10103603
alpha-BHC (alpha-Hexachlorocyclohexane)	ТХ	7110	10103603
alpha-Chlordane	ТХ	7240	10103603
Aroclor-1016 (PCB-1016)	ТХ	8880	10103603
Aroclor-1221 (PCB-1221)	ТХ	8885	10103603
Aroclor-1232 (PCB-1232)	ТХ	8890	10103603
Aroclor-1242 (PCB-1242)	ТХ	8895	10103603



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: 600-70016-1

Client Project/Site: Exide Recycling Center, Frisco TX Projec

For:

Pastor, Behling & Wheeler LLC 2201 Double Creek Dr Suite 4004 Round Rock, Texas 78664

Attn: Eric Pastor

Authorized for release by: 3/28/2013 5:00:24 PM Cathy Upton Data Delivery Analyst cathy.upton@testamericainc.com

Designee for

Sachin Kudchadkar Project Manager II sachin.kudchadkar@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

600-70016-1

Job Number:

Project Name/Number:

Exide Recycling Center, Frisco TX Project

This Data Package consists of:

X

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

- X R1 Field Chain-of-Custody Form
- X R2 Sample Identification Cross-reference;
- X 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).
- X R4 Surrogate Recovery Data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- X R5 Test Reports/Summary Forms for Blank Samples;
- X 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
- X 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.
- List of method quantitation limit (MQL) and detectability check sample results for each analyte for each method and X R9 matrix;
- X 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 Name (printed) Data Delivery Analyst

Official Title (printed)

Signature

03/28/2013 Date

Ap	oper	ndix A (cont'd): Laboratory Review Checklis	t: Reportable Data					
Labo	orator	y Name: TestAmerica-Houston	LRC Date: 03/25/13					
Proi	ect N	ame: Exide-Recycling Center, Frisco TX	Laboratory Job Number: 600-70016					
Pov	iowor	Name: TWP	Prop Batch Number(s): $600, 101673, J$	CD				
			riep Baten Number(s). 000-101073-1		No	NTA 3	ND ⁴	ED #5
#-	A-	Description		res	NO	NA	INK	EK#
D1	OT	Chain-of-custody (C-O-C)		X.				
K1	01	Did samples meet the laboratory's standard conditions of samp	le acceptability upon receipt?	X		v		
D2	OI	were all departures from standard conditions described in an e	xception report?			X		
R2	01	Sample and quality control (QC) identification	tory ID numbers?	v				
		Are all laboratory ID numbers cross-referenced to the corresponding OC data?		A V				
R3	OI	Test renorts		Λ				
10		Were all samples prepared and analyzed within holding times?		X				
		Other than those results $<$ MOL, were all other raw values brac	keted by calibration standards?	X				
		Were calculations checked by a peer or supervisor?		X				
		Were all analyte identifications checked by a peer or superviso	r?	X				
		Were sample detection limits reported for all analytes not detect	cted?	Х				
		Were all results for soil and sediment samples reported on a dr	y weight basis?			Х		
		Were % moisture (or solids) reported for all soil and sediment	samples?			Х		
		Were bulk soil/solid samples for volatile analysis extracted wit	h methanol per SW846 Method 5035?			Х		
		If required for the project, TICs reported?				Х		
R4	0	Surrogate recovery data						
		Were surrogates added prior to extraction?				Х		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?				Х		
R5	OI	DI Test reports/summary forms for blank samples						
		Were appropriate type(s) of blanks analyzed?		X				
		Were blanks analyzed at the appropriate frequency? Were method blanks taken through the entire analytical process, including preparation and, if		X				
				Х				
		Were black concentrations < MOL 2		v				
R6	OI	L aboratory control samples (LCS):		Λ				
		Were all COCs included in the LCS?		X				
		Was each LCS taken through the entire analytical procedure, in	cluding prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?		X				
		Were LCS (and LCSD, if applicable) %Rs within the laborator	y QC limits?	Х				
		Does the detectability check sample data document the laborate	bry's capability to detect the COCs at	Х				
		the MDL used to calculate the SDLs?						
		Was the LCSD RPD within QC limits?				Х		
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data						
		Were the project/method specified analytes included in the MS	and MSD?	Х				
		Were MS/MSD analyzed at the appropriate frequency?		X				
		Were MS (and MSD, if applicable) %Rs within the laboratory	QC limits?	_	-		X	1
по	OT	Were MS/MSD RPDs within laboratory QC limits?					X	1
кð	OI	Analytical duplicate data		v				
		Were appropriate analytical duplicates analyzed for each matrix	X /					
		Were RPDs or relative standard deviations within the laborator	zy <u>CC limits?</u>	Λ			v	2
R9	OI	Method quantitation limits (MOL s).	y ge mints:				Λ	2
10		Are the MOLs for each method analyte included in the laborate	orv data package?	X				
		Do the MOLs correspond to the concentration of the lowest no	n-zero calibration standard?	X				
		Are unadjusted MOLs and DCSs included in the laboratory dat	a package?	X				
R10	OI	Other problems/anomalies	1 0					
		Are all known problems/anomalies/special conditions noted in	this LRC and ER?	X				
		Was applicable and available technology used to lower the SD	L to minimize the matrix interference	Х		1	1	1
		affects on the sample results?						
		Is the laboratory NELAC-accredited under the Texas Laborator	ry Accreditation Program for the	Х				
		analytes, matrices and methods associated with this laborate	bry data package?					
	1.	Items identified by the letter "R" must be included in the laboratory data	a package submitted in the TRRP-required re	port(s)	. Iter	ns ide	ntified	l by the

4. NR = Not reviewed;

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked). 5.

A1

Ar	nen	dix A (cont'd): Laboratory Review Checklist: R	Reportable Data					
Lab	orato	ry Name: TestAmerica-Houston LRC	C Date: 03/25/13					
Pro	ject N	Jame: Exide-Recycling Center, Frisco TX Lab	oratory Job Number: 600-70016					
Rev	viewe	r Name: TWR Pret	n Batch Number(s): 600-101673- I	ICP				
#1	Δ^2	Description	p Duten (tuniber(s): 000 101073 1	Ves	No	NA^3	NR ⁴	FR# ⁵
π S1		Initial calibration (ICAL)		103	110	пл	INK	LIN
51	01	Initial calibration (ICAL)	ute within OC limite?			v		
		Were response factors and/or relative response factors for each analy	yte within QC limits?					
		West the number of stor dords recommon dod in the method used for a	all analytaal	v		Λ		
		Was the number of standards recommended in the method used for a	an analytes:	Λ		v		
		Are ICAL date evailable for all instruments used?	ised to calculate the curve?	v		Λ		
		Has the initial calibration curve been verified using an appropriate s	acond source standard?	A V				
\$2	OI	Initial and continuing collibration verification (ICCV and CCV)	and continuing calibration	Λ				
52		Was the CCV analyzed at the method required frequency?	and continuing canor ation	v				
		Was the CCV analyzed at the method-required frequency?	ad OC limits?	Λ	v			3
		Was the ICAL curve vorified for each analyte?	eu ge mints?	v	Λ			5
		Was the absolute value of the analyte concentration in the increasion	$CCP < MDL^2$	A V				
53	0	Was the absolute value of the analyte concentration in the morganic	CCB < MDL?	Λ				
55	0	Mass spectral tuning: Was the appropriate compound for the method used for tuning?				v		
		Was the appropriate compound for the method used for turning?						
S 4	0	Internal standards (IS):				Λ		
5-	0	Were IS area counts and retention times within the method required	OC limits?			v		
\$5	OI	Pay data (NELAC section 5.5.10)	QC mints?			Λ		
55	01	Ware the rew date (for example, chromatograms, spectral date) review	awad by an analyst?	v				
	Were data according with manual integrations flagged on the row data?		Λ		v			
\$6	0	Duel column confirmation				Λ		
50	0	Dual column confirmation				v		
\$7	0	Tentatively identified compounds (TICs):	- 2			Λ		
57	0	If TICs were requested, were the mass spectra and TIC data subject	to appropriate checks?			v		
S 8	T	Interference Check Sample (ICS) results:	to appropriate cheeks:			Λ		
50	1	Were percent recoveries within method OC limits?		v				
S 9	T	Serial dilutions, post digestion spikes, and method of standard a	dditions	Λ				
57	1	Were percent differences, recoveries, and the linearity within the OC	⁷ limits specified in the method?			1	x	4
S10	OI	Method detection limit (MDL) studies	e mints specified in the method.					-
510	01	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:		Λ				
		Was the laboratory's performance acceptable on the applicable profi	ciency tests or evaluation studies?	x				
S12	OI	Standards documentation	ereney tests of evaluation staties.					
	01	Are all standards used in the analyses NIST-traceable or obtained fro	om other appropriate sources?	x				
S13	OI	Compound/analyte identification procedures						
	01	Are the procedures for compound/analyte identification documented	19	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	27	X				
S15	OI	Verification/validation documentation for methods (NELAC Ch	apter 5)					
		Are all the methods used to generate the data documented verified	and validated, where applicable?	X			-	
S16	OT	I shorstory standard operating procedures (SOPs).						
510		Are laboratory SOPs current and on file for each method performed	9	x				
		in a most and be a search and on the for each method performed		~				
		1 Items identified by the letter "R" should be included in the laboratory	data package submitted to the TCEO in	the T	RRP	-require	ed repo	rt(s).

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.

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable). NA = Not applicable.2

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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).

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Appendix A (cont'd): Laboratory Review Checklist: Exception Reports						
Laborat	ory Name: TestAmerica-Houston	LRC Date: 03/25/13				
Project	Name: Exide-Recycling Center, Frisco TX	Laboratory Job Number: 600-70016				
Reviewer Name: TWR		Prep Batch Number(s): 600-101673- ICP				
ER # ¹	DESCRIPTION					
1	The laboratory selected a sample from another group to perform as the MS/MSD.					
2	The laboratory selected a sample from another group to perform as the DUP.					
3	The continuing calibration verification (CCV) for cadmium associated with batch 101814 recovered above the upper					
	control limit. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have					
	been reported.					
4	The laboratory selected a sample from another group to perform as the PDS and SD.					

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:	Water			
Method:	200.7/6010			
Preparation:	200.7P/3010			
Date Analyzed:	12/3/2012			
Date Prepared:	11/28/2012			
Instrument:	Thermo 6500			
TALs Batches:	94513, 94244(p	orep)		
Units:	mg/L			
Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.0197	0.5
Antimony	0.0063	0.01	0.0106	0.05
Arsenic	0.0033	0.01	0.0071	0.01
Barium	0.0022	0.005	0.0052	0.02
Beryllium	0.00134	0.002	0.0039	0.005
Boron	0.0077	0.02	0.0228	0.2
Cadmium	0.00073	0.001	0.001	0.005
Calcium	0.022	0.05	0.0916	1
Chromium	0.0016	0.002	0.0035	0.01
Cobalt	0.00063	0.001	0.0008	0.01
Copper	0.0014	0.002	0.0005	0.01
Iron	0.087	0.1	0.0965	0.4
Lithium	0.0024	0.005	0.0066	0.2
Lead	0.0029	0.005	0.0053	0.01
Selenium	0.0042	0.01	0.0105	0.04
Manganese	0.00084	0.002	0.0019	0.01
Molybdenum	0.0027	0.005	0.0057	0.01
Nickel	0.00179	0.005	0.0048	0.01
Silver	0.0012	0.0025	0.0026	0.01
Sodium	0.02	0.05	0.381	1
Strontium	0.0005	0.001	0.0015	0.005
Thallium	0.0078	0.02	0.0203	0.03
Tin	0.0028	0.005	0.0053	0.01
Titanium	0.0011	0.002	0.002	0.01
Vanadium	0.0017	0.002	0.0041	0.01
Zinc	0.0022	0.005	0.0058	0.01

Job ID: 600-70016-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative 600-70016-1

Comments

No additional comments.

Receipt

The samples were received on 3/14/2013 8:39 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.7° C.
Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-70016-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-70016-1	MW-13	Water	03/13/13 12:55	03/14/13 08:39
600-70016-2	MW-14	Water	03/13/13 13:35	03/14/13 08:39
600-70016-3	MW-12	Water	03/13/13 14:10	03/14/13 08:39

TestAmerica Houston

Client Sample Results

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-70016-1

Client Sample ID: MW-13 Date Collected: 03/13/13 12:55 Date Received: 03/14/13 08:39							Lab Sam	ple ID: 600-7 Matrix	0016-1 c: Water
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		03/14/13 12:17	03/15/13 18:54	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/14/13 12:17	03/15/13 18:54	1
Method: 6010B - Metals (ICP) - Dis	solved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U ^	0.00500	0.000350	mg/L		03/14/13 12:17	03/15/13 19:40	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/14/13 12:17	03/15/13 19:40	1
Client Sample ID: MW-14							Lab Sam	ple ID: 600-7	0016-2
Date Collected: 03/13/13 13:35								Matrix	c: Water
Date Received: 03/14/13 08:39									
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		03/14/13 12:17	03/18/13 13:34	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/14/13 12:17	03/15/13 19:06	1
Method: 6010B - Metals (ICP) - Dis	solved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000700	J	0.00500	0.000350	mg/L		03/14/13 12:17	03/19/13 10:51	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/14/13 12:17	03/15/13 19:52	1
Client Sample ID: MW-12							Lab Sam	ple ID: 600-7	0016-3
Date Collected: 03/13/13 14:10								Matrix	c: Water
Date Received: 03/14/13 08:39									
Method: 6010B - Metals (ICP)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.00103	J	0.00500	0.000350	mg/L		03/14/13 12:17	03/18/13 13:38	1
Lead	0.00290	J	0.0100	0.00290	mg/L		03/14/13 12:17	03/15/13 19:10	1
Method: 6010B - Metals (ICP) - Dis	solved								

metriod. ov rob - metals (ror) - bissorved												
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac			
Cadmium	0.000350	U ^	0.00500	0.000350	mg/L		03/14/13 12:17	03/15/13 19:56	1			
Lead	0.00290	U	0.0100	0.00290	mg/L		03/14/13 12:17	03/15/13 19:56	1			

Definitions/Glossary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

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Qualifiers

Metals	
Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
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	8
%R	Percent Recovery	
CNF	Contains no Free Liquid	9
DER	Duplicate error ratio (normalized absolute difference)	
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)	
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)

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Lab Sample ID: MB 600-101673/1-A										Client Sa	mple ID: Metho	od Blank
Matrix: Water											Prep Type:	Total/NA
Analysis Batch: 101814											Prep Batch	: 101673
	MB	MB										
Analyte	Result	Qualifier	MQL (Adj)		SDL	Unit		D	P	repared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.00	0350	mg/L			03/1	4/13 12:17	03/15/13 18:20	1
Lead	0.00290	U	0.0100	0.0	0290	mg/L			03/1	4/13 12:17	03/15/13 18:20	1
Lab Sample ID: MB 600-101673/1-A										Client Sa	mple ID: Metho	od Blank
Matrix: Water											Prep Type:	Total/NA
Analysis Batch: 101898											Prep Batch	: 101673
	MB	MB										
Analyte	Result	Qualifier	MQL (Adj)		SDL	Unit		D	P	repared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.00	0350	mg/L			03/1	4/13 12:17	03/18/13 13:27	1
Lab Sample ID: MB 600-101673/1-A										Client Sa	mple ID: Metho	od Blank
Matrix: Water											Prep Type:	Total/NA
Analysis Batch: 101960											Prep Batch	: 101673
	MB	MB										
Analyte	Result	Qualifier	MQL (Adj)		SDL	Unit		D	P	repared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.00	0350	mg/L			03/1	4/13 12:17	03/19/13 10:32	1
Lab Sample ID: LCS 600-101673/2-A								CI	lient	Sample	ID: Lab Control	Sample
Matrix: Water											Prep Type:	Total/NA
Analysis Batch: 101814											Prep Batch	: 101673
			Spike	LCS	LCS						%Rec.	
Analyte			Added	Result	Qua	lifier	Unit		D	%Rec	Limits	
Cadmium			0.500	0.5479			mg/L		_	110	80 - 120	
Lead			1.00	1.085			mg/L			109	80 - 120	
Lab Sample ID: LCS 600-101673/2-A								CI	lient	Sample	ID: Lab Control	Sample
Matrix: Water											Prep Type:	Total/NA
Analysis Batch: 101898											Prep Batch	: 101673
			Spike	LCS	LCS						%Rec.	
Analyte			Added	Result	Qua	lifier	Unit		D	%Rec	Limits	
Cadmium			0.500	0.5217			mg/L		_	104	80 - 120	
Lab Sample ID: LCS 600-101673/2-A								CI	lient	Sample	ID: Lab Contro	Sample
Matrix: Water											Prep Type:	Total/NA
Analysis Batch: 101960											Prep Batch	: 101673
			Spike	LCS	LCS						%Rec.	
Analyte			Added	Result	Qua	lifier	Unit		D	%Rec	Limits	
Cadmium			0.500	0.5066			mg/L		_	101	80 - 120	

Unadjusted Detection Limits

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method	
Cadmium	0.00500	0.000350	mg/L	6010B	
Lead	0.0100	0.00290	mg/L	6010B	

Method: 6010B - Metals (ICP) - Dissolved

Analyte	MQL	MDL	Units	Method
Cadmium	0.00500	0.000350	mg/L	6010B
Lead	0.0100	0.00290	mg/L	6010B

TestAmerica Houston

QC Association Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Metals

Prep Batch: 101673	3
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Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
600-70016-1	MW-13	Total/NA	Water	3010A	
600-70016-1	MW-13	Dissolved	Water	3010A	
600-70016-2	MW-14	Total/NA	Water	3010A	
600-70016-2	MW-14	Dissolved	Water	3010A	
600-70016-3	MW-12	Total/NA	Water	3010A	
600-70016-3	MW-12	Dissolved	Water	3010A	
LCS 600-101673/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-101673/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 101814

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
600-70016-1	MW-13	Total/NA	Water	6010B	101673
600-70016-1	MW-13	Dissolved	Water	6010B	101673
600-70016-2	MW-14	Total/NA	Water	6010B	101673
600-70016-2	MW-14	Dissolved	Water	6010B	101673
600-70016-3	MW-12	Total/NA	Water	6010B	101673
600-70016-3	MW-12	Dissolved	Water	6010B	101673
LCS 600-101673/2-A	Lab Control Sample	Total/NA	Water	6010B	101673
MB 600-101673/1-A	Method Blank	Total/NA	Water	6010B	101673

Analysis Batch: 101898

Lab Sample ID	Client Sample ID	Prep Туре	Matrix	Method	Prep Batch
600-70016-2	MW-14	Total/NA	Water	6010B	101673
600-70016-3	MW-12	Total/NA	Water	6010B	101673
LCS 600-101673/2-A	Lab Control Sample	Total/NA	Water	6010B	101673
MB 600-101673/1-A	Method Blank	Total/NA	Water	6010B	101673

Analysis Batch: 101960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-70016-2	MW-14	Dissolved	Water	6010B	101673
LCS 600-101673/2-A	Lab Control Sample	Total/NA	Water	6010B	101673
MB 600-101673/1-A	Method Blank	Total/NA	Water	6010B	101673

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Client Samp	le ID: MW-13 I: 03/13/13 12:55							Lab Sample ID: 600-700 Matrix: V				
Date Received	l: 03/14/13 08:3	39										
	Batch	Batch		Dilution	Batch	Prepared						
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab				
Total/NA	Prep	3010A			101673	03/14/13 12:17	NER	TAL HOU				
Total/NA	Analysis	6010B		1	101814	03/15/13 18:54	TWR	TAL HOU				
Dissolved	Prep	3010A			101673	03/14/13 12:17	NER	TAL HOU				
Dissolved	Analysis	6010B		1	101814	03/15/13 19:40	TWR	TAL HOU				
Client Samp	ole ID: MW-1	4						Lab Sample	ID: 600-70016-2			
Date Collected	d: 03/13/13 13:	35						-	Matrix: Water			

Date Collected: 03/13/13 13:35 Date Received: 03/14/13 08:39

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			101673	03/14/13 12:17	NER	TAL HOU
Total/NA	Analysis	6010B		1	101814	03/15/13 19:06	TWR	TAL HOU
Dissolved	Prep	3010A			101673	03/14/13 12:17	NER	TAL HOU
Dissolved	Analysis	6010B		1	101814	03/15/13 19:52	TWR	TAL HOU
Total/NA	Analysis	6010B		1	101898	03/18/13 13:34	DCL	TAL HOU
Dissolved	Analysis	6010B		1	101960	03/19/13 10:51	DCL	TAL HOU

Client Sample ID: MW-12Lab Sample ID: 600-70016-3Date Collected: 03/13/13 14:10Matrix: WaterDate Received: 03/14/13 08:39Matrix: Water

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			101673	03/14/13 12:17	NER	TAL HOU
Total/NA	Analysis	6010B		1	101814	03/15/13 19:10	TWR	TAL HOU
Dissolved	Prep	3010A			101673	03/14/13 12:17	NER	TAL HOU
Dissolved	Analysis	6010B		1	101814	03/15/13 19:56	TWR	TAL HOU
Total/NA	Analysis	6010B		1	101898	03/18/13 13:38	DCL	TAL HOU

Laboratory References:

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

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-70016-1

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	08-04-12
Louisiana	NELAP	6	01967	06-30-13
Oklahoma	State Program	6	9503	08-31-13
Texas	NELAP	6	T104704223-10-6-TX	10-31-13
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	GULF	10-31-13

TestAmerica Houston

Chain of	Temperature on Receipt	اھ ا	stAn	nerica	
Custody Record	Drinking Water? Yes□		EADER IN ENVIR	ONMENTAL TESTING	
Client PBW	Project Manager			Date 3/13/12	Chain of Custody Number
2201 Druch O Creek Dr.	Ste yooy Telephone Number (Area Code	e)/Fax Number 3 454		Lab Number	Page [of]
City R Mr M. R. K. There zho Code	64 JUNN Draton	Lab Contact	Anal more	vsis (Attach list if space is needed)	
Project Name and Location (State)	Carrier/Waybill Number		٦ ١4 ٩ ٩ ٢		
Contract/Purchase Order/Ouote No.	Matrix	Containers & Preservatives	4-2) 4 pm 9 1		9jpt
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date Date	НОВЛ ////////////////////////////////////	ns 10510 401	600-70016 Chain	l of Custody
MW-13 3/	13/13 /255 X	2	XXX		
MW-14 31	13/13 /335 X	2	XXX		
12 Jun - 12 MM-12 31	13/13 1410 X	2	XXX		
Possible Hazard Identification \[Non-Hazard \] Flammable \[Skin Initant \] P	Cample Disposal Coison B Disposal Disposal Coilent	t 🗌 Disposal By Lab	Archive For	A fee may be asse. Months longer than 1 month	essed if samples are retained th)
Turn Around Time Required	21 Days 0ther	QC Requirements (Speci	14		
1. Helingyishory	3/3/13/13 114 50	5 1. Received By Co	Cores		31313 MSO
2. Reinduising By C. C. M. T.	8/13/13 1773	2. Received By	d		Date 1 Time 2147) 205
3. Relinquished By	Date I Time	3. Received By			Date
Comments					
DISTRIBUTION: WHITE - Returned to Client with Report, CAN-	4RY - Stays with the Sample; PINK - Field Copy				

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Client: Pastor, Behling & Wheeler LLC

Login Number: 70016 List Number: 1

Creator: Pulumbarit, Josh

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.7
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.	True	

Job Number: 600-70016-1

List Source: TestAmerica Houston



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: 600-70223-1

Client Project/Site: Exide Recycling Center, Frisco TX Projec

For:

Pastor, Behling & Wheeler LLC 2201 Double Creek Dr Suite 4004 Round Rock, Texas 78664

Attn: Eric Pastor

Authorized for release by: 4/3/2013 2:18:52 PM Cathy Upton Data Delivery Analyst cathy.upton@testamericainc.com

Designee for

Sachin Kudchadkar Project Manager II sachin.kudchadkar@testamericainc.com

LINKS Review your project results through TOTOLACCESS 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

600-70223-1

Job Number:

Project Name/Number:

Exide Recycling Center, Frisco TX Project

This Data Package consists of:

X

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

- R1 Field Chain-of-Custody Form
- **R**2 Sample Identification Cross-reference;
- **X** 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).
- **X** 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
- **R**8 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.
- **R**9 List of method quantitation limit (MQL) and detectability check sample results for each analyte for each method and matrix;
- **X** 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 Name (printed) Data Delivery Analyst

Official Title (printed)

Signature

04/03/2013

Date

A	oper	ndix A (cont'd): Laboratory Review Checkl	list: Reportable Data					
Lab	orator	y Name: TestAmerica-Houston	LRC Date: 03/25/13					
Proi	ect N	ame: Exide Recycling Center, Frisco TX Project	Laboratory Job Number: 600-70223					
n		Name DDC	Deep Detab Neurober(-); (00, 102180 - Sel	16-4-				
Rev	1ewer		Prep Batch Number(s): $600-102180 - Su$	ITate	1		1 4	5
#1	A ²	Description		Yes	No	NA ³	NR⁺	ER#'
		Chain-of-custody (C-O-C)						
R1	OI	Did samples meet the laboratory's standard conditions of sar	nple acceptability upon receipt?	Х				
		Were all departures from standard conditions described in an	a exception report?			Х		
R2	OI Sample and quality control (QC) identification							
		Are all field sample ID numbers cross-referenced to the labo	pratory ID numbers?	X				
-		Are an laboratory ID numbers cross-referenced to the corresponding QC data?		X				
R3	OI Test reports Ware all samples prepared and analyzed within holding times?							
	Were all samples prepared and analyzed within holding times? Other than these results \leq MOL, were all other raw values brackated by calibration standards?		X					
		Other than those results < MQL, were all other raw values by	racketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	2	X				
	Were all analyte identifications checked by a peer or supervisor?			X				
	Were all results for soil and sediment camples reported on a dry weight basic?					v		
	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? Were bulk soil/solid samples for volatile analysis extracted with mothenol per SW846 Method 50252					X		
	Were bulk soil/solid samples for volatile analysis extracted with methanol per SW846 Method 5035?							
D 4	0	If required for the project, TICs reported?						
K4	0	0 Surrogate recovery data Ware surrogates added prior to sytraction?				v		
		Were surrogates added prior to extraction? Were surrogate percent recoveries in all samples within the laboratory OC limits?						
R5	OI	Were surrogate percent recoveries in all samples within the laboratory QC limits?				Λ		
K5	01	Were appropriate type(s) of blanks analyzed?		v				
		Were blanks analyzed at the appropriate frequency?		A V				
		Were method blanks taken through the entire analytical proc	ess including preparation and if	X				
		applicable, cleanup procedures?	ess, meruding preparation and, n	1				
		Were blank concentrations < MOL?		X	1	1		1
R6	OI	Laboratory control samples (LCS):						-
	-	Were all COCs included in the LCS?		Х				
		Was each LCS taken through the entire analytical procedure.	, including prep and cleanup steps?	Х				
		Were LCSs analyzed at the required frequency?		Х	1	1		
		Were LCS (and LCSD, if applicable) %Rs within the laborat	tory QC limits?	Х	1	1		
		Does the detectability check sample data document the labor	atory's capability to detect the COCs at	Х				
		the MDL used to calculate the SDLs?						
		Was the LCSD RPD within QC limits?				Х		
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) dat	ta					
		Were the project/method specified analytes included in the M	AS and MSD?	Х				
		Were MS/MSD analyzed at the appropriate frequency?		Х				
		Were MS (and MSD, if applicable) %Rs within the laborator	ry QC limits?	Х				
		Were MS/MSD RPDs within laboratory QC limits?		Х				
R8	OI	Analytical duplicate data						
		Were appropriate analytical duplicates analyzed for each ma	trix?			X		
		Were analytical duplicates analyzed at the appropriate freque	ency?			X		
		Were RPDs or relative standard deviations within the laborat	tory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):						
		Are the MQLs for each method analyte included in the labor	atory data package?	X				
		Do the MQLs correspond to the concentration of the lowest r	non-zero calibration standard?	X				
D10	0.1	Are unadjusted MQLs and DCSs included in the laboratory of	data package?	X				
K10	OI	Other problems/anomalies	in this LDC and ED9	37		-		
		Are all known problems/anomalies/special conditions noted	in this LKC and EK?	X				
		was applicable and available technology used to lower the S	to minimize the matrix interference	X	1	1	1	2
		anects on the sample results?	tory Accreditation Drogram for the	v				
		analytes matrices and methods associated with this labor	atory data package?					
I	1	Items identified by the letter "R" must be included in the laboratory d	lata nackage submitted in the TRRP-required re	nort(e)) Iter	1 ns ide	l ntifie	l by the

letter "S" should be retained and made available upon request for the appropriate retention period.

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 NA = Not applicable;

 4. NR = Not reviewed;
 5. ER# = Exception Re ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

A1

Ar	pen	dix A (cont'd): Laboratory Review Checklis	t: Reportable Data					
Lab	orato	ry Name: TestAmerica-Houston	LRC Date: 03/25/13					
Pro	ject N	ame: Exide Recycling Center, Frisco TX Project	Laboratory Job Number: 600-70223					
Rev	iewe	Name: BDG	Prep Batch Number(s): 600-102180 – S	ulfate	e			
#1	$\#^1 A^2 $ Description			Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)		105	110		1.11	
51	01	Were response factors and/or relative response factors for each	analyte within OC limits?	x				
		Were percent RSDs or correlation coefficient criteria met?	anaryte within QC mints:	X				
		Was the number of standards recommended in the method used	1 for all analytes?	X				
	Were all points generated between the lowest and highest standard used to calculate the curve?							
	Are ICAL data available for all instruments used?							
Has the initial calibration curve been verified using an appropriate second source standard?				X				
S 2	OI	Initial and continuing calibration verification (ICCV and C	(CV) and continuing calibration					
~-	01	Was the CCV analyzed at the method-required frequency?		x				
		Were percent differences for each analyte within the method-re	equired OC limits?	X				
	Was the ICAL curve verified for each analyte?		X					
	Was the absolute value of the analyte concentration in the inorganic CCB < MDL?							
S 3	0	Was the absolute value of the analyte concentration in the morganic CCB < MDL:						
~	<u> </u>	Was the appropriate compound for the method used for tuning?				x		
		Was the appropriate compound for the method used for tuning?				X		
S4	0	Internal standards (IS):						
~ -	0	Were IS area counts and retention times within the method-required OC limits?						
S 5	OI	Were is alea counts and retention times within the method-required QC mints? A)L Raw data (NELAC section 5.5.10)						
	01	Were the raw data (for example, chromatograms, spectral data)) reviewed by an analyst?	X		1		
		Were data associated with manual integrations flagged on the r	raw data?			X		
S6	0	Dual column confirmation						
	0	Did dual column confirmation results meet the method-required	d OC?			X		
S 7	0	Tentatively identified compounds (TICs):						
	-	If TICs were requested, were the mass spectra and TIC data sul	biect to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results:						
		Were percent recoveries within method QC limits?		1		Х		1
S9	Ι	Serial dilutions, post digestion spikes, and method of standa	ard additions					
		Were percent differences, recoveries, and the linearity within the	he QC limits specified in the method?			Х		
S10	OI	Method detection limit (MDL) studies						
		Was a MDL study performed for each reported analyte?		Х	1			
		Is the MDL either adjusted or supported by the analysis of DCS	Ss?	Х				
S11	OI	Proficiency test reports:						
		Was the laboratory's performance acceptable on the applicable	proficiency tests or evaluation studies?	Х		1		
S12	OI	Standards documentation	· · · ·					
		Are all standards used in the analyses NIST-traceable or obtain	ed from other appropriate sources?	Х				
S13	OI	Compound/analyte identification procedures						
		Are the procedures for compound/analyte identification docum	ented?	Х				
S14	OI	Demonstration of analyst competency (DOC)						
		Was DOC conducted consistent with NELAC Chapter 5?		Χ				
		Is documentation of the analyst's competency up-to-date and o	n file?	Χ				
S15	OI	Verification/validation documentation for methods (NELA	C Chapter 5)					
		Are all the methods used to generate the data documented, veri	fied, and validated, where applicable?	Х				
S16	OI	Laboratory standard operating procedures (SOPs):						
		Are laboratory SOPs current and on file for each method perfor	rmed?	Х				

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. 1

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).

Apper	Appendix A (cont'd): Laboratory Review Checklist: Exception Reports					
Laborat	tory Name: TestAmerica-Houston	LRC Date: 03/25/13				
Project	Name: Exide Recycling Center, Frisco TX Project	Laboratory Job Number: 600-70223				
Review	Reviewer Name: BDG Prep Batch Number(s): 600-102180 – Sulfate					
$\mathbf{ER} \#^1$	DESCRIPTION					
1	Sulfate was detected above the MDL, but below the MQI	L in the method blank. The level of detection is below the				
	recommended reporting limit and the appropriate flags have been applied.					
2	The Sulfate SDLs for samples 600-70223 – 1 and 2 were	elevated due to the high concentrations of this analyte.				

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

A	oper	ndix A (cont'd): Laboratory Review Checklis	t: Reportable Data					
Lab	oratoi	y Name: TestAmerica-Houston	LRC Date: 03/26/13					
Proi	ect N	ame: Exide Recycling Center, Frisco TX	Laboratory Job Number: 600-70223					
Rev	iewer	Name: TWR	Prep Batch Number(s): 600-102039- I	СР				
#1		Description		Yes	No	NA ³	NR^4	ER# ⁵
	Л	Chain of anotody (C.O.C)				1.1.1		LICH
R1	OI	Did samples meet the laboratory's standard conditions of samp	le accentability upon receint?	v				
	01	Were all departures from standard conditions described in an e	xception report?	Λ		x		
R2	OI	Sample and quality control (QC) identification				Λ		
	01	Are all field sample ID numbers cross-referenced to the laborat	tory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the correspo	nding OC data?	X				
R3	OI	Test reports	8					
		Were all samples prepared and analyzed within holding times?		Х			1	
		Other than those results < MQL, were all other raw values brac	keted by calibration standards?	Х				
		Were calculations checked by a peer or supervisor?		Х				
		Were all analyte identifications checked by a peer or superviso	r?	Х				
		Were sample detection limits reported for all analytes not detect	cted?	Х				
		Were all results for soil and sediment samples reported on a dry	y weight basis?			Х		
		Were % moisture (or solids) reported for all soil and sediment	samples?			Х		
		Were bulk soil/solid samples for volatile analysis extracted wit	h methanol per SW846 Method 5035?			Х		
	0	If required for the project, TICs reported?				X		
R4	0	Surrogate recovery data				NY.		
		Were surrogates added prior to extraction?				X		
D5	OI	Were surrogate percent recoveries in all samples within the laboratory QC limits?				X		
K5	OI	Test reports/summary forms for blank samples		v				
		Were hlorike analyzed at the appropriate frequency?						
		Were blanks analyzed at the appropriate frequency?						
		applicable, cleanup procedures?						
		Were blank concentrations < MOL?						
R6	OI	Laboratory control samples (LCS):						
		Were all COCs included in the LCS?		Х				
		Was each LCS taken through the entire analytical procedure, ir	cluding prep and cleanup steps?	Х				
		Were LCSs analyzed at the required frequency?		Х				
		Were LCS (and LCSD, if applicable) %Rs within the laborator	y QC limits?	Х				
		Does the detectability check sample data document the laborate	bry's capability to detect the COCs at	Х				
		the MDL used to calculate the SDLs?		_				
		Was the LCSD RPD within QC limits?				X		
K 7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data	11/(2D)	37				
		Were the project/method specified analytes included in the MS	and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	OC limite?	Λ			v	1
		Were MS/MSD RPDs within laboratory OC limits?	QC minits?				A V	1
R8	OI	Analytical dunlicate data					Λ	1
-10	01	Were appropriate analytical duplicates analyzed for each matrix	x?	x				
		Were analytical duplicates analyzed at the appropriate frequence	2. 2V?	X				
		Were RPDs or relative standard deviations within the laborator	v OC limits?				X	2
R9	OI	Method quantitation limits (MOLs):						
	-	Are the MQLs for each method analyte included in the laborate	bry data package?	Х			1	
		Do the MQLs correspond to the concentration of the lowest not	n-zero calibration standard?	Х				
		Are unadjusted MQLs and DCSs included in the laboratory dat	a package?	Х				
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 SDI	L to minimize the matrix interference	Х				
		affects on the sample results?		*7				
1		is the laboratory NELAC-accredited under the Texas Laborator	ry Accreditation Program for the	X	1	1		
I	1.	Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required re					ntified	l by the

4. NR = Not reviewed;

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked). 5.

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A	pen	dix A (cont'd): Laboratory Review Checklist: R	leportable Data					
Lab	orato	ry Name: TestAmerica-Houston LRC	C Date: 03/26/13					
Pro	ject N	Jame: Exide Recycling Center, Frisco TX Labo	oratory Job Number: 600-70223					
Rev	viewe	r Name: TWR Prep	Batch Number(s): 600-102039- I	СР				
#1	A^2	Description		Yes	No	NA ³	NR^4	ER# ⁵
«1	OI	Initial calibration (ICAL)		105	110			211.
51	01	Were response factors and/or relative response factors for each analy	te within OC limits?			x		
		Were percent RSDs or correlation coefficient criteria met?	te within ge mints:			X		
		Was the number of standards recommended in the method used for a	ll analytes?	x		Λ		
		Were all points generated between the lowest and highest standard use	sed to calculate the curve?	1		x		
		Are ICAL data available for all instruments used?				Λ		
	Has the initial calibration curve been verified using an appropriate second source standard?		X					
S 2	OI	Initial and continuing calibration verification (ICCV and CCV)	and continuing calibration	Λ				
-	Was the CCV analyzed at the method required frequency?		and continuing canbration	x				
		Were percent differences for each analyte within the method-required	d OC limits?	X				
		Was the ICAL curve verified for each analyte?		X				
		Was the absolute value of the analyte concentration in the inorganic l	CCR < MDI ?	X V				
\$3	0	Mass spectral tuning:	CCB < MDL!	Λ				
55	0	Was the appropriate compound for the method used for tuning?				v		
		Was the appropriate compound for the method used for tuning:				Λ V		
S 4	0	Internal standards (IS):				Λ		
-	0	Ware IS great counts and retention times within the method required (OC limits?			v		
\$5	OI	Were is area counts and retention times within the method-required QC minus?				Λ		
55	01	Ware the raw date (for example, shrometograms, spectral date) ravia	wed by an analyst?	v				
		Were data associated with manual integrations flagged on the raw data	wed by all allaryst?	Λ		v		
56	0	Puol column confirmation				Λ		
50	0	Did dual column confirmation results meet the method required OC?)			v		
\$7	0	Tentetively identified compounds (TICe):				Λ		
57	0	If TICs were requested, were the mass meetrs and TIC data subject t	a annuanista abaalta?			v		
68	т	In the swele requested, were the mass spectra and the data subject t	to appropriate checks?			Λ		
50	1	Ware percent recoveries within method OC limits?		v				
50	т	Seriel dilutions, nest digestion spikes, and method of standard as	ditions	Λ				
35	1	Serial diducions, post digestion spikes, and method of standard ad	limits aposified in the method?				v	2
S10	OI	Wete percent differences, recoveries, and the linearity within the QC	innus specified in the method?				Λ	3
510	01	Was a MDL study performed for each reported analyte?		v				
		Is the MDL sitter adjusted or supported by the analysis of DCSe2						
S 11	OT	Proficiency test reports:		Λ				
511		Was the laboratory's performance accentable on the applicable profic	viancy tasts or avaluation studios?	v				
\$12	OI	Standards documentation	clency tests of evaluation studies:	Λ				
512	01	Are all standards used in the analyses NIST traceable or obtained fro	om other appropriate sources?	v				
S13	OI	Compound/enalyte identification precedures	on other appropriate sources?	Λ				
515	01	Are the precedures for compound/englyte identification documented	9	v				
S1/	OI	Are the procedures for compound/analyte identification documented	2	Λ				
514	01	Was DOC conducted consistent with NELAC Chapter 52		v				
		Is documentation of the analyst's compateness up to data and on files)	A V		<u> </u>		
\$15	OI	Varification/validation documentation for matheds (NELAC Cha	antor 5)	Λ				
515	01	Are all the methods used to generate the data documented, verified a	apter 3) and validated where applicable?	v				
C1/	OT	Laboratory standard an article and local (COD)	and vanualed, where applicable?	Λ				
510	01	Laboratory standard operating procedures (SOPs):	,	V				
		Are raboratory SOP's current and on the for each method performed?		Λ				
		1 Items identified by the letter "R" should be included in the laboratory d Items identified by the letter "S" should be retained and made available	lata package submitted to the TCEQ in	the T	RRP-	requir	ed repo	rt(s).

NR = Not Reviewed.

2 3 4

5

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

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable). NA = Not applicable.

Apper	Appendix A (cont'd): Laboratory Review Checklist: Exception Reports					
Laborat	Laboratory Name: TestAmerica-Houston LRC Date: 03/26/13					
Project Name: Exide Recycling Center, Frisco TX Laboratory Job Number: 600-70223		Laboratory Job Number: 600-70223				
Review	Reviewer Name: TWR Prep Batch Number(s): 600-102039- ICP					
ER # ¹	DESCRIPTION	•				
1	The laboratory selected a sample from another group to perform as the MS/MSD.					
2	The laboratory selected a sample from another group to perform as the DUP.					
3	The laboratory selected a sample from another group to perform as the PDS and SD.					

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: Water Method: SM4500 S2 D Preparation: N/A Date Analyzed: 10/23/2012 Date Prepared: 10/23/2012 TALs Batches: 91748 Units: mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Sulfide	0.009	0.015	0.013	0.01

Detection Check Standard

Matrix:	Water			
Method:	200.7/6010			
Preparation:	200.7P/3010			
Date Analyzed:	12/3/2012			
Date Prepared:	11/28/2012			
Instrument:	Thermo 6500			
TALs Batches:	94513, 94244(p	orep)		
Units:	mg/L			
Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.0197	0.5
Antimony	0.0063	0.01	0.0106	0.05
Arsenic	0.0033	0.01	0.0071	0.01
Barium	0.0022	0.005	0.0052	0.02
Beryllium	0.00134	0.002	0.0039	0.005
Boron	0.0077	0.02	0.0228	0.2
Cadmium	0.00073	0.001	0.001	0.005
Calcium	0.022	0.05	0.0916	1
Chromium	0.0016	0.002	0.0035	0.01
Cobalt	0.00063	0.001	0.0008	0.01
Copper	0.0014	0.002	0.0005	0.01
Iron	0.087	0.1	0.0965	0.4
Lithium	0.0024	0.005	0.0066	0.2
Lead	0.0029	0.005	0.0053	0.01
Selenium	0.0042	0.01	0.0105	0.04
Manganese	0.00084	0.002	0.0019	0.01
Molybdenum	0.0027	0.005	0.0057	0.01
Nickel	0.00179	0.005	0.0048	0.01
Silver	0.0012	0.0025	0.0026	0.01
Sodium	0.02	0.05	0.381	1
Strontium	0.0005	0.001	0.0015	0.005
Thallium	0.0078	0.02	0.0203	0.03
Tin	0.0028	0.005	0.0053	0.01
Titanium	0.0011	0.002	0.002	0.01
Vanadium	0.0017	0.002	0.0041	0.01
Zinc	0.0022	0.005	0.0058	0.01

Job ID: 600-70223-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative 600-70223-1

Comments

No additional comments.

Receipt

The samples were received on 3/19/2013 8:33 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.5° C.

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-70223-1

Project/Site: Exide	ing & Wheeler LLC Recycling Center, Frisco TX Projec		IestAmerica Job IL	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Lab Sample ID	Client Sample ID	Matrix	Collected	Received 3
600-70223-1 600-70223-2	MW-10 B7N	Water Water	03/18/13 14:00 03/18/13 14:45	03/19/13 08:33 03/19/13 08:33
				5
				7
				8
				9
				10
				13
				14

Client Sample Results

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-70223-1

Client Sample ID: MW-10 Date Collected: 03/18/13 14:00 Date Received: 03/19/13 08:33							Lab Sam	ple ID: 600-7 Matrix	0223-1 c: Water
Method: 6010B - Metals (ICP)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.00120	J	0.00500	0.000350	mg/L		03/20/13 09:05	03/20/13 15:44	1
Lead	0.00760	J	0.0100	0.00290	mg/L		03/20/13 09:05	03/20/13 15:44	1
Method: 6010B - Metals (ICP) - Dis	ssolved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.00130	J	0.00500	0.000350	mg/L		03/20/13 09:05	03/20/13 15:53	1
Lead	0.00300	J	0.0100	0.00290	mg/L		03/20/13 09:05	03/20/13 15:53	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	753	b	50.0	13.7	mg/L			03/21/13 02:20	100
Client Sample ID: B7N							Lab Sam	ple ID: 600-7	0223-2
Date Collected: 03/18/13 14:45 Date Received: 03/19/13 08:33								Matrix	c: Water
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		03/20/13 09:05	03/20/13 15:55	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/20/13 09:05	03/20/13 15:55	1
Method: 6010B - Metals (ICP) - Dis	ssolved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/20/13 09:05	03/20/13 15:58	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/20/13 09:05	03/20/13 15:58	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1820	b	50.0	13.7	mg/L			03/21/13 03:33	100

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Qualifiers

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

Qualifier	Qualifier Description
b	The compound was found in the blank and sample
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.	9
¤	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)	
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	13
MDC	Minimum detectable concentration	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
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)	

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

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-102039/1-A									Client S	ample ID: Me	thod	Blank
Matrix: Water										Prep Typ	e: To	tal/NA
Analysis Batch: 102120										Prep Bat	ch: 1	02039
		MB MB										
Analyte	R	esult Qualifier	MQL (Adj)		SDL Unit		D	F	repared	Analyzed		Dil Fa
Cadmium	0.00	0350 U	0.00500	0.000	350 mg/L			03/2	20/13 09:05	03/20/13 15:3	39	
Lead	0.0	0290 U	0.0100	0.00	290 mg/L			03/2	20/13 09:05	03/20/13 15:3	39	
Lab Sample ID: LCS 600-102039/2-	A						С	lien	t Sample	ID: Lab Cont	rol S	ampl
Matrix: Water										Prep Typ	e: To	tal/N/
Analysis Batch: 102120										Prep Bat	ch: 1	0203
			Spike	LCS	LCS					%Rec.		
Analyte			Added	Result	Qualifier	Unit		D	%Rec	Limits		
Cadmium			0.500	0.5124		mg/L			102	80 - 120		
Lead			1.00	0.9677		mg/L			97	80 - 120		
Method: 300.0 - Anions, Ion Cl	nromat	ography										
- Lab Sample ID: MB 600-102180/3									Client S	ample ID: Me	thod	Blan
Matrix: Water									onone o	Pren Tyn	e' To	tal/N/
Analysis Batch: 102180										1100 190	0. 10	
Analysis Batch. 102100		МВ МВ										
Analvte	R	esult Qualifier	MQL (Adi)	5	SDL Unit		D	F	repared	Analvzed		Dil Fa
Sulfate	0.4	4504 J	0.500	0.	137 mg/L					03/20/13 17:3	32	-
— —												
Lab Sample ID: LCS 600-102180/4							С	lien	t Sample	ID: Lab Cont	rol S	ampl
Matrix: Water										Prep Typ	e: To	tal/N/
Analysis Batch: 102180												
-			Spike	LCS	LCS					%Rec.		
Analyte			Added	Result	Qualifier	Unit		D	%Rec	Limits		
Sulfate			20.0	21.73		mg/L			109	90 - 110		
- Lab Sample ID: 600-70223-1 MS									C	Client Sample	D: I	MW-1
Matrix: Water										Prep Typ	e: To	tal/N/
Analysis Batch: 102180												
Analysis Baton. 102100	Sample	Sample	Spike	MS	MS					%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit		D	%Rec	Limits		
Sulfate	753	b	1000	1815		mg/L			106	80 - 120		
- I ah Sample ID: 600-70223-1 MSD										Client Sample	ייחו	MW_1
Matrix: Wator											0. To	tal/N
Matrix. Water										Prep typ	e. 10	
Analysis Datch. 102160	Sample	Sample	Snike	Men	MSD					%Rec		DDI
Analyte	Recult	Qualifier		Rocult	Qualifier	Unit		л	%Rec	/intec.	Rbu	Lim
	750		1000	1705	Quanner				104	<u>20 120</u>	4	
Guilde	100	~	1000	1/30		mg/L			104	00 - 120		

Unadjusted Detection Limits

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

2 3 4 5 6 7 8 9 11 12 13 14 15

Method: 6010B - Metals (ICP)

 Analyte	MQL	MDL	Units	Method
Cadmium	0.00500	0.000350	mg/L	6010B
Lead	0.0100	0.00290	mg/L	6010B
Method: 6010B - Metals (ICP)	- Dissolved			
 Analyte	MQL	MDL	Units	Method
Cadmium	0.00500	0.000350	mg/L	6010B
Lead	0.0100	0.00290	mg/L	6010B
General Chemistry				
Analyte	MQL	MDL	Units	Method

TestAmerica Houston

QC Association Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

12

Metals

Pre	bВ	atc	h:	10	20	39
		alu	•••			~~

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-70223-1	MW-10	Total/NA	Water	3010A	
600-70223-1	MW-10	Dissolved	Water	3010A	
600-70223-2	B7N	Total/NA	Water	3010A	
600-70223-2	B7N	Dissolved	Water	3010A	
LCS 600-102039/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-102039/1-A	Method Blank	Total/NA	Water	3010A	
Analysis Batch: 102120	D Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-70223-1	MW-10	Total/NA	Water	6010B	102039
600-70223-1	MW-10	Dissolved	Water	6010B	102039
600-70223-2	B7N	Total/NA	Water	6010B	102039
600-70223-2	B7N	Dissolved	Water	6010B	102039
LCS 600-102039/2-A	Lab Control Sample	Total/NA	Water	6010B	102039
MB 600-102039/1-A	Method Blank	Total/NA	Water	6010B	102039

General Chemistry

Analysis Batch: 102180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-70223-1		Total/NA	Water	300.0	
600-70223-1 MS	MW-10	Total/NA	Water	300.0	
600-70223-1 MSD	MW-10	Total/NA	Water	300.0	
600-70223-2	B7N	Total/NA	Water	300.0	
LCS 600-102180/4	Lab Control Sample	Total/NA	Water	300.0	
MB 600-102180/3	Method Blank	Total/NA	Water	300.0	

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Lab Sample ID: 600-70223-2

Matrix: Water

Client Sample ID: MW-10							Lab Sample ID: 600-70223			
Date Collected	: 03/18/13 14:0	00							Matrix: Water	
Date Received	: 03/19/13 08:3	33								
	Batch	Batch		Dilution	Batch	Prepared				
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab		
Total/NA	Prep	3010A			102039	03/20/13 09:05	NER	TAL HOU		
Total/NA	Analysis	6010B		1	102120	03/20/13 15:44	DCL	TAL HOU		
Dissolved	Prep	3010A			102039	03/20/13 09:05	NER	TAL HOU		
Dissolved	Analysis	6010B		1	102120	03/20/13 15:53	DCL	TAL HOU		
Total/NA	Analysis	300.0		100	102180	03/21/13 02:20	SUP	TAL HOU		
Total/NA Dissolved Dissolved Total/NA	Analysis Prep Analysis Analysis	6010B 3010A 6010B 300.0		1 1 100	102120 102039 102120 102180	03/20/13 15:44 03/20/13 09:05 03/20/13 15:53 03/21/13 02:20	DCL NER DCL SUP	TAL HOU TAL HOU TAL HOU TAL HOU		

Client Sample ID: B7N Date Collected: 03/18/13 14:45

Date Received: 03/19/13 08:33

-	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			102039	03/20/13 09:05	NER	TAL HOU
Total/NA	Analysis	6010B		1	102120	03/20/13 15:55	DCL	TAL HOU
Dissolved	Prep	3010A			102039	03/20/13 09:05	NER	TAL HOU
Dissolved	Analysis	6010B		1	102120	03/20/13 15:58	DCL	TAL HOU
Total/NA	Analysis	300.0		100	102180	03/21/13 03:33	SUP	TAL HOU

Laboratory References:

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

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-70223-1

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	08-04-12
Louisiana	NELAP	6	01967	06-30-13
Oklahoma	State Program	6	9503	08-31-13
Texas	NELAP	6	T104704223-10-6-TX	10-31-13
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	GULF	10-31-13

TestAmerica Houston

1 2 3 4 5 6 7 8 9 10	11 12 13 14 15 16	
Chain of Custody Record		
TAL-4124 (1007)	Drinking Water? Yes No THE LEADE	R IN El 600-70223 Chain of Custody
Client PBW	Project Manager tvill V pravue	Date Chain of Custody Number
220 Duble Greekbr, Ste 4004	Telephone Number (Area Code)/Fax Number (672) {71 - 3 Y3Y	Lab Number Page of
Dr. J. R. r. K State ZD Code	Site Contact	Analysis (Attach list if more space is needed)
Project Name and Location (State)	Carrier/Maybill Number	
Exide APA / Texas	04	Special Instructions/
Contract/Purchase Order/Quote No. 1255	Matrix Preservatives	6 fale Conditions of Receipt
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Air Aqueous Sed. Soil Unpres. H2SO4 HNO3 HCI NaOH ZnAc/ NaOH	Das Srul
MW-10 3/18/13	1400 X 2 X	
$m_{W} - 10$ $3/8/13$	и И	
B7N 3/18/13	kyys X 2 X	
B7N 3/18/3	2	
· · · · · · · · · · · · · · · · · · ·		
Possible Hazard Identification	Sample Disposal Unknown Return To Client Disposal By Lab Archiv	(A lee may be assessed if samples are retained re For Months longer than 1 month)
Tum Around Time Required	<i>OC Requirements (Specify)</i>	
1. Balaquijmed By	3/18/13 1500 1. Received BY UCCON	12/18/3 1502
2 heintruished by Charles	Bld 13 Time 2 Received by	Datę I Jime
3. Relinquished By	Date Time 3. Received By Julien Lin	
Comments	with the Sample; PINK - Field Copy	
DISTRIBUTION. WITTE TRAINED to Onone man traperty of white oraly of		

.

ł

Client: Pastor, Behling & Wheeler LLC

Login Number: 70223 List Number: 1

Creator: Pulumbarit, Josh

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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.	True	

Job Number: 600-70223-1

List Source: TestAmerica Houston



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: 600-70259-1

Client Project/Site: Exide Recycling Center, Frisco TX Projec

For:

Pastor, Behling & Wheeler LLC 2201 Double Creek Dr Suite 4004 Round Rock, Texas 78664

Attn: Eric Pastor

Authorized for release by: 4/3/2013 5:42:44 PM Cathy Upton Data Delivery Analyst cathy.upton@testamericainc.com

Designee for

Sachin Kudchadkar Project Manager II sachin.kudchadkar@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.



Table of Contents

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TestAmerica Houston TRRP Data Package Cover Page

600-70259-1

Job Number:

Project Name/Number:

Exide Recycling Center, Frisco TX Project

This Data Package consists of:

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

- X R1 Field Chain-of-Custody Form
- X R2 Sample Identification Cross-reference;
- X 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).
- X R4 Surrogate Recovery Data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- X R5 Test Reports/Summary Forms for Blank Samples;
- X R6 Test Reports/Summary Forms for Laboratory Control Samples (LCSs) including:
 - a) LCS spiking amounts,

X

- 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
- X 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.
- List of method quantitation limit (MQL) and detectability check sample results for each analyte for each method and X R9 matrix;
- X 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 Name (printed) Data Delivery Analyst

Official Title (printed)

Signature

04/03/2013

Laboratory Name: TestAmerica-Houston LRC Date: 03/25/13 Project Name: Exide Recycling Center, Frisco TX Project Laboratory Job Number: 600-70259 Reviewer Name: BDG Prep Batch Number(s): 600-102180 - Sulfate # A' Description Yes No NA NK' E RI Ol Did samples meet the laboratory's standard conditions of sample acceptability upon receipf? X R2 Ol Sample and quality control (QC) chernification X R3 Ol Testeppend quality control (QC) chernification X R4 Iboratory ID numbers cross-referenced to the laboratory ID numbers? X R4 Ol Test reports X X R4 Ol Test reports X X Were all samples prepared and analyzed within holding times? X X X Were all analyse identifications checked by a peer or supervisor? X X X Were all analyse identifications checked by a peer or supervisor? X X X Were all samples reported for all analyse identification schecked by a peer or supervisor? X X X Were all analyse identifications checked by a peer or supervisor? X X	A	oper	ndix A (cont'd): Laboratory Review Checkl	list: Reportable Data					
Project Name: Exide Recycling Center, Frisco TX Project Laboratory Job Number: 600-70259 Reviewer Name: EDG Prep Batch Number(s): 600-70259 Reviewer Name: EDG Yes No R1 A? Description Yes No R1 A? Description Yes No R2 OI Samples and quality control (QC) identification K R3 OI Test reports X X R4 R3 Indied sample ID numbers: cross-referenced to the laboratory ID numbers? X X R4 R3 OI Test reports X X X R4 R4 Reviewer (Reviewer Conservicement on the laboratory ID numbers: Cross-referenced to the corresponding QC data? X X Were all samples prepared and analyzed within holding times? X X X Were call malysts identifications checked by a peer or supervisor? X X X Were sample detection limits reported for all soul and sediment samples? X X X Were sample detection limits reported for all soul and sediment samples? X X X	Lab	orator	y Name: TestAmerica-Houston	LRC Date: 03/25/13					
Reviewer Name: BDG Prep Batch Number(s): 600-102180 - Sulfate #* X Description Yes No NA! Ne!* R1 OI Did sumples meet the laboratory's standard conditions of sample acceptability upon receipt? X X X R1 OI Did sumples meet the laboratory's standard conditions of sample acceptability upon receipt? X X R2 OI Sample and quality control (QC) identification X X X R3 OI Test reports X	Proi	ect N	ame: Exide Recycling Center, Frisco TX Project	Laboratory Job Number: 600-70259					
Revenue [Prep Batteri Number(s): 000-102180 - 102180	Dar	ione	Name: BDC	Pran Ratch Number(a): 600 102190	lfata				
# A Description Yes No NA Net P Chain-of-custody (C-O-C) Image: Control of the control of the property of the control of	Kev.	lewer		Prep Batch Number(s): $600-102180 - Su$		N	NTA 3	NID4	ED 115
Chain-of-custody (C-O-C) Image: Chain-of-custody (C-O-C) X Were all departures from standard conditions of sample acceptability upon receipt? X X R2 OI Sample and quality control (QC) identification X X R3 OI Tesmple and quality control (QC) identification X X R4 OI Test reports X X X R3 OI Test reports X X X X Were all aspite identifications checked by a peer or supervisor? X X X X Were all analyte identifications checked by a peer or supervisor? X X X X Were sample detection limits reported for all analytes not detectod? X X X X Were surgate percevery data X X X X X Were surgate percevery data X X X X X Were surgate percevery data X X X X X X Were surgate percevent recoveries in all samples propentel supercevice	#'	Až	Description		Yes	No	NA	NR	ER#
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 X R3 OI Test reports X R4 re all laboratory ID numbers cross-referenced to the iaboratory ID numbers? X R4 OI Test reports X Were all samples prepared and analyzed within holding times? X X Were all samples prepared and analyzed within holding times? X X Were all samples prepared for all analytes within the laborator? X X Were all samples prepared for all analytes in detected? X X Were all results for soil and sediment samples? X X Were sump detection limits reported for all soil and sediment samples? X X Were sumgater sourcey data X X X Were sumogate percent recoveries in all samples within the laboratory QC limits? X X Were sumogate percent recoveries in all samples within the laboratory QC limits? X X Were sumogate percent recoveries in blank sampl	D 1	01	Chain-of-custody (C-O-C)						
Were all departures from standard conditions described in an exception report? X R2 Of Sample and quality control (QC) Identification Are all field sample ID numbers cross-referenced to the corresponding QC data? X R3 OI Test reports X Image: Control (QC) Identification R4 ID Test reports X Image: Control (QC) Identification Were all analytic detected by a peer or supervisor? X Image: Control (QC) (QC) (QC) (QC) (QC) (QC) (QC) (QC)	КI	OI	Did samples meet the laboratory's standard conditions of sar	mple acceptability upon receipt?	X				
R2 Oi Sample and quality control (QC) identification Are all laboratory ID numbers cross-referenced to the laboratory ID numbers? X Are all laboratory ID numbers cross-referenced to the corresponding QC data? X Were all samples prepared and analyzed within holding times? X Were all samples prepared and analyzed within holding times? X Were calculations checked by a peer or supervisor? X Were calculations checked by a peer or supervisor? X Were all sample betterion limits reported for all analyses not detected? X Were balls solisol samples for volatile analysis extracted with methanol per SW846 Method 5035? X Were surgate recovery data X X Were surgate sadded prior to extraction? X X Were surgate sadded prior to extraction? X X Were blanks analyzed at the appropriate frequency? X X Were blanks concentrations < MQL?	DA	01	Were all departures from standard conditions described in ar	n exception report?	_		X		
Are all laboratory LD funders: Cross-reterenced to the corresponding QC data? X R3 OI Test reports X Were all samples prepared and analyzed within holding times? X Other than those results < MQL, were all other raw values bracketed by calibration standards?	K2	OI	Sample and quality control (QC) identification	anto my ID anough and t	v				
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			Are all known problems/anomalies/special conditions noted	in this LRC and ER?	Х				
Was applicable and available technology used to lower the SDL to minimize the matrix interference X affects on the sample results?			Was applicable and available technology used to lower the S affects on the sample results?	DL to minimize the matrix interference	X				3
Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the X			Is the laboratory NELAC-accredited under the Texas Labora	tory Accreditation Program for the	X				
analytes, matrices and methods associated with this laboratory data package?	I	1	analytes, matrices and methods associated with this labor tems identified by the letter "P" must be included in the laboratory of	atory data package?	nort(a)	Itor	ne ide	ntific	hv th

letter "S" should be retained and made available upon request for the appropriate retention period.
O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);

3. NA = Not applicable;

4. NR = Not reviewed;

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked). 5.

RG-366/TRRP-13 Revised May 2010

Ap	pen	dix A (cont'd): Laboratory Review Checklist:	Reportable Data					
Lab	orato	ry Name: TestAmerica-Houston LRC	C Date: 03/25/13					
Pro	ject N	ame: Exide Recycling Center, Frisco TX Project Labo	pratory Job Number: 600-70259					
Rev	iewe	Name: BDG Pren	Batch Number(s): 600-102180 – Su	ulfate	<u>,</u>			
#1	A^2	Description		Yes	No	NA ³	NR^4	ER# ⁵
s1	OI	Initial calibration (ICAL)		105	110	1111	1.11	LIC
51	01	Were response factors and/or relative response factors for each anal	vte within OC limits?	x				
		Were percent RSDs or correlation coefficient criteria met?	lyte within QC mints:	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 s	second source standard?	X				
S 2	OI	Initial and continuing calibration verification (ICCV and CCV)	and continuing calibration					
	01	Was the CCV analyzed at the method-required frequency?	and containing curror unon	X				
		Were percent differences for each analyte within the method-require	ed OC limits?	X				
		Was the ICAL curve verified for each analyte?	X					
		Was the absolute value of the analyte concentration in the inorganic	X					
S3 O		Mass spectral tuning:						
	0	Was the appropriate compound for the method used for tuning?			X			
		Were ion abundance data within the method-required OC limits?			X			
S4	0	Internal standards (IS):						
	0	Were IS area counts and retention times within the method-required	1 OC limits?			X		
S 5	OI	Raw data (NELAC section 5.5.10)						
	01	Were the raw data (for example, chromatograms, spectral data) revi	iewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw d	lata?			X		
S6	0	Dual column confirmation						
	-	Did dual column confirmation results meet the method-required OC?				X		
S 7	0	Tentatively identified compounds (TICs):	-					
	-	If TICs were requested, were the mass spectra and TIC data subject	to appropriate checks?			X		
S8	Ι	Interference Check Sample (ICS) results:	TT T					
		Were percent recoveries within method QC limits?				Х		
S9	Ι	Serial dilutions, post digestion spikes, and method of standard a	additions					
		Were percent differences, recoveries, and the linearity within the Q	C limits specified in the method?			Х		
S10	OI	Method detection limit (MDL) studies	•					
		Was a MDL study performed for each reported analyte?		Х				
		Is the MDL either adjusted or supported by the analysis of DCSs?		Х				
S11	OI	Proficiency test reports:						
		Was the laboratory's performance acceptable on the applicable prof	iciency tests or evaluation studies?	Х				
S12	OI	Standards documentation						
		Are all standards used in the analyses NIST-traceable or obtained fi	rom other appropriate sources?	Х				
S13	OI	Compound/analyte identification procedures						
		Are the procedures for compound/analyte identification documente	d?	Х				
S14	OI	Demonstration of analyst competency (DOC)						
		Was DOC conducted consistent with NELAC Chapter 5?		Х				
		Is documentation of the analyst's competency up-to-date and on file	e?	Х				
S15	OI	Verification/validation documentation for methods (NELAC Cl	hapter 5)					
		Are all the methods used to generate the data documented, verified,	and validated, where applicable?	Х				
S16	OI	Laboratory standard operating procedures (SOPs):						
		Are laboratory SOPs current and on file for each method performed	1?	Х				
						<u> </u>	Ļ	
		I Items identified by the letter "R" should be included in the laboratory	data package submitted to the TCEO in	the 1	KKP	-requir	ed repo	rt(s).

I 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).

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Appendix A (cont'd): Laboratory Review Checklist: Exception Reports						
Laborat	Laboratory Name: TestAmerica-HoustonLRC Date: 03/25/13					
Project Name: Exide Recycling Center, Frisco TX Project Laboratory Job Number: 600-70259						
Reviewer Name: BDG Prep Batch Number(s): 600-102180 - Sulfate						
ER # ¹	t ^{#1} DESCRIPTION					
1	Sulfate was detected above the MDL, but below the MQI	in the method blank. The level of detection is below the				
	recommended reporting limit and the appropriate flags ha	ave been applied.				
2	2 The laboratory selected a sample from another group to perform as the MS/MSD.					
3	The Sulfate SDLs for samples $600-70259 - 1, 2, 3, 4, 5$ and 6 were elevated due to the high concentrations of this					
	analyte.					

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

Ap	oper	ndix A (cont'd): Laboratory Review Checklis	t: Reportable Data					
Labo	orator	y Name: TestAmerica-Houston	LRC Date: 03/26/13					
Proi	ect N	ame: Exide Recycling Center, Frisco TX	Laboratory Job Number: 600-70259					
Revi	iewer	Name: TWR	Prep Batch Number(s): $600-102122$. I	CP				
#1			11ep Baten (Vullber(3): 000-102122-1		No	NA ³	ND^4	ED # ⁵
#	A	Choin of autody (C, Q, C)		105	NU	INA	INK	ĽIXπ
D1	OT	Chain-of-custody (C-O-C)	1	v				
K1	01	Were all departures from standard conditions described in an a	receptability upon receipt?	Λ		v		
R2	OI	Sample and quality control (QC) identification	cception report?			Λ		
K2	01	Are all field sample ID numbers cross-referenced to the laborat	ory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the correspo	nding OC data?	X				
R3	OI	Test reports						
-	01	Were all samples prepared and analyzed within holding times?		X		1	1	
		Other than those results $<$ MQL, were all other raw values brac	keted by calibration standards?	Х				
		Were calculations checked by a peer or supervisor?		Х				
	Were all analyte identifications checked by a peer or supervisor?							
		Were sample detection limits reported for all analytes not detection	eted?	Х				
		Were all results for soil and sediment samples reported on a dry	y weight basis?			Х		
		Were % moisture (or solids) reported for all soil and sediment	samples?			Х		
		Were bulk soil/solid samples for volatile analysis extracted with	h methanol per SW846 Method 5035?			Х		
		If required for the project, TICs reported?				Х		
R4	0	Surrogate recovery data						
	Were surrogates added prior to extraction?					Х		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?				Х		
R5	OI	Test reports/summary forms for blank samples						
		Were appropriate type(s) of blanks analyzed?		Х				
		Were blanks analyzed at the appropriate frequency?		Х				
		Were method blanks taken through the entire analytical process	s, including preparation and, if	Х				
		applicable, cleanup procedures?						
D.		Were blank concentrations < MQL?		X				
R6	OI	Laboratory control samples (LCS):		X.				
		Were all COCs included in the LCS?		X				
		Was each LCS taken through the entire analytical procedure, in	cluding prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?		X				
		Were LCS (and LCSD, if applicable) %Rs within the laborator	y QC limits?	X				
		the MDL used to calculate the SDL s ²	bry's capability to detect the COCs at	А				
		Was the LCSD RPD within OC limits?				v		
R7	OI	Matrix snike (MS) and matrix snike dunlicate (MSD) data				Λ		
	01	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	OC limits?	X				
		Were MS/MSD RPDs within laboratory OC limits?		X				
R8	OI	Analytical duplicate data						
		Were appropriate analytical duplicates analyzed for each matrix	x?	Х				
		Were analytical duplicates analyzed at the appropriate frequence	cy?	Х				
		Were RPDs or relative standard deviations within the laborator	y QC limits?	Х				
R9	OI	Method quantitation limits (MQLs):						
	ſ	Are the MQLs for each method analyte included in the laborate	ory data package?	Х				
		Do the MQLs correspond to the concentration of the lowest not	n-zero calibration standard?	Х				
		Are unadjusted MQLs and DCSs included in the laboratory dat	a package?	Х				
R10	OI	Other problems/anomalies						
1		Are all known problems/anomalies/special conditions noted in	this LRC and ER?	X				
		Was applicable and available technology used to lower the SDI	L to minimize the matrix interference	Х				
		affects on the sample results?				<u> </u>		
1		Is the laboratory NELAC-accredited under the Texas Laborator	ry Accreditation Program for the	Х		1		
I		analytes, matrices and methods associated with this laborate	bry data package?			<u> </u>		1 1

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 NA = Not applicable;

 4. NR = Not reviewed;
 5. ER# = Exception Re ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

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A r	nor	div A (cont'd). I shorstory Raview Charlist. D	enortable Data					
Lab	orato	ry Name: TestAmerica-Houston	Date: 03/26/13					
Pro	iect N	Jame: Exide Recycling Center Erisco TX Labo	ratory Job Number: 600-70259					
1 IQ				CD				
Rev	iewei	r Name: TWR Prep	Batch Number(s): 600-102122-1	CP	1			
#1	A^2	Description		Yes	No	NA ³	NR ⁴	ER# ³
S1	OI	Initial calibration (ICAL)						
		Were response factors and/or relative response factors for each analyt	te within QC limits?			Х		
		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				
Ga	0.1	Has the initial calibration curve been verified using an appropriate sec	cond source standard?	X				
S 2	OI	Initial and continuing calibration verification (ICCV and CCV) a	nd continuing calibration					
		Was the CCV analyzed at the method-required frequency?		X				
		Were percent differences for each analyte within the method-required	I QC limits?	X				
		Was the ICAL curve verified for each analyte?	X					
a		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?						
53	0	Mass spectral tuning:						
		Was the appropriate compound for the method used for tuning?	the appropriate compound for the method used for tuning?					
G 4	0	Were ion abundance data within the method-required QC limits?				X		
54	0	Internal standards (IS):				v		
65	01	Were IS area counts and retention times within the method-required (QC limits?			X		
85	OI	Raw data (NELAC section 5.5.10)	11 1 2	N				
		Were the raw data (for example, chromatograms, spectral data) review	wed by an analyst?	Х		37		
66	0	were data associated with manual integrations flagged on the raw dat	a?			X		
30	0	Dual column confirmation				v		
67	0	Transfer the second sec				Λ		
57	0	I fentatively identified compounds (IICs):	annuanista abaalta?			v		
66	т	In Thes were requested, were the mass spectra and The data subject to	appropriate checks?			Λ		
30	1	Ware percent recoveries within method OC limits?		v				
59	T	Seriel dilutions, post digestion spikes, and method of standard ad	ditions	Λ				
57	1	Were percent differences recoveries and the linearity within the OC	limits specified in the method?	v				
\$10	OI	Mothed detection limit (MDL) studies	mints specified in the method?	Λ				
510	01	Was a MDL study performed for each reported analyte?		x				
		Is the MDL either educted or supported by the analysis of DCSs?		X V				
S11	OI	Proficiency test reports:		Λ				
		Was the laboratory's performance acceptable on the applicable profic	iency tests or evaluation studies?	x				
S12	OI	Standards documentation	lency tests of evaluation studies:	Δ				
~	01	Are all standards used in the analyses NIST-traceable or obtained from	m other appropriate sources?	x				
S13	OI	Compound/analyte identification procedures	in other uppropriate sources.					
	01	Are the procedures for compound/analyte identification documented?)	X		1		1
S14	OI	Demonstration of analyst competency (DOC)						
	01	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 Cha	pter 5)					
		Are all the methods used to generate the data documented, verified, and	nd validated, where applicable?	X				1
S16	OI	Laboratory standard operating procedures (SOPs)		-				
		Are laboratory SOPs current and on file for each method performed?		X		1		1
		1 Items identified by the letter "R" should be included in the laboratory da	ata package submitted to the TCEQ in	the T	RRP	-require	ed repo	rt(s).

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.

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable). NA = Not applicable.2

3

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).

3

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports					
Laboratory Name: TestAmerica-Houston	LRC Date: 03/26/13				
Project Name: Exide Recycling Center, Frisco TX	Laboratory Job Number: 600-70259				
Reviewer Name: TWR	Prep Batch Number(s): 600-102122- ICP				
ER # ¹ DESCRIPTION					

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: Water Method: 300.0, 9056 Preparation: N/A Date Analyzed: 12/17/2012 Date Prepared: 12/17/2012 TALs Batches: N/A Units: mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Fluoride	0.799	0.1	0.094	0.2
Chloride	0.126	0.2	0.259	0.4
Nitrite	0.105	0.2	0.302	0.2
Bromide	0.07	0.1	0.855	0.2
Nitrate	0.032	0.1	0.125	0.2
Orthophosphate	0.117	0.3	0.285	0.2
Sulfate	0.137	0.4	0.354	0.4

Detection Check Standard

Matrix:	Water			
Method:	200.7/6010			
Preparation:	200.7P/3010			
Date Analyzed:	12/3/2012			
Date Prepared:	11/28/2012			
Instrument:	Thermo 6500			
TALs Batches:	94513, 94244(p	orep)		
Units:	mg/L			
Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.0197	0.5
Antimony	0.0063	0.01	0.0106	0.05
Arsenic	0.0033	0.01	0.0071	0.01
Barium	0.0022	0.005	0.0052	0.02
Beryllium	0.00134	0.002	0.0039	0.005
Boron	0.0077	0.02	0.0228	0.2
Cadmium	0.00073	0.001	0.001	0.005
Calcium	0.022	0.05	0.0916	1
Chromium	0.0016	0.002	0.0035	0.01
Cobalt	0.00063	0.001	0.0008	0.01
Copper	0.0014	0.002	0.0005	0.01
Iron	0.087	0.1	0.0965	0.4
Lithium	0.0024	0.005	0.0066	0.2
Lead	0.0029	0.005	0.0053	0.01
Selenium	0.0042	0.01	0.0105	0.04
Manganese	0.00084	0.002	0.0019	0.01
Molybdenum	0.0027	0.005	0.0057	0.01
Nickel	0.00179	0.005	0.0048	0.01
Silver	0.0012	0.0025	0.0026	0.01
Sodium	0.02	0.05	0.381	1
Strontium	0.0005	0.001	0.0015	0.005
Thallium	0.0078	0.02	0.0203	0.03
Tin	0.0028	0.005	0.0053	0.01
Titanium	0.0011	0.002	0.002	0.01
Vanadium	0.0017	0.002	0.0041	0.01
Zinc	0.0022	0.005	0.0058	0.01

Job ID: 600-70259-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative 600-70259-1

Comments

No additional comments.

Receipt

The samples were received on 3/20/2013 9:11 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.7° C and 5.4° C.

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-70259-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-70259-1	MW-18	Water	03/18/13 15:40	03/20/13 09:11
600-70259-2	MW-24	Water	03/18/13 16:15	03/20/13 09:11
600-70259-3	P2	Water	03/19/13 08:15	03/20/13 09:11
600-70259-4	B4R	Water	03/19/13 08:50	03/20/13 09:11
600-70259-5	MW-25	Water	03/19/13 09:15	03/20/13 09:11
600-70259-6	MW-23	Water	03/19/13 09:45	03/20/13 09:11

Client Sample Results

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-70259-1

Client Sample ID: MW-18 Date Collected: 03/18/13 15:40							Lab Sam	ple ID: 600-7 Matrix	0259-1 c: Water
Date Received: 03/20/13 09:11									
Nothod: 6010B Motols (ICB)									
Analyte	Result	Qualifier	MQL (Adi)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	ma/L		03/20/13 16:30	03/21/13 14:58	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/20/13 16:30	03/21/13 14:58	1
- Method: 6010B - Metals (ICP) - Dis	ssolved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/20/13 16:30	03/21/13 15:08	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/20/13 16:30	03/21/13 15:08	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	298	b	5.00	1.37	mg/L			03/21/13 04:46	10
lient Sample ID: MW-24							Lab Sam	ple ID: 600-7	0259-2
ate Collected: 03/18/13 16:15								Matrix	k: Water
ate Received: 03/20/13 09:11									
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		03/20/13 16:30	03/21/13 15:24	1
Lead	0.00380	J	0.0100	0.00290	mg/L		03/20/13 16:30	03/21/13 15:24	1
Method: 6010B - Metals (ICP) - Dis	ssolved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/20/13 16:30	03/21/13 15:27	1
Lead	0.00540	J	0.0100	0.00290	mg/L		03/20/13 16:30	03/21/13 15:27	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1640	b	50.0	13.7	mg/L			03/21/13 05:22	100
lient Sample ID: P2							Lab Sam	ple ID: 600-7	0259-3
ate Collected: 03/19/13 08:15								Matrix	c: Water
ate Received: 03/20/13 09:11									
Method: 6010B - Metals (ICP)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.00120	J	0.00500	0.000350	mg/L		03/20/13 16:30	03/21/13 15:29	1
_ead	0.00500	J	0.0100	0.00290	mg/L		03/20/13 16:30	03/21/13 15:29	1
Method: 6010B - Metals (ICP) - Dis	ssolved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.00140	J	0.00500	0.000350	mg/L		03/20/13 16:30	03/21/13 15:32	1
Lead	0.00500	J	0.0100	0.00290	mg/L		03/20/13 16:30	03/21/13 15:32	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2560	b	50.0	13.7	ma/L			03/21/13 05:59	100

MQL (Adj)

MQL (Adj)

0.00500

0.00500

0.0100

SDL Unit

0.000350 mg/L

0.00290 mg/L

SDL Unit

0.000250 ma/

D

D

Prepared

03/20/13 16:30

03/20/13 16:30

Prepared

02/20/42 46:20

Result Qualifier

Result Qualifier

0.00150 J

0.00810 J

Client Sample ID: B4R

Analyte

Lead

Analyte

Cadmium

Date Collected: 03/19/13 08:50

Date Received: 03/20/13 09:11

Method: 6010B - Metals (ICP)

Method: 6010B - Metals (ICP) - Dissolved

TestAmerica Job ID: 600-70259-1

Lab Sample ID: 600-70259-4

Analyzed

03/21/13 15:34

03/21/13 15:34

Analyzed

02/01/12 15:07

Matrix: Water

Dil Fac

Dil Fac

1

1

8

	3
	6

Cadmium	0.00170	J	0.00500	0.000350	mg/L		03/20/13 16:30	03/21/13 15:37	1
Lead	0.00580	J	0.0100	0.00290	mg/L		03/20/13 16:30	03/21/13 15:37	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	953	b	50.0	13.7	mg/L			03/21/13 06:35	100
Client Sample ID: MW-25							Lab Sam	ple ID: 600-7	0259-5
Date Collected: 03/19/13 09:15								Matrix	k: Water
Date Received: 03/20/13 09:11									
Method: 6010B - Metals (ICP)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.00310	J	0.00500	0.000350	mg/L		03/20/13 16:30	03/21/13 15:39	1
Lead	0.00640	J	0.0100	0.00290	mg/L		03/20/13 16:30	03/21/13 15:39	1
Method: 6010B - Metals (ICP) - Dis	solved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.00300	J	0.00500	0.000350	mg/L		03/20/13 16:30	03/21/13 15:41	1
Lead	0.00740	J	0.0100	0.00290	mg/L		03/20/13 16:30	03/21/13 15:41	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	3700	b	50.0	13.7	mg/L			03/21/13 07:12	100
Client Sample ID: MW-23							Lab Sam	ple ID: 600-7	0259-6
Date Collected: 03/19/13 09:45								Matrix	k: Water
Date Received: 03/20/13 09:11									
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		03/20/13 16:30	03/21/13 15:44	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/20/13 16:30	03/21/13 15:44	1

_ Method: 6010B - Metals (ICP)) - Dissolved								
Analyte	, Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/20/13 16:30	03/21/13 15:47	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/20/13 16:30	03/21/13 15:47	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2090	b	50.0	13.7	mg/L			03/21/13 08:25	100

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

5

Qualifiers

Metals	
Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.
General Ch	nemistry
Qualifier	Qualifier Description
b	The compound was found in the blank and sample

J Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.	9
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	10
%R	Percent Recovery	
CNF	Contains no Free Liquid	
DER	Duplicate error ratio (normalized absolute difference)	
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)	
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 600-102122/1-	Α										Client	Sample ID:	Method	l Blank
Matrix: Water												Prep T	ype: To	otal/NA
Analysis Batch: 102230												Prep E	Batch:	102122
		ΜВ	MB											
Analyte	R	esult	Qualifier	MQL (Adj)		SDL	Unit		D	Р	repared	Analyz	ed	Dil Fac
Cadmium	0.00	0350	U	0.00500	0.00	0350	mg/L			03/2	20/13 16:3	30 03/21/13	14:54	1
Lead	0.0	0290	U	0.0100	0.0	0290	mg/L			03/2	20/13 16:3	30 03/21/13	14:54	1
Lab Sample ID: LCS 600-102122/2	- A								C	lient	t Samp	le ID: Lab Co	ontrol S	Sample
Matrix: Water												Prep T	ype: To	otal/NA
Analysis Batch: 102230												Prep E	Batch: '	102122
				Spike	LCS	LCS						%Rec.		
Analyte				Added	Result	Qua	lifier	Unit		D	%Rec	Limits		
Cadmium				0.500	0.4997			mg/L			100	80 - 120		
Lead				1.00	1.002			mg/L			100	80 - 120		
Lab Sample ID: 600-70259-1 MS												Client Sam	ple ID:	MW-18
Matrix: Water												Prep T	ype: To	otal/NA
Analysis Batch: 102230	• ·	~		0 "								Prep E	Batch: '	102122
Australia	Sample	Sam	ipie	Spike	MS	MS		11-2		_	0/ -	%Rec.		
Analyte	Result	Qua		Added	Result	Qua	infier	Unit		_ <u>D</u>	%Rec			
	0.000350	U		0.500	0.5097			mg/L			102	75 - 125		
Lead	0.00290	U		1.00	1.004			mg/L			100	75 - 125		
- I ab Sample ID: 600 70250 1 MSD												Client Same		MIN 10
Lab Sample ID. 600-70259-1 MSD												Chefit Sahi	pie ID.	
Analysis Potchy 102220												Prep I	ype: ic	102422
Analysis Batch. 102230	Sample	Sam	nlo	Snike	MSD	MSD						%Rec	batch.	
Analyte	Popult	Oua	lifior	Added	Posult	Oual	lifior	Unit		п	%Pec	Jintec.	PPD	Limit
	0.000350			0.500	0 5180	Quu		ma/l			104	75 125	2	20
Lead	0.000000	U U		1.00	1 023			mg/L			107	75 125	2	20
	0.00200	0		1.00	1.020			iiig/L			102	10 - 120	2	20
												Client Sam	ple ID:	MW-18
Matrix: Water												Prep T	vpe: To	otal/NA
Analysis Batch: 102230												Prep	Batch:	102122
·	Sample	Sam	ple		DU	DU								RPD
Analyte	Result	Qua	lifier		Result	Qua	lifier	Unit		D			RPD	Limit
Cadmium	0.000350	U		(0.000350	U		mg/L					NC	20
Lead	0.00290	U			0.00290	U		mg/L					NC	20
								-						
Lab Sample ID: 600-70259-1 MS												Client Sam	ple ID:	MW-18
Matrix: Water												Prep Ty	pe: Dis	solved
Analysis Batch: 102230												Prep E	Batch: '	102122
	Sample	Sam	ple	Spike	MS	MS						%Rec.		
Analyte	Result	Qua	lifier	Added	Result	Qua	lifier	Unit		D	%Rec	Limits		
Cadmium	0.000350	U		0.500	0.5092			mg/L			102	75 - 125		
Lead	0.00290	U		1.00	1.008			mg/L			101	75 - 125		
_														
Lab Sample ID: 600-70259-1 MSD												Client Sam	ple ID:	MW-18
Matrix: Water												Prep Ty	pe: Dis	solved
Analysis Batch: 102230												Prep I	Batch: '	102122
	Sample	Sam	ple	Spike	MSD	MSD)					%Rec.		RPD
Analyte	Result	Qua	lifier	Added	Result	Qua	lifier	Unit		_ D	%Rec	Limits	RPD	Limit
Cadmium	0.000350	U		0.500	0.5110			mg/L			102	75 ₋ 125	0	20

QC Sample Results

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Sulfate

TestAmerica Job ID: 600-70259-1

10

Lab Sample ID: 600-70259-1 WSD)											Client Sam	ple ID: I	NW-18
Matrix: Water												Prep Ty	pe: Diss	solved
Analysis Batch: 102230												Prep	Batch: 1	02122
-	Sample	Sam	ple	Spike	MSD	MSD						%Rec.		RPD
Analyte	Result	Qual	lifier	Added	Result	Qual	ifier	Unit		D	%Rec	Limits	RPD	Limit
Lead	0.00290	U		1.00	1.009			mg/L			101	75 - 125	0	20
Lab Sample ID: 600-70259-1 DU												Client Sam	ple ID: I	NW-18
Matrix: Water												Prep Ty	pe: Diss	solved
Analysis Batch: 102230												Prep	Batch: 1	02122
	Sample	Sam	ple		DU	DU								RPD
Analyte	Result	Qual	lifier		Result	Qual	ifier	Unit		D			RPD	Limit
Cadmium	0.000350	U		C	0.000350	U		mg/L					NC	20
Lead	0.00290	U			0.00290	U		mg/L					NC	20
-														
- /ethod: 300.0 - Anions, Ion (- Lab Sample ID: MB 600-102180/3	Chromat	ogra	aphy								Client	Sample ID:	Method	Blank
Aethod: 300.0 - Anions, Ion (- Lab Sample ID: MB 600-102180/3 Matrix: Water	Chromat	ogra	aphy								Client	Sample ID: Prep 1	Method īype: To	Blank tal/NA
Aethod: 300.0 - Anions, Ion (- Lab Sample ID: MB 600-102180/3 Matrix: Water Analysis Batch: 102180	Chromat	ogra	aphy								Client	Sample ID: Prep 1	Method Type: To	Blank tal/NA
Aethod: 300.0 - Anions, Ion (Lab Sample ID: MB 600-102180/3 Matrix: Water Analysis Batch: 102180	Chromat	MB	Aphy MB Qualifier	MOL (Adi)		SDI	linit				Client	Sample ID: Prep 1	Method Type: To	Blank tal/NA
Aethod: 300.0 - Anions, Ion (Lab Sample ID: MB 600-102180/3 Matrix: Water Analysis Batch: 102180 Analyte Sulfate	<u>Chromat</u>	MB esult 4504	MB Qualifier J		(SDL 0.137	Unit mg/L		D	Pı	Client S	Sample ID: Prep 7 	Method Type: To red 17:32	Blank tal/NA Dil Fac
Aethod: 300.0 - Anions, Ion (Lab Sample ID: MB 600-102180/3 Matrix: Water Analysis Batch: 102180 Analyte Sulfate	Chromat	MB esult 4504	MB Qualifier J	MQL (Adj) 0.500	(SDL 0.137	Unit mg/L		D	Pr	Client S	Sample ID: Prep 7 — Analy: 03/20/13	Method Type: To red 17:32 -	Blank tal/NA Dil Fac 1
Aethod: 300.0 - Anions, Ion (Lab Sample ID: MB 600-102180/3 Matrix: Water Analysis Batch: 102180 Analyte Sulfate Lab Sample ID: LCS 600-102180/4 Matrix: Water	<u>Chromat</u> - <u>R</u> 0.	MB esult 4504	MB Qualifier J	MQL (Adj) 0.500	(SDL 0.137	Unit mg/L		D Clie	Pr	Client S repared	Sample ID: Prep 7 	Method Type: To ted 17:32	Blank tal/NA Dil Fac 1 ample tal/NA
Aethod: 300.0 - Anions, Ion (Lab Sample ID: MB 600-102180/3 Matrix: Water Analysis Batch: 102180 Analyte Sulfate Lab Sample ID: LCS 600-102180/4 Matrix: Water Analysis Batch: 102180	Chromat - <u>R</u> 0.	MB esult 4504	MB Qualifier J	MQL (Adj) 0.500	(SDL).137	Unit mg/L		D Clie	Pi	Client S repared	Sample ID: Prep 7 	Method Type: To Trian - Trian - Trian - Type: To	Blank tal/NA Dil Fac 1 ample tal/NA
Aethod: 300.0 - Anions, Ion (Lab Sample ID: MB 600-102180/3 Matrix: Water Analysis Batch: 102180 Analyte Sulfate Lab Sample ID: LCS 600-102180/4 Matrix: Water Analysis Batch: 102180	Chromat 	MB esult 4504	MB Qualifier J	MQL (Adj) 0.500	(SDL).137	Unit mg/L		D Clie	Pr	Client S repared	Sample ID: Prep 1 — Analy: 03/20/13 e ID: Lab C Prep 1 %Rec.	Method Type: To red 17:32 - ontrol S Type: To	Blank tal/NA Dil Fac 1 ample tal/NA

20.0

21.73

mg/L

109

90 - 110

Unadjusted Detection Limits

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

2 3 4 5 6 7 8 9 11 12 13 14 15

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Cadmium	0.00500	0.000350	mg/L	6010B
Lead	0.0100	0.00290	mg/L	6010B
Method: 6010B - Metals (ICP) -	Dissolved			
Analyte	MQL	MDL	Units	Method
Cadmium	0.00500	0.000350	mg/L	6010B
Cadmium Lead	0.00500 0.0100	0.000350 0.00290	mg/L mg/L	6010B 6010B
Cadmium Lead General Chemistry	0.00500	0.000350 0.00290	mg/L mg/L	6010B 6010B
Cadmium Lead General Chemistry Analyte	0.00500 0.0100 MQL	0.000350 0.00290 MDL	mg/L mg/L Units	6010B 6010B Method

QC Association Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Metals

Prep Batch: 102122

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
600-70259-1	MW-18	Total/NA	Water	3010A	
600-70259-1	MW-18	Dissolved	Water	3010A	
600-70259-1 DU	MW-18	Total/NA	Water	3010A	
600-70259-1 DU	MW-18	Dissolved	Water	3010A	
600-70259-1 MS	MW-18	Total/NA	Water	3010A	
600-70259-1 MS	MW-18	Dissolved	Water	3010A	
600-70259-1 MSD	MW-18	Total/NA	Water	3010A	
600-70259-1 MSD	MW-18	Dissolved	Water	3010A	
600-70259-2	MW-24	Total/NA	Water	3010A	
600-70259-2	MW-24	Dissolved	Water	3010A	
600-70259-3	P2	Total/NA	Water	3010A	
600-70259-3	P2	Dissolved	Water	3010A	
600-70259-4	B4R	Total/NA	Water	3010A	
600-70259-4	B4R	Dissolved	Water	3010A	
600-70259-5	MW-25	Total/NA	Water	3010A	
600-70259-5	MW-25	Dissolved	Water	3010A	
600-70259-6	MW-23	Total/NA	Water	3010A	
600-70259-6	MW-23	Dissolved	Water	3010A	
LCS 600-102122/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-102122/1-A	Method Blank	Total/NA	Water	3010A	
Analysis Batch: 10223	0				
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
600-70259-1	MW-18	Total/NA	Water	6010B	102122
600-70259-1	MW-18	Dissolved	Water	6010B	102122
600-70259-1 DU	MW-18	Total/NA	Water	6010B	102122
600-70259-1 DU	MW-18	Dissolved	Water	6010B	102122
600-70259-1 MS	MW-18	Total/NA	Water	6010B	102122
600-70259-1 MS	MW-18	Dissolved	Water	6010B	102122
600-70259-1 MSD	MW-18	Total/NA	Water	6010B	102122
600-70259-1 MSD	MW-18	Dissolved	Water	6010B	102122
600-70259-2	MW-24	Total/NA	Water	6010B	102122
600-70259-2	MW-24	Dissolved	Water	6010B	102122
600-70259-3	P2	Total/NA	Water	6010B	102122

600-70259-2	MW-24	Dissolved	Water	6010B
600-70259-3	P2	Total/NA	Water	6010B
600-70259-3	P2	Dissolved	Water	6010B
600-70259-4	B4R	Total/NA	Water	6010B
600-70259-4	B4R	Dissolved	Water	6010B
600-70259-5	MW-25	Total/NA	Water	6010B
600-70259-5	MW-25	Dissolved	Water	6010B
600-70259-6	MW-23	Total/NA	Water	6010B
600-70259-6	MW-23	Dissolved	Water	6010B
LCS 600-102122/2-A	Lab Control Sample	Total/NA	Water	6010B
MB 600-102122/1-A	Method Blank	Total/NA	Water	6010B

General Chemistry

Analysis Batch: 102180

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
600-70259-1	MW-18	Total/NA	Water	300.0	
600-70259-2	MW-24	Total/NA	Water	300.0	

TestAmerica Houston

QC Association Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-70259-1

3 4 5 6 7 8 9 12 13 14 15

General Chemistry (Continued)

Analysis Batch: 102180 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-70259-3	P2	Total/NA	Water	300.0	
600-70259-4	B4R	Total/NA	Water	300.0	
600-70259-5	MW-25	Total/NA	Water	300.0	
600-70259-6	MW-23	Total/NA	Water	300.0	
LCS 600-102180/4	Lab Control Sample	Total/NA	Water	300.0	
MB 600-102180/3	Method Blank	Total/NA	Water	300.0	

Client Samp	le ID: MW-1	8						Lab Sample ID: 600-70259-
Date Collected	: 03/18/13 15:4	40						Matrix: Wate
Date Received	: 03/20/13 09:1	11						
	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			102122	03/20/13 16:30	NER	TAL HOU
Total/NA	Analysis	6010B		1	102230	03/21/13 14:58	DCL	TAL HOU
Dissolved	Prep	3010A			102122	03/20/13 16:30	NER	TAL HOU
Dissolved	Analysis	6010B		1	102230	03/21/13 15:08	DCL	TAL HOU
Total/NA	Analysis	300.0		10	102180	03/21/13 04:46	SUP	TAL HOU

Client Sample ID: MW-24

Date Collected: 03/18/13 16:15 Date Received: 03/20/13 09:11

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			102122	03/20/13 16:30	NER	TAL HOU
Total/NA	Analysis	6010B		1	102230	03/21/13 15:24	DCL	TAL HOU
Dissolved	Prep	3010A			102122	03/20/13 16:30	NER	TAL HOU
Dissolved	Analysis	6010B		1	102230	03/21/13 15:27	DCL	TAL HOU
Total/NA	Analysis	300.0		100	102180	03/21/13 05:22	SUP	TAL HOU

Client Sample ID: P2

Date Collected: 03/19/13 08:15 Date Received: 03/20/13 09:11

-	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			102122	03/20/13 16:30	NER	TAL HOU
Total/NA	Analysis	6010B		1	102230	03/21/13 15:29	DCL	TAL HOU
Dissolved	Prep	3010A			102122	03/20/13 16:30	NER	TAL HOU
Dissolved	Analysis	6010B		1	102230	03/21/13 15:32	DCL	TAL HOU
Total/NA	Analysis	300.0		100	102180	03/21/13 05:59	SUP	TAL HOU

Client Sample ID: B4R Date Collected: 03/19/13 08:50

Date Received: 03/20/13 09:11

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			102122	03/20/13 16:30	NER	TAL HOU
Total/NA	Analysis	6010B		1	102230	03/21/13 15:34	DCL	TAL HOU
Dissolved	Prep	3010A			102122	03/20/13 16:30	NER	TAL HOU
Dissolved	Analysis	6010B		1	102230	03/21/13 15:37	DCL	TAL HOU
Total/NA	Analysis	300.0		100	102180	03/21/13 06:35	SUP	TAL HOU

13

Lab Sample ID: 600-70259-3

Lab Sample ID: 600-70259-4

Lab Sample ID: 600-70259-2

Matrix: Water

Matrix: Water

Matrix: Water

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Lab Sample ID: 600-70259-6

Matrix: Water

Client Samp	lient Sample ID: MW-25							Lab Sample I	D: 600-70259-5
Date Collected	: 03/19/13 09:′	15							Matrix: Water
Date Received	: 03/20/13 09:1	1							
	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3010A			102122	03/20/13 16:30	NER	TAL HOU	
Total/NA	Analysis	6010B		1	102230	03/21/13 15:39	DCL	TAL HOU	
Dissolved	Prep	3010A			102122	03/20/13 16:30	NER	TAL HOU	
Dissolved	Analysis	6010B		1	102230	03/21/13 15:41	DCL	TAL HOU	
Total/NA	Analysis	300.0		100	102180	03/21/13 07:12	SUP	TAL HOU	

Client Sample ID: MW-23 Date Collected: 03/19/13 09:45 Date Received: 03/20/13 09:11

Batch Batch Dilution Batch Prepared Prep Type Method Run Factor Number Туре or Analyzed Analyst Lab Total/NA Prep 3010A 102122 03/20/13 16:30 NER TAL HOU Total/NA Analysis 6010B 102230 03/21/13 15:44 DCL TAL HOU 1 Dissolved Prep 3010A 102122 03/20/13 16:30 NER TAL HOU Dissolved 6010B 102230 03/21/13 15:47 DCL TAL HOU Analysis 1 Total/NA Analysis 300.0 100 102180 03/21/13 08:25 SUP TAL HOU

Laboratory References:

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

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Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-70259-1

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	08-04-12
Louisiana	NELAP	6	01967	06-30-13
Oklahoma	State Program	6	9503	08-31-13
Texas	NELAP	6	T104704223-10-6-TX	10-31-13
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	GULF	10-31-13

Chain of Custody Record Drinking Wa	e on Receipt	600-70259 Chan of Custody	
Client Project Manag	". I:V VAN MMC	$\frac{2}{3}/19/13$ Ch	ain of Custody Number
Address Telephone Autor Star 4004 (SID &	nber (Area Code)/Fax Number	Laß Number	age of
Chy State Zhe Code Site Contact	Lab Contact	Analysis (Attach list if more space is needed)	
Driver Mama and I reation (State)			
Frides Ivalie and Located Carlos		pb f	Special Instructions/
ContractiPurchase Order/Quote No.	Matrix Preservatives		Conditions of Heceipt
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Sed. Soll Unpres H2SO4 HNO3 HCI NaOH ZnAc/ NaOH	<u>A</u> Ju Sh	
MW-18 3/18/3 1540 1			
N N N		×	
MW-24 3/18/13/615 X			
~ ~ ~			
≥2 = 2/19/3 CB15 ×			
$\frac{1}{2} \frac{1}{2} \frac{1}$			the #1 ozy before
MW-25 3/19/13 0915 \$			
n X		· ×	
MW-23 3/19/13 0947 >	<u>ک</u>		
c			
Possible Hazard Identification San	ple Disposal Return To Client 🔲 Disposal By Lab 🔛 Arc	hive For Months longer than 1 month)	d if samples are retained
Tum Around Time Required	QC Requirements (Specify)		•
1. Relinquiered By 01 Jack	1515 1. Received By		3 19 13 15 15
2. Relinquistic By Carlos 3/A/13	Ime 2. Hecaved by		Cate
3. Relinquished By	Ime 3. necesive by		13/20/13 8/1
Comments DISTRIBUTION: WHITE - Returned to Client with Report: CANARY - Stays with the Sample; Pl	NK - Field Copy		

ł

Client: Pastor, Behling & Wheeler LLC

Login Number: 70259 List Number: 1

Creator: Pulumbarit, Josh

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.7 5.4
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.	True	

Job Number: 600-70259-1

List Source: TestAmerica Houston



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: 600-70437-1

Client Project/Site: Exide Recycling Center, Frisco TX Projec

For:

Pastor, Behling & Wheeler LLC 2201 Double Creek Dr Suite 4004 Round Rock, Texas 78664

Attn: Mr. Tim Nickels

Authorized for release by: 4/8/2013 5:33:33 PM Cathy Upton Data Delivery Analyst cathy.upton@testamericainc.com

Designee for

Sachin Kudchadkar Project Manager II sachin.kudchadkar@testamericainc.com

LINKS Review your project results through TOTOLACCESS Have a Question? Ask The Expert

Visit us at: www.testamericainc.com intended to be the legally binding equivalent of a traditionally handwritten signature.

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

This report has been electronically signed and authorized by the signatory. Electronic signature is

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

at the e-mail address or telephone number listed on this page.

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TestAmerica Houston TRRP Data Package Cover Page

Job Number:

600-70437-1

Project Name/Number:

Exide Recycling Center, Frisco TX Project

This Data Package consists of:

X

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

- R1 Field Chain-of-Custody Form
- **R**2 Sample Identification Cross-reference;
- **X** 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).
- **X** 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
- **R**8 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.
- **R**9 List of method quantitation limit (MQL) and detectability check sample results for each analyte for each method and matrix;
- **R**10 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 Name (printed) Data Delivery Analyst

Official Title (printed)

Signature

04/08/2013

A	oper	ndix A (cont'd): Laboratory Review Checklis	t: Reportable Data					
Lab	orator	ry Name: TestAmerica-Houston	LRC Date: 03/26/13					
Proj	ect N	ame: Exide Recycling Center, Frisco TX	Laboratory Job Number: 600-70437					
Rev	iewer	Name: TWR	Prep Batch Number(s): 600-102417-1	CP				
#1		Description	110p Bateli (Valloci(3): 000 102417 1		No	NA ³	NR ⁴	FR#5
π	А	Chain-of-custody (C-O-C)		103	110	1111		LICI
R1	OI	Did samples must the laboratory's standard conditions of samp	la accontability upon receipt?	v				
N I	01	Were all departures from standard conditions described in an e	x ception report?	Λ		v		
R2	OI	Sample and quality control (QC) identification				Λ		
	01	Are all field sample ID numbers cross-referenced to the laborat	tory ID numbers?	x				
		Are all laboratory ID numbers cross-referenced to the correspo	nding OC data?	X				
R3	OI	Test reports						
	-	Were all samples prepared and analyzed within holding times?		Х	1	1		
		Other than those results < MQL, were all other raw values brac	keted by calibration standards?	Х				
		Were calculations checked by a peer or supervisor?	2	Х	1	1		
		Were all analyte identifications checked by a peer or superviso	r?	Х	1	1		
		Were sample detection limits reported for all analytes not detect	cted?	Х	1	1		
		Were all results for soil and sediment samples reported on a dr	y weight basis?			Х		
		Were % moisture (or solids) reported for all soil and sediment	samples?			Х		
		Were bulk soil/solid samples for volatile analysis extracted wit	h methanol per SW846 Method 5035?			Х		
		If required for the project, TICs reported?				Х		
R4	0	Surrogate recovery data						
		Were surrogates added prior to extraction?				Х		
		Were surrogate percent recoveries in all samples within the lab	oratory QC limits?			Х		
R5	OI	Test reports/summary forms for blank samples						
		Were appropriate type(s) of blanks analyzed?		Х				
		Were blanks analyzed at the appropriate frequency?		Х				
		Were method blanks taken through the entire analytical process	s, including preparation and, if	Х				
		applicable, cleanup procedures?						
		Were blank concentrations < MQL?		Х				
R6	OI	Laboratory control samples (LCS):						
		Were all COCs included in the LCS?		Х				
		Was each LCS taken through the entire analytical procedure, in	cluding prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?		X				
		Were LCS (and LCSD, if applicable) %Rs within the laborator	y QC limits?	X				
		Does the detectability check sample data document the laborate	bry's capability to detect the COCs at	Х				
		the MDL used to calculate the SDLs?				v		
D7	OI	Was the LCSD RPD within QC limits?				Λ		
К/	01	Watrix spike (MS) and matrix spike duplicate (MSD) data Ware the project/method specified analytes included in the MS	and MSD?	v		1		
		Were MS/MSD analyzed at the appropriate frequency?		A V		1		
		Were MS (and MSD, if applicable) %Rs within the laboratory	OC limits?	Λ			x	1
		Were MS/MSD RPDs within laboratory OC limits?					X	1
R8	OI	Analytical dunlicate data						-
	01	Were appropriate analytical duplicates analyzed for each matri	x?	X				
		Were analytical duplicates analyzed at the appropriate frequence	2V?	X	1	1		
		Were RPDs or relative standard deviations within the laborator	v OC limits?		1	1	X	2
R9	OI	Method quantitation limits (MOLs):						_
	01	Are the MOLs for each method analyte included in the laborate	orv data package?	X		1		
		Do the MOLs correspond to the concentration of the lowest no	n-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory dat	a package?	Х	1	1		
R10	OI	Other problems/anomalies						
		Are all known problems/anomalies/special conditions noted in	this LRC and ER?	X		1	1	
1		Was applicable and available technology used to lower the SD	L to minimize the matrix interference	Х	1	1	1	
1		affects on the sample results?				L		
		Is the laboratory NELAC-accredited under the Texas Laboratory	ry Accreditation Program for the	Х				
		analytes, matrices and methods associated with this laborate	bry data package?					
	1.	Items identified by the letter "R" must be included in the laboratory data	a package submitted in the TRRP-required re	port(s)). Iter	ns ide	ntified	l by the

4. NR = Not reviewed;

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked). 5.

A1

Lab	orato	ry Name: TestAmerica-Houston LRC	C Date: 03/26/13					
Pro	ject N	Jame: Exide Recycling Center, Frisco TX Labo	oratory Job Number: 600-70437					
Rev	viewe	r Name [,] TWR Pren	Batch Number(s): 600-102417-1	CP				
#1	10 W C	Description	Baten ((allioer(6)): 000 102 (1)	Vac	No	ΝΛ ³	ND^4	ED
#	A			res	INO	INA	INK	EK
51	OI					v		-
		Were response factors and/or relative response factors for each analy	te within QC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	11 1 ()	v		X		
		Was the number of standards recommended in the method used for a	all analytes?	X		v		
		were all points generated between the lowest and highest standard us	sed to calculate the curve?	v		X		
		Are ICAL data available for all instruments used?	1 (1 10	X				
GA	OT	Has the initial calibration curve been verified using an appropriate se	econd source standard?	Х				_
52	OI	Initial and continuing calibration verification (ICCV and CCV) a	and continuing calibration					
		Was the CCV analyzed at the method-required frequency?		X				
		Were percent differences for each analyte within the method-required	d QC limits?	X				
		Was the ICAL curve verified for each analyte?		Х				
		Was the absolute value of the analyte concentration in the inorganic	CCB < MDL?	Х				_
S3	0	Mass spectral tuning:						
		Was the appropriate compound for the method used for tuning?				X		
		Were ion abundance data within the method-required QC limits?				Х		
S4	0	Internal standards (IS):						
		Were IS area counts and retention times within the method-required	QC limits?			Х		
S5	OI	Raw data (NELAC section 5.5.10)						
		Were the raw data (for example, chromatograms, spectral data) revie	ewed by an analyst?	Х				
		Were data associated with manual integrations flagged on the raw da	ata?			Х		
S6	0	Dual column confirmation						
		Did dual column confirmation results meet the method-required QC?	?			Х		
S7	0	Tentatively identified compounds (TICs):						
		If TICs were requested, were the mass spectra and TIC data subject t	to appropriate checks?			Х		
S8	Ι	Interference Check Sample (ICS) results:						
		Were percent recoveries within method QC limits?		Х				
S9	Ι	Serial dilutions, post digestion spikes, and method of standard ad	dditions					
		Were percent differences, recoveries, and the linearity within the QC	C limits specified in the method?				Х	3
S10	OI	Method detection limit (MDL) studies	•					
		Was a MDL study performed for each reported analyte?		Х				
		Is the MDL either adjusted or supported by the analysis of DCSs?		Х				
S11	OI	Proficiency test reports:						
		Was the laboratory's performance acceptable on the applicable profic	ciency tests or evaluation studies?	Х				T
S12	OI	Standards documentation						
		Are all standards used in the analyses NIST-traceable or obtained fro	om other appropriate sources?	Х				
S13	OI	Compound/analyte identification procedures	• • • • • • • • • • • • • • • • •					
	01	Are the procedures for compound/analyte identification documented	?	X				
S14	OI	Demonstration of analyst competency (DOC)						
	01	Was DOC conducted consistent with NELAC Chapter 5?		x				-
		Is documentation of the analyst's competency un-to-date and on files	?	X				+
S15	OI	Verification/validation documentation for methods (NFLAC Che	anter 5)	- 21				
510	01	Are all the methods used to generate the data documented verified a	and validated where applicable?	v	_			-
C17	OT	I ab an the memous used to generate the data documented, verified, a	and valuated, where applicable?	Λ				-
310	UI	Laboratory standard operating procedures (SUPs):		v				
		Are laboratory SOPS current and on file for each method performed?	(А				
	•	1 Items identified by the letter "R" should be included in the laboratory of	data package submitted to the TCEO in	the T	RRP	requir	ed repo	rt(s)

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

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable). NA = Not applicable.

2 3 4

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NR = Not Reviewed.

RG-366/TRRP-13 Revised May 2010

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports						
Laboratory Name: TestAmerica-Houston LRC Date: 03/26/13		LRC Date: 03/26/13				
Project Name: Exide Recycling Center, Frisco TX		Laboratory Job Number: 600-70437				
Reviewer Name: TWR		Prep Batch Number(s): 600-102417- ICP				
ER # ¹	DESCRIPTION					
1	The laboratory selected a sample from another group to perform as the MS/MSD.					
2	The laboratory selected a sample from another group to perform as the DUP.					
3	The laboratory selected a sample from another group to perform as the PDS and SD.					

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:	Water						
Method:	200.7/6010						
Preparation:	200.7P/3010						
Date Analyzed:	3/29/2013						
Date Prepared:	3/28/2013						
Instrument:	Thermo 6500						
TALs Batches:	102868, 10275	5р					
Units:	mg/L	mg/L					
Analyte	MDL	DCS Spike	Measured Result	MQL			
Aluminum	0.006	0.02	0.0177	0.5			
Antimony	0.0063	0.01	0.0105	0.05			
Arsenic	0.0033	0.01	0.0077	0.01			
Barium	0.0022	0.005	0.0026	0.02			
Beryllium	0.00134	0.002	0.0042	0.005			
Boron	0.0077	0.02	0.0193	0.2			
Cadmium	0.00073	0.001	0.001	0.005			
Calcium	0.022	0.05	0.0583	1			
Chromium	0.0016	0.002	0.0037	0.01			
Cobalt	0.00063	0.001	0.0012	0.01			
Copper	0.0014	0.002	0.0012	0.01			
Iron	0.087	0.1	0.1011	0.4			
Lithium	0.0024	0.005	0.0043	0.2			
Lead	0.0029	0.005	0.005	0.01			
Selenium	0.0042	0.01	0.0083	0.04			
Manganese	0.00084	0.002	0.002	0.01			
Molybdenum	0.0027	0.005	0.0048	0.01			
Nickel	0.00179	0.005	0.0043	0.01			
Silver	0.0012	0.0025	0.0024	0.01			
Sodium	0.02	0.05	0.0465	1			
Strontium	0.0005	0.001	0.001	0.005			
Thallium	0.0078	0.02	0.0184	0.03			
Tin	0.0028	0.005	0.0049	0.01			
Titanium	0.0011	0.002	0.0023	0.01			
Vanadium	0.0017	0.002	0.0048	0.01			
Zinc	0.0022	0.005	0.0065	0.01			

Job ID: 600-70437-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative 600-70437-1

Comments

No additional comments.

Receipt

The samples were received on 3/22/2013 8:38 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.0° C and 3.7° C.

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-70437-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-70437-1	MW-28	Water	03/21/13 08:30	03/22/13 08:38

TestAmerica Job ID: 600-70437-1

Client Sample ID: MW-28

Date Collected: 03/21/13 08:30 Date Received: 03/22/13 08:38

Lab Sample ID: 600-70437-1 Matrix: Water

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		03/25/13 08:42	03/25/13 16:57	1
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/25/13 08:42	03/25/13 16:57	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/25/13 08:42	03/25/13 16:57	1
Selenium	0.00417	U	0.0400	0.00417	mg/L		03/25/13 08:42	03/25/13 16:57	1

Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	0.00328	U	0.0100	0.00328	mg/L		03/25/13 08:42	03/25/13 16:59	1
Cadmium, Dissolved	0.000350	U	0.00500	0.000350	mg/L		03/25/13 08:42	03/25/13 16:59	1
Lead, Dissolved	0.00290	U	0.0100	0.00290	mg/L		03/25/13 08:42	03/25/13 16:59	1
Selenium, Dissolved	0.00417	U	0.0400	0.00417	mg/L		03/25/13 08:42	03/25/13 16:59	1
Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Qualifiers

Metals

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

Glossary

U	Analyte was not detected at or above the SDL.	5
Glossary		6
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	8
DER	Duplicate error ratio (normalized absolute difference)	
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	9
DLC	Decision level concentration	
MDA	Minimum detectable activity	
EDL	Estimated Detection Limit	
MDC	Minimum detectable concentration	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
ND	Not detected at the reporting limit (or MDL or EDL if shown)	
PQL	Practical Quantitation Limit	12
QC	Quality Control	IJ
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)	

MQL (Adj)

0.0100

0.0100

0.00500

0.00500

0.0100

0.0100

0.0400

0.0400

SDL Unit

0.00328 mg/L

0.00328 mg/L

0.000350 mg/L

0.000350 mg/L

0.00290 mg/L

0.00290 mg/L

0.00417 mg/L

0.00417 mg/L

D

Prepared

03/25/13 08:42

03/25/13 08:42

03/25/13 08:42

03/25/13 08:42

03/25/13 08:42

MB MB

0.00328 U

0.00328 U

0.000350 U

0.000350 U

Result Qualifier

Method: 6010B - Metals (ICP)

Matrix: Water

Arsenic, Dissolved

Cadmium, Dissolved

Analyte

Arsenic

Cadmium

Analysis Batch: 102511

Lab Sample ID: MB 600-102417/1-A

Analyzed

03/25/13 16:43

03/25/13 16:43

03/25/13 16:43

03/25/13 16:43

03/25/13 16:43

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 102417 5 Dil Fac 1 1 1

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03/25/13 08:42 03/25/13 16:43 1 03/25/13 08:42 03/25/13 16:43 1 03/25/13 08:42 03/25/13 16:43 1 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA Prep Batch: 102417

Lead	0.00290	U
Lead, Dissolved	0.00290	U
Selenium	0.00417	U
Selenium, Dissolved	0.00417	U

Lab Sample ID: LCS 600-102417/2-A Matrix: Water

Analysis Batch: 102511

-	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Arsenic	1.00	0.9819		mg/L		98	80 - 120	
Arsenic, Dissolved	1.00	0.9819		mg/L		98	80 - 120	
Cadmium	0.500	0.4922		mg/L		98	80 - 120	
Cadmium, Dissolved	0.500	0.4922		mg/L		98	80 - 120	
Lead	1.00	0.9735		mg/L		97	80 - 120	
Lead, Dissolved	1.00	0.9735		mg/L		97	80 - 120	
Selenium	1.00	0.9847		mg/L		98	80 - 120	
Selenium, Dissolved	1.00	0.9847		mg/L		98	80 - 120	
-								

Unadjusted Detection Limits

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method	
Arsenic	0.0100	0.00328	mg/L	6010B	
Cadmium	0.00500	0.000350	mg/L	6010B	
Lead	0.0100	0.00290	mg/L	6010B	
Selenium	0.0400	0.00417	mg/L	6010B	

Method: 6010B - Metals (ICP) - Dissolved

Analyte	MQL	MDL	Units	Method	
Arsenic, Dissolved	0.0100	0.00328	mg/L	6010B	
Cadmium, Dissolved	0.00500	0.000350	mg/L	6010B	
Lead, Dissolved	0.0100	0.00290	mg/L	6010B	
Selenium, Dissolved	0.0400	0.00417	mg/L	6010B	

TestAmerica Houston

QC Association Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Lab Control Sample

Method Blank

TestAmerica Job ID: 600-70437-1

102417

102417

Metals

Prep Batch: 102417

LCS 600-102417/2-A

MB 600-102417/1-A

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-70437-1	MW-28	Total/NA	Water	3010A	
600-70437-1	MW-28	Dissolved	Water	3010A	
LCS 600-102417/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-102417/1-A	Method Blank	Total/NA	Water	3010A	
Analysis Batch: 10251	1				
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
600-70437-1	MW-28	Total/NA	Water	6010B	102417
600-70437-1	MW-28	Dissolved	Water	6010B	102417

Total/NA

Total/NA

Water

Water

6010B

6010B

102417

102511

03/25/13 08:42

03/25/13 16:59

NER

DCL

TAL HOU

TAL HOU

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Prep

Analysis

Matrix: Water

Lab Sample ID: 600-70437-1 **Client Sample ID: MW-28** Date Collected: 03/21/13 08:30 Date Received: 03/22/13 08:38 Batch Dilution Batch Batch Prepared Method Prep Type Factor Туре Run Number or Analyzed Analyst Lab Total/NA Prep 3010A 102417 03/25/13 08:42 NER TAL HOU Total/NA 6010B TAL HOU Analysis 1 102511 03/25/13 16:57 DCL

1

Laboratory References:

Dissolved

Dissolved

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

3010A

6010B

TestAmerica Houston

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-70437-1

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	08-04-12 *
Louisiana	NELAP	6	01967	06-30-13
Oklahoma	State Program	6	9503	08-31-13
Texas	NELAP	6	T104704223-10-6-TX	10-31-13
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	GULF	10-31-13

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

TestAmerica Houston

	13 14 15	
Chain of Temperat	ure on Receipt Test	
Custody Hecord Drinking 1 TAL-4124 (1907)		ENVIRONME 600-70437 Chain of Custody
Client PRW Project Man	ager Will Voiner	Date 3/21/13 Chain of Custody Number 225364
220 Donto) Creek & Ste 4004 (512)	Vumber (Area Code)/Fax Number	Lab Number Page of
Rounddack TX 78664 Junio	Ji Lab Contact	Analysis (Altach list in more space is needed)
Project Name and Location (State) Carrier Way	till Number	Special Instructions
ContractPurchase Order/Quote No.	Matrix Containers &	Conditions of Receip
Sample I.D. No. and Description Date Time (Containers for each sample may be combined on one line) Date Time	Aqueous Sed. Soil Unpres. H2SO4 HNO3 HCI NaOH ZnAC/ NaOH Totz D.356	
MW-28 3/13 0830	X Z X X X X	Run Totalsy
		bisolut tor
		leacy Creating
Possible Hazard Identification	ample Disposal] Return To Client 🌐 Disposal By Lab 🔲 Archive For	(A fee may be assessed if samples are retained Months longer than 1 month)
Tum Around Time Required	, QC Requirements (Specify)	
$\frac{1.6}{3} \frac{1}{2} $	13 1520 1. Received By UCCN	221/13 1/5 A)
2. Relinquished By UCCON Relation	13 1730 2. Received By	Dale I Time
3. Relinquished By Date	Time 3. Receipted By Clifter United	$\begin{vmatrix} D_{atb} \\ 0 \Im/z z/t 3 \end{vmatrix} Time \\ 0 S S S$
Comments	ľ	
DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample;	PINK - Field Copy	

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Client: Pastor, Behling & Wheeler LLC

Login Number: 70437 List Number: 1

Creator: Pulumbarit, Josh

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.7 2.0
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.	True	

List Source: TestAmerica Houston



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: 600-70496-1

Client Project/Site: Exide Recycling Center, Frisco TX Projec

For:

Pastor, Behling & Wheeler LLC 2201 Double Creek Dr Suite 4004 Round Rock, Texas 78664

Attn: Eric Pastor

Authorized for release by: 4/8/2013 5:54:46 PM Cathy Upton Data Delivery Analyst cathy.upton@testamericainc.com

Designee for

Sachin Kudchadkar Project Manager II sachin.kudchadkar@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

600-70496-1

Job Number:

Project Name/Number:

Exide Recycling Center, Frisco TX Project

This Data Package consists of:

X

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

- R1 Field Chain-of-Custody Form
- **X** R2 Sample Identification Cross-reference;
- **X** 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).
- **X** 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 $\ensuremath{\%R}$ 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
- **X** 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.
- **R**9 List of method quantitation limit (MQL) and detectability check sample results for each analyte for each method and matrix;
- **X** 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 Name (printed) Data Delivery Analyst

Official Title (printed)

Signature

04/08/2013 Date

A	oper	ndix A (cont'd): Laboratory Review Checkl	ist: Reportable Data					
Lab	orator	y Name: TestAmerica-Houston	LRC Date: 03/28/13					
Proi	ect N	ame: Exide Recycling Center, Erisco TX Project	Laboratory Job Number: 600-70496					
n 10				10.4				
Rev	1ewer		Prep Batch Number(s): $600-102605 - Sub$	Tate	1		1	5
#1	A ²	Description		Yes	No	NA ³	NR⁺	ER#'
		Chain-of-custody (C-O-C)						
R1	OI	Did samples meet the laboratory's standard conditions of sam	nple acceptability upon receipt?	Х				
		Were all departures from standard conditions described in an	exception report?			Х		
R2	OI	Sample and quality control (QC) identification						
		Are all field sample ID numbers cross-referenced to the labo	ratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corres	ponding QC data?	X				
R3	OI	Test reports						
		Were all samples prepared and analyzed within holding time	s?	X				
		Other than those results < MQL, were all other raw values br	racketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	0	X		-		
		Were all analyte identifications checked by a peer or supervi	sor?	X		-		
		Were sample detection limits reported for all analytes not det		X		v		
		Were all results for soil and sediment samples reported on a d	dry weight basis?	_		X		
		Were % moisture (or solids) reported for all soli and sedimer	nt samples?	-		X		
		Were bulk soil/solid samples for volatile analysis extracted v	with methanol per SW846 Method 5035?	-		X		
D4	0	If required for the project, TICs reported? Surrogate recovery data				Λ		
K4	0	Surrogate recovery data				v	1	
		Were surrogate percent recoveries in all samples within the laboratory OC limits?						
R5	OI Test reports/summary forms for blank samples		aboratory QC minus?			Λ		
ĸs	01	Were appropriate type(s) of blanks analyzed?		v				
		Were blanks analyzed at the appropriate frequency?		A V				
		Were method blanks taken through the entire analytical proc	ess including preparation and if	X				
		applicable cleanup procedures?	ess, meruding preparation and, n	Λ				
		Were blank concentrations < MOL?		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 laborat	tory QC limits?	Х		1		
		Does the detectability check sample data document the labor	atory's capability to detect the COCs at	Х		1		
		the MDL used to calculate the SDLs?						
		Was the LCSD RPD within QC limits?				Х		
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) dat	a					
		Were the project/method specified analytes included in the M	AS and MSD?	Х				
		Were MS/MSD analyzed at the appropriate frequency?		Х				
		Were MS (and MSD, if applicable) %Rs within the laborator	ry QC limits?	Х				
		Were MS/MSD RPDs within laboratory QC limits?		Х				
R8	OI	Analytical duplicate data						
		Were appropriate analytical duplicates analyzed for each mat	trix?			Х		
		Were analytical duplicates analyzed at the appropriate freque	ency?			Х		
		Were RPDs or relative standard deviations within the laborat	tory QC limits?			X		
R9	OI	Method quantitation limits (MQLs):						
		Are the MQLs for each method analyte included in the labor	atory data package?	X				
		Do the MQLs correspond to the concentration of the lowest n	non-zero calibration standard?	X				
		Are unadjusted MQLs and DCSs included in the laboratory of	lata package?	X				
R10	OI	Other problems/anomalies						
		Are all known problems/anomalies/special conditions noted	in this LRC and ER?	X	<u> </u>	┨───		
		Was applicable and available technology used to lower the S	DL to minimize the matrix interference	X	1			1
		arrects on the sample results?	term Arene ditest: D C d	17		<u> </u>		
		is the laboratory NELAC-accredited under the Texas Labora	tory Accreditation Program for the	X	1			
I	1	analytes, matrices and methods associated with this labor	atory uata package?	no+(-)	 16-	1 no : 1	ntif: .	1 6 4

letter "S" should be retained and made available upon request for the appropriate retention period.

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 NA = Not applicable;

 4. NR = Not reviewed;
 5. ER# = Exception Re ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

A1

Ap	pen	dix A (cont'd): Laboratory Review Checklist:	Reportable Data					
Lab	orato	ry Name: TestAmerica-Houston LR	C Date: 03/28/13					
Pro	ject N	lame: Exide Recycling Center, Frisco TX Project Lat	boratory Job Number: 600-70496					
Rev	iewe	r Name: BDG Pre	ep Batch Number(s): 600-102605 – St	ulfate	;			
#1	A^2	Description	r	Yes	No	NA ³	NR^4	ER# ⁵
<u>S1</u>	OI	Initial calibration (ICAL)						
51	01	Were response factors and/or relative response factors for each and	alvte within OC limits?	x				
		Were percent RSDs or correlation coefficient criteria met?		X				
		Was the number of standards recommended in the method used for	or all analytes?	X				
		Were all points generated between the lowest and highest standard	d used to calculate the curve?	X				
		Are ICAL data available for all instruments used?						
		Has the initial calibration curve been verified using an appropriate	Ising an appropriate second source standard?					
S2	OI	Initial and continuing calibration verification (ICCV and CCV	V) and continuing calibration					
		Was the CCV analyzed at the method-required frequency?	G	Х				
		Were percent differences for each analyte within the method-requi	ired OC limits?	Х				
		Was the ICAL curve verified for each analyte?		Х				
		Was the absolute value of the analyte concentration in the inorgan	ic CCB < MDL?	Х				
S3 C	0	Mass spectral tuning:						
		Was the appropriate compound for the method used for tuning?	Ind for the method used for tuning?					
		Were ion abundance data within the method-required QC limits?	ance data within the method-required QC limits?					
S4	0	Internal standards (IS):						
		Were IS area counts and retention times within the method-require	ed QC limits?			Х		
S 5	OI	Raw data (NELAC section 5.5.10)						
		Were the raw data (for example, chromatograms, spectral data) rev	viewed by an analyst?	Х				
		Were data associated with manual integrations flagged on the raw			Х			
S6	0	Dual column confirmation						
		Did dual column confirmation results meet the method-required QC?				Х		
S7	0	Tentatively identified compounds (TICs):						
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?						
S8	Ι	Interference Check Sample (ICS) results:						
		Were percent recoveries within method QC limits?				Х		
S9	Ι	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				
G 4 4		Is the MDL either adjusted or supported by the analysis of DCSs?		X				
<u>S11</u>	OI	Proficiency test reports:	<u> </u>	X.				
G10	01	Was the laboratory's performance acceptable on the applicable pro	officiency tests or evaluation studies?	X				
512	OI	Standards documentation	6 41 14 0	v				
612	OT	Are all standards used in the analyses NIST-traceable or obtained	from other appropriate sources?	Χ				
515	OI	Compound/analyte identification procedures	10	v				-
614	OT	Are the procedures for compound/analyte identification document	ied ?	Χ				
514		Wea DOC conducted consistent with NEL AC Charter 52		v				
		Was DOC conducted consistent with NELAC Chapter 5?	:1-9					
S15	OT	Is documentation of the analysis's competency up-to-date and on fi Varification/validation documentation for matheda (NELAC)	Thenter 5)	Λ				
513		Are all the methods used to generate the date decumented verifies	and validated where environments	v				
C1/	OT	Are an the memous used to generate the data documented, vermed	a, and vanualed, where applicable?	Λ				
510		Laboratory Standard operating procedures (SOPS):	242	v				
		Free laboratory SOF's current and on the for each method performe	zu :	Λ				
·		1 Items identified by the letter "R" should be included in the laborator	ry data package submitted to the TCEQ in	the T	RRP	-requir	ed repo	rt(s).

Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required reported reported to the TCEQ in the TRRP-required reported to the transformation of
Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).

2 3 4 NA = Not applicable.

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: 03/28/13						
Project Name: Exide Recycling Center, Frisco TX Project	Laboratory Job Number: 600-70496						
Reviewer Name: BDG	Prep Batch Number(s): 600-102605 – Sulfate						
ER # ¹ DESCRIPTION							
1 The Sulfate SDLs for samples $600-70496 - 1$, 2 and 3	The Sulfate SDLs for samples 600-70496 – 1, 2 and 3 were elevated due to the high concentrations of this analyte.						

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

A	oper	ndix A (cont'd): Laboratory Review Checklis	t: Reportable Data					
Lab	orator	ry Name: TestAmerica-Houston	LRC Date: 03/27/13					
Proi	ect N	ame: Exide Recycling Center, Frisco TX	Laboratory Job Number: 600-70496					
Rev	iewer	Name: TWR	Prep Batch Number(s): 600-102459- I	СР				
#1		Description		Yes	No	NA ³	NR^4	ER# ⁵
"	л	Chain-of-custody (C-O-C)		105	110	1.1.1		LICH
R1	OI	Did samples meet the laboratory's standard conditions of samp	la accontability upon receipt?	v				
	01	Were all departures from standard conditions described in an e	xception report?	Λ		x		
R2	OI	Sample and quality control (QC) identification			Λ			
	01	Are all field sample ID numbers cross-referenced to the laborat	tory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the correspo	nding OC data?	X				
R3	OI	Test reports						
		Were all samples prepared and analyzed within holding times?	Х			1		
		her than those results < MQL, were all other raw values bracketed by calibration standards?						
		Were calculations checked by a peer or supervisor?						
		Were all analyte identifications checked by a peer or supervisor	Х					
		Were sample detection limits reported for all analytes not detected?						
		Were all results for soil and sediment samples reported on a dry	y weight basis?			Х		
		Were % moisture (or solids) reported for all soil and sediment			Х			
		Were bulk soil/solid samples for volatile analysis extracted with methanol per SW846 Method 5035?						
	-	If required for the project, TICs reported?						
R4	0	Surrogate recovery data						
		Were surrogates added prior to extraction?			X			
D5	OT	Were surrogate percent recoveries in all samples within the laboratory QC limits?				X		
КЭ	OI	Test reports/summary forms for blank samples		v				
		Were appropriate type(s) of blanks analyzed?		X				
		Were method blanks taken through the entire analytical process. including preparation and if						
		applicable, cleanup procedures?	s, including preparation and, if	Λ				
		Were blank concentrations < MOL?		x				
R6	OI	Laboratory control samples (LCS):		21				
	01	Were all COCs included in the LCS?		X				
		Was each LCS taken through the entire analytical procedure, in	cluding prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?		Х				
		Were LCS (and LCSD, if applicable) %Rs within the laborator	y QC limits?	Х				
		Does the detectability check sample data document the laborate	ory's capability to detect the COCs at	Х				
		the MDL used to calculate the SDLs?						
		Was the LCSD RPD within QC limits?				Х		
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data						
		Were the project/method specified analytes included in the MS	and MSD?	Х				
		Were MS/MSD analyzed at the appropriate frequency?		Х				
		Were MS (and MSD, if applicable) %Rs within the laboratory	QC limits?				X	1
DO	OT	Were MS/MSD RPDs within laboratory QC limits?					X	1
кð	OI	Analytical duplicate data	9	v				
		Were appropriate analytical duplicates analyzed for each matrix	X /					
		Were analytical duplicates analyzed at the appropriate frequence Were RDDs or relative standard deviations within the laborator	cy ?	X			v	2
R 0	OI	Method quantitation limits (MOL s):	y QC minus?				Λ	2
K)	01	Are the MOLs for each method analyte included in the laborate	arry data packaga?	v				
		Do the MQL's for each method analyte included in the laborate	n zero calibration standard?	N V				
		Are unadjusted MOLs and DCSs included in the laboratory dat	a package?	X				
R10	OI	Other problems/anomalies	u puorago:	Λ				
		Are all known problems/anomalies/special conditions noted in this LPC and EP?				1		
		Was applicable and available technology used to lower the SD	L to minimize the matrix interference	X		1		
		affects on the sample results?			1			
1		Is the laboratory NELAC-accredited under the Texas Laborator	ry Accreditation Program for the	X	1	1		
		analytes, matrices and methods associated with this laborate	bry data package?		1			
	1.	Items identified by the letter "R" must be included in the laboratory data	a package submitted in the TRRP-required re	port(s)). Iter	ns ide	ntifie	l by the

4. NR = Not reviewed;

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked). 5.

Ap	pen	dix A (cont'd): Laboratory Review Checklist: Ro	eportable Data						
Lab	orato	ry Name: TestAmerica-Houston LRC	Date: 03/27/13						
Pro	ject N	Iame: Exide Recycling Center, Frisco TX Labo	ratory Job Number: 600-70496						
Rev	iewe	r Name: TWR Prep	Batch Number(s): 600-102459- I	CP					
$\#^1$	A^2	Description		Yes	No	NA ³	NR^4	ER# ⁵	
S 1	OI	Initial calibration (ICAL)							
~-		Were response factors and/or relative response factors for each analyt	te within OC limits?			X			
		Were percent RSDs or correlation coefficient criteria met?				X			
		Was the number of standards recommended in the method used for al	1 analytes?	X					
		Were all points generated between the lowest and highest standard us	ed to calculate the curve?			Х			
		Are ICAL data available for all instruments used?	ments used?						
		Has the initial calibration curve been verified using an appropriate sec	ed using an appropriate second source standard?						
S2	OI	Initial and continuing calibration verification (ICCV and CCV) a							
		Was the CCV analyzed at the method-required frequency?	is the CCV analyzed at the method-required frequency?						
		Were percent differences for each analyte within the method-required	the method-required QC limits?						
		Was the ICAL curve verified for each analyte?	analyte?						
		Was the absolute value of the analyte concentration in the inorganic C	Х						
S 3	0	Mass spectral tuning:							
		Was the appropriate compound for the method used for tuning?	id for the method used for tuning?						
		Were ion abundance data within the method-required QC limits?	n the method-required QC limits?						
S4	0	Internal standards (IS):							
		Were IS area counts and retention times within the method-required Q	QC limits?			Х			
S5	OI	Raw data (NELAC section 5.5.10)	-						
		Were the raw data (for example, chromatograms, spectral data) review	wed by an analyst?	Х					
		Were data associated with manual integrations flagged on the raw dat	a?			Х			
S6	0	Dual column confirmation							
		Did dual column confirmation results meet the method-required QC?				Х			
S7	0	Tentatively identified compounds (TICs):							
		If TICs were requested, were the mass spectra and TIC data subject to	o appropriate checks?			Х			
S8	Ι	Interference Check Sample (ICS) results:							
-		Were percent recoveries within method QC limits?		Х					
S9	Ι	Serial dilutions, post digestion spikes, and method of standard ad	ditions						
		Were percent differences, recoveries, and the linearity within the QC	limits specified in the method?				Х	3	
S10	OI	Method detection limit (MDL) studies							
		Was a MDL study performed for each reported analyte?		Х					
		Is the MDL either adjusted or supported by the analysis of DCSs?		Х					
S11	OI	Proficiency test reports:							
		Was the laboratory's performance acceptable on the applicable profice	iency tests or evaluation studies?	Х					
S12	OI	Standards documentation							
		Are all standards used in the analyses NIST-traceable or obtained from	m other appropriate sources?	Х					
S13	OI	Compound/analyte identification procedures							
		Are the procedures for compound/analyte identification documented?		Х					
S14	OI	Demonstration of analyst competency (DOC)							
		Was DOC conducted consistent with NELAC Chapter 5?		Х					
	L	Is documentation of the analyst's competency up-to-date and on file?		X					
S15	OI	Verification/validation documentation for methods (NELAC Cha	pter 5)						
		Are all the methods used to generate the data documented, verified, and	nd validated, where applicable?	X					
S16	OI	Laboratory standard operating procedures (SOPs):							
I		Are laboratory SOPs current and on file for each method performed?		Х				1	
	1	1 Items identified by the letter "R" should be included in the laboratory da	ata package submitted to the TCEO in	the T	RRP	requir	ed reno	rt(s)	

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.

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable). NA = Not applicable.2

3

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 u): Laboratory Review Checkhst: Exception Reports							
Laboratory Name: TestAmerica-Houston LRC Date: 03/27/13							
Project Name: Exide Recycling Center, Frisco TX		Laboratory Job Number: 600-70496					
Review	wer Name: TWR	Prep Batch Number(s): 600-102459- ICP					
ER # ¹	DESCRIPTION						
1	The laboratory selected a sample from another g	oup to perform as the MS/MSD.					
2	The laboratory selected a sample from another group to perform as the DUP.						
3	The laboratory selected a sample from another group to perform as the PDS and SD.						

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: Water Method: 300.0, 9056 Preparation: N/A Date Analyzed: 01/29/2013 Date Prepared: 01/29/2013 TALs Batches: N/A Units: mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Fluoride	0.08	0.075	0.354	0.2
Chloride	0.127	0.1	1.02	0.4
Nitrite	0.105	0.05	0.347	0.2
Bromide	0.071	0.2	0.307	0.2
Nitrate	0.032	0.04	0.476	0.2
Orthophosphate	0.117	0.25	0.305	0.2
Sulfate	0.137	0.15	0.256	0.4

Detection Check Standard

Matrix:	Water			
Method:	200.7/6010			
Preparation:	200.7P/3010			
Date Analyzed:	3/29/2013			
Date Prepared:	3/28/2013			
Instrument:	Thermo 6500			
TALs Batches:	102868, 10275	5p		
Units:	mg/L			
Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.0177	0.5
Antimony	0.0063	0.01	0.0105	0.05
Arsenic	0.0033	0.01	0.0077	0.01
Barium	0.0022	0.005	0.0026	0.02
Beryllium	0.00134	0.002	0.0042	0.005
Boron	0.0077	0.02	0.0193	0.2
Cadmium	0.00073	0.001	0.001	0.005
Calcium	0.022	0.05	0.0583	1
Chromium	0.0016	0.002	0.0037	0.01
Cobalt	0.00063	0.001	0.0012	0.01
Copper	0.0014	0.002	0.0012	0.01
Iron	0.087	0.1	0.1011	0.4
Lithium	0.0024	0.005	0.0043	0.2
Lead	0.0029	0.005	0.005	0.01
Selenium	0.0042	0.01	0.0083	0.04
Manganese	0.00084	0.002	0.002	0.01
Molybdenum	0.0027	0.005	0.0048	0.01
Nickel	0.00179	0.005	0.0043	0.01
Silver	0.0012	0.0025	0.0024	0.01
Sodium	0.02	0.05	0.0465	1
Strontium	0.0005	0.001	0.001	0.005
Thallium	0.0078	0.02	0.0184	0.03
Tin	0.0028	0.005	0.0049	0.01
Titanium	0.0011	0.002	0.0023	0.01
Vanadium	0.0017	0.002	0.0048	0.01
Zinc	0.0022	0.005	0.0065	0.01

Job ID: 600-70496-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative 600-70496-1

Comments

No additional comments.

Receipt

The samples were received on 3/25/2013 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.4° C.

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU

Protocol References:

_

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-70496-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-70496-1	MW-17	Water	03/22/13 13:30	03/25/13 09:00
600-70496-2	B5N	Water	03/22/13 11:25	03/25/13 09:00
600-70496-3	B1R	Water	03/22/13 10:35	03/25/13 09:00

TestAmerica Houston

Client Sample Results

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-70496-1

Client Sample ID: MW-17 Date Collected: 03/22/13 13:30							Lab Sam	ple ID: 600-7 Matrix	0496-1 c: Water
Date Received: 03/25/13 09:00								ind in	. mater
_									
Method: 6010B - Metals (ICP)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000400	J	0.00500	0.000350	mg/L		03/25/13 11:45	03/25/13 19:40	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/25/13 11:45	03/25/13 19:40	1
Method: 6010B - Metals (ICP) - Dis	ssolved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium, Dissolved	0.000350	U	0.00500	0.000350	mg/L		03/25/13 11:45	03/25/13 19:43	1
Lead, Dissolved	0.00290	U	0.0100	0.00290	mg/L		03/25/13 11:45	03/25/13 19:43	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1510		50.0	13.7	mg/L			03/26/13 13:41	100
Client Sample ID: B5N							Lab Sam	ple ID: 600-7	0496-2
Date Collected: 03/22/13 11:25								Matrix	k: Water
Date Received: 03/25/13 09:00									
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		03/25/13 11:45	03/25/13 19:45	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/25/13 11:45	03/25/13 19:45	1
- Method: 6010B - Metals (ICP) - Dis	ssolved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium, Dissolved	0.000350	U	0.00500	0.000350	mg/L		03/25/13 11:45	03/25/13 19:48	1
Lead, Dissolved	0.00290	U	0.0100	0.00290	mg/L		03/25/13 11:45	03/25/13 19:48	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	946		50.0	13.7	mg/L			03/26/13 13:59	100
Client Sample ID: B1R							Lab Sam	ple ID: 600-7	0496-3
ate Collected: 03/22/13 10:35								Matrix	· Wator
Date Received: 03/25/13 09:00								Watin	. Water
- Method: 6010B - Metals (ICP)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000400	J	0.00500	0.000350	mg/L		03/25/13 11:45	03/25/13 19:50	1
Lead	0.00360	J	0.0100	0.00290	mg/L		03/25/13 11:45	03/25/13 19:50	1
Method: 6010B - Metals (ICP) - Dis	SSOIVED	Qualifier		פחי	Unit	Р	Drepared	Analyzod	
Analyte	Result	Juanner		0.0002E0	mall	U	03/25/12 11:45	Alialyzeu	
	0.000400	J	0.0000	0.000300	mg/L		03/25/13 11.45	03/25/12 10.53	1
- -	0.00290	0	0.0100	0.00290	iliy/∟		03/20/13 11.45	03/23/13 19.33	1
General Chemistry	.	0			11	-	Dura d	A	D :: -
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	18.2		5.00	1.37	mg/L			03/26/13 12:10	10

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

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.	- 5
U	Analyte was not detected at or above the SDL.	5
General Ch	nemistry	
Qualifier	Qualifier Description	
U	Analyte was not detected at or above the SDL.	7
Glossary		8

Abbreviation	These commonly used abbreviations may or may not be present in this report.	0
¤	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)	
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	13
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
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)	

1 2 3 4 5 6 7 8 9 10

Lab Sample ID: MB 600-102459/1-A Matrix: Water

Method: 6010B - Metals (ICP)

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

Client Sample ID: Lab Control Sample

Prep Batch: 102459

Prep Type: Total/NA

Analysis	Batch:	102511

	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/25/13 11:45	03/25/13 17:37	1
Cadmium, Dissolved	0.000350	U	0.00500	0.000350	mg/L		03/25/13 11:45	03/25/13 17:37	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/25/13 11:45	03/25/13 17:37	1
Lead, Dissolved	0.00290	U	0.0100	0.00290	mg/L		03/25/13 11:45	03/25/13 17:37	1

Lab Sample ID: LCS 600-102459/2-A Matrix: Water Analysis Batch: 102511

Analysis Batch: 102511							Prep Ba	atch: 102459
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Cadmium	0.500	0.4907		mg/L		98	80 - 120	
Cadmium, Dissolved	0.500	0.4907		mg/L		98	80 - 120	
Lead	1.00	0.9695		mg/L		97	80 - 120	
Lead, Dissolved	1.00	0.9695		mg/L		97	80 - 120	

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-102605/3 Matrix: Water Analysis Batch: 102605												Client S	ample ID: Prep T	Method ype: To	Blank tal/NA
		мв	МВ												
Analyte	Re	esult	Qualifier	MQL	(Adj)		SDL	Unit		D	P	repared	Analyz	ed	Dil Fac
Sulfate	0	.137	U		0.500	0	0.137	mg/L					03/26/13	09:26	1
Lab Sample ID: LCS 600-102605/4										Clie	ent	Sample	ID: Lab Co	ontrol S	ample
Matrix: Water													Prep 1	ype: To	tal/NA
Analysis Batch: 102605															
				Spike		LCS	LCS						%Rec.		
Analyte				Added		Result	Qual	ifier	Unit		D	%Rec	Limits		
Sulfate				20.0		19.74			mg/L			99	90 - 110		
													Client Sa	mple IC): B1R
Matrix: Water													Prep 1	ype: To	tal/NA
Analysis Batch: 102605															
	Sample	Sam	ple	Spike		MS	MS						%Rec.		
Analyte	Result	Qual	ifier	Added		Result	Qual	ifier	Unit		D	%Rec	Limits		
Sulfate	18.2			100		109.0			mg/L			91	80 - 120		
													Client Sa	mple IC): B1R
Matrix: Water													Prep 1	ype: To	tal/NA
Analysis Batch: 102605															
	Sample	Sam	ple	Spike		MSD	MSD						%Rec.		RPD
Analyte	Result	Qual	ifier	Added		Result	Qual	ifier	Unit		D	%Rec	Limits	RPD	Limit
Sulfate	18.2			100		111.8			mg/L		_	94	80 - 120	3	20

Unadjusted Detection Limits

MQL

0.00500

0.0100

MQL

0.00500

0.0100

MQL

0.500

MDL

MDL

MDL

0.137

0.000350

0.00290

0.000350

0.00290

Units

mg/L

mg/L

Units

mg/L

mg/L

Units

mg/L

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Method: 6010B - Metals (ICP) - Dissolved

Method: 6010B - Metals (ICP)

Analyte

Lead

Analyte

Analyte

Sulfate

Cadmium, Dissolved

General Chemistry

Lead, Dissolved

Cadmium

Method

6010B

6010B

Method

6010B

6010B

Method 300.0

11 12 13 14 15

TestAmerica Houston

QC Association Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

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Metals

Prep Batch: 102459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-70496-1	MW-17	Total/NA	Water	3010A	
600-70496-1	MW-17	Dissolved	Water	3010A	
600-70496-2	B5N	Total/NA	Water	3010A	
600-70496-2	B5N	Dissolved	Water	3010A	
600-70496-3	B1R	Total/NA	Water	3010A	
600-70496-3	B1R	Dissolved	Water	3010A	
LCS 600-102459/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-102459/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 102511

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
600-70496-1	MW-17	Total/NA	Water	6010B	102459
600-70496-1	MW-17	Dissolved	Water	6010B	102459
600-70496-2	B5N	Total/NA	Water	6010B	102459
600-70496-2	B5N	Dissolved	Water	6010B	102459
600-70496-3	B1R	Total/NA	Water	6010B	102459
600-70496-3	B1R	Dissolved	Water	6010B	102459
LCS 600-102459/2-A	Lab Control Sample	Total/NA	Water	6010B	102459
MB 600-102459/1-A	Method Blank	Total/NA	Water	6010B	102459

General Chemistry

Analysis Batch: 102605

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
600-70496-1	MW-17	Total/NA	Water	300.0	
600-70496-2	B5N	Total/NA	Water	300.0	
600-70496-3	B1R	Total/NA	Water	300.0	
600-70496-3 MS	B1R	Total/NA	Water	300.0	
600-70496-3 MSD	B1R	Total/NA	Water	300.0	
LCS 600-102605/4	Lab Control Sample	Total/NA	Water	300.0	
MB 600-102605/3	Method Blank	Total/NA	Water	300.0	

Lab Sample ID: 600-70496-2

Lab Sample ID: 600-70496-3

Matrix: Water

Matrix: Water

Client Samp	le ID: MW-1	7						Lab Sample ID	: 600-70496-1
Date Collected	: 03/22/13 13:3	30							Matrix: Water
Date Received	: 03/25/13 09:0	00							
	Batch	Batch		Dilution	Batch	Prepared			
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3010A			102459	03/25/13 11:45	NER	TAL HOU	
Total/NA	Analysis	6010B		1	102511	03/25/13 19:40	DCL	TAL HOU	
Dissolved	Prep	3010A			102459	03/25/13 11:45	NER	TAL HOU	
Dissolved	Analysis	6010B		1	102511	03/25/13 19:43	DCL	TAL HOU	
Total/NA	Analysis	300.0		100	102605	03/26/13 13:41	DAW	TAL HOU	

Client Sample ID: B5N

Date Collected: 03/22/13 11:25 Date Received: 03/25/13 09:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			102459	03/25/13 11:45	NER	TAL HOU
Total/NA	Analysis	6010B		1	102511	03/25/13 19:45	DCL	TAL HOU
Dissolved	Prep	3010A			102459	03/25/13 11:45	NER	TAL HOU
Dissolved	Analysis	6010B		1	102511	03/25/13 19:48	DCL	TAL HOU
Total/NA	Analysis	300.0		100	102605	03/26/13 13:59	DAW	TAL HOU

Client Sample ID: B1R Date Collected: 03/22/13 10:35

Date Received: 03/25/13 09:00

-	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			102459	03/25/13 11:45	NER	TAL HOU
Total/NA	Analysis	6010B		1	102511	03/25/13 19:50	DCL	TAL HOU
Dissolved	Prep	3010A			102459	03/25/13 11:45	NER	TAL HOU
Dissolved	Analysis	6010B		1	102511	03/25/13 19:53	DCL	TAL HOU
Total/NA	Analysis	300.0		10	102605	03/26/13 12:10	DAW	TAL HOU

Laboratory References:

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

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Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-70496-1

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	08-04-12 *
Louisiana	NELAP	6	01967	06-30-13
Oklahoma	State Program	6	9503	08-31-13
Texas	NELAP	6	T104704223-10-6-TX	10-31-13
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	GULF	10-31-13

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

TestAmerica Houston

		Chain of custody Number 295383	Page of		Special Instructions/	Conditions of Receipt			γpoţ	- Cue	io ure	240 s	9670.	2-009	9			ssed if samples are retained h)		2/2/13 150	Date	Date	
stAmerica	LEADER IN ENVIRONMENTAL TESTING	Date 22-(3	Lab Number	Analysis (Attach list If more space is needed)	201 P	1163 100 2 7	7NS 530 Wat	X	X	7	× ×	×	×	· .	×			Archive For Months longer than 1 month	. (4	luc		ere	1
Temperature on Receipt	Drinking Water? Yes No	Project Manager F.C.U.C. PASCID R	Telephone Number (Area Code) (Fax Number 512-671-3434	Site Contact Lab Contact	REPATING OLANT	Matrix Containers & Preservatives	Date Date Date Date Date Date Date Date	-22-13 1330 X X	1 1330 X X	1 1330 N	1125 X X X		1 1125 X	1 1035 X X	1 1035 X X	↓ 1035 K		Poison B Unknown Return To Client Disposal By Lab	21 Days Other	3-22-13 Time I. Received By CC	Pate Min Time 2. Received By	Darge 1 3 Tinto 3. Acceled By	
Chain of	Custoay Hecord	Clerk N.	Address 2221 Mulbue (AUBL DR	Onicol Cri II State ZP 200	Project Name and Logation (State)	ContractPurchase Order/Quote No.	Sample I.D. No. and Description (Containers for each sample may be combined on one line)	mw-17 3	LI-MW	LI-MW PA	BSN	NSQ 22	NSA 23	BIC	BIR	RIK		Possible Hazard Identification	Turn Around Time Required	f. Reliferuisteed By	2 Relinguistical By I / / / / / / /	3. Helindished By	Comments

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DISTRIBUTION: WHITE - Returned to Client with Report, CANARY - Stays with the Sample; PINK - Field Copy

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14 15 16

Client: Pastor, Behling & Wheeler LLC

Login Number: 70496 List Number: 1

Creator: Pulumbarit, Josh

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.4
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.	True	

Job Number: 600-70496-1

List Source: TestAmerica Houston

DATA USABILITY SUMMARY

SITE:	Exide Class II Landfill Frisco, Texas						
CLIENT:	_IENT: Pastor, Behling & Wheeler, LLC (PBW) Round Rock, Texas						
EVENT:	Groundwater Sampling – April 2013						
INTENDED USE:	Groundwater Monitoring and Affected Property Assess	ment					
LABORATORY:	TestAmerica – Houston, TX TLAP Certification T104704223 Work Orders: 600-71450-1, 600-71532-1						
TESTS/ METHODS:	Total Metals (Se)	SW846 3010A/6010B					
	Dissolved Metals (Se)	SW846 3010A/6010B					
	Sulfate (SO4)	EPA 300.0					
SAMPLES:	8 groundwater samples, 1 laboratory MS/MSD pair (see Table 1 for a complete listing)						

QAA completed a third-party 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).

All samples collected during the event were reviewed. QAA completed the review using the following laboratory and project submittals:

- Laboratory reportable data as defined in TRRP-13;
- Laboratory review checklists (LRCs) 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, QAA used the LRCs to evaluate the following QC parameters:

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

Criteria used for the data usability review are as follows:

Inorganics: 70-130% spike recovery (and not less than 30% or data is rejected) and <u>+</u>MQL difference or 30% RPD (for laboratory 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.

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 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 form. 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 1 to this DUS.

USABILITY SUMMARY

 Usability of Unqualified Non-Detects – Non-detects are reported at the sample detection limit (SDL) as required per TRRP. Additionally, according to the LRCs, an MDL study was performed for each analyte and the MDLs were checked for reasonableness. The levels of required performance (LORPs) have been established by PBW as the protective concentration levels (PCLs) for residential use and a Class 3 groundwater classification. 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 critical PCLs.

Usability of Qualified Data – No QC deficiencies were noted that resulted in the reviewer applying data quality flags. Thus, all
results are acceptable for the intended use. Results with a laboratory J-flag (i.e., between the SDL and MQL) should be
considered estimates. The actual value for these results is not expected to exceed the sample MQL.

QAA Reviewer:

Taryn G. Scholz (Name) 6/14/13 (Date)

QC PARAMETER	QC OUTCOME
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. No revisions were required.
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 record is complete and agrees with that in the field notes and laboratory report and all tests results are reported as requested on the custody record, except as follows:
	• For job number J71450, the laboratory logged in one sample (PMW-20R) with the incorrect time (13:00 instead of 13:55 as shown on the custody record and in the field notes). The sample date is correct and this has no effect on the pass/fail status for the holding time checks and thus no further action was taken.
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.
Field Procedures	Readings for temperature, pH, specific conductivity, and turbidity were recorded in the field notes. Each well was either purged until the well conditions stabilized and sampled immediately or purged until dry and sampled the next day after recovery (for LMW-5, LMW-8, LMW-9, LMW-22, and MW-28). Samples were collected in containers provided by the laboratory, placed on ice, and delivered to the laboratory by overnight courier. All dissolved sample aliquots were field-filtered using a 0.45-micron filter. Aliquots for total metals were filtered using a 10-micron filter for wells with a turbidity greater than 10-NTU (for LMW-8 and LMW-9). Only dedicated or disposable equipment was used. No field QC samples (blanks or duplicates) were collected with the investigative samples.
Results Reporting Procedures	The hardcopy analytical results include a Result, MQL (adjusted), and SDL. The EDD includes the MDL, SDL (under the SQL column per previously used terminology) and the MQL, which is not adjusted for sample specific factors. Results are reported in mg/L. 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.
	None of the samples required dilution.
MQLs	The LORPs for the samples have been defined by PBW as the Tier 1 PCLs for residential use and a Class 3 groundwater classification (i.e., $^{GW}GW_{Class}$ 3 in TCEQ Table 3 dated June 29, 2012). The Unadjusted MQLs are at or below the LORPs for all applicable analytes.
MDLs	According to the LRCs, 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 (DCSs) as required per TRRP-13. Results for the DCS are included in the laboratory data packages.
Laboratory Blanks	No analytes are reported above the detection limit in the laboratory blanks, which confirms that no contamination was introduced in the laboratory.
Field QC Blanks	No field QC blanks were collected with the samples.

DATA USABILITY SUMMARY

QC PARAMETER	QC OUTCOME
Laboratory Control Spike Recovery	The laboratory prepared one laboratory control spike (LCS) for each analytical batch and the spike solution contained all of the analytes. The LCS recoveries are within the TRRP recommended limits, which indicates good accuracy for the preparation and analysis technique on a sample free of matrix effects.
Matrix Spike Recovery	The laboratory prepared one Matrix Spike (MS) and Matrix Spike Duplicate (MSD) for each analytical batch and the spike solution contained all of the analytes. Recoveries are reported for MS/MSD prepared using a sample from the site. One MS/MSD pair was prepared using sample LMW-17 for Sulfate and the recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on the given sample matrix, except as follows:
	• Sulfate was not recovered in the MS prepared using sample LMW-17. The laboratory narrative states that the recovery is outside the control limits due to a missed spiking event.
	The MSD recovery is within control at 81% and thus the reviewer did not qualify the data.
Surrogate Recovery	Surrogates are not used for methods SW846 6010B or EPA 300.0.
Laboratory Duplicate Precision	The laboratory prepared one Matrix Spike Duplicate (MSD) for each analytical batch and the spike solution contained all of the analytes. RPDs are reported for MSD prepared using a sample from the site. One MSD was prepared using sample LMW-17 for Sulfate; however, Sulfate was not recovered in the MS due to a missed spiking event and thus it is not possible to calculate the RPD.
Field Duplicate Precision	No field duplicates were collected with the samples.
Instrument Tuning	Instrument tuning is not required for methods SW846 6010B or EPA 300.0.
Instrument Calibration	According to the LRCs, initial and continuing calibration data met method requirements for all reported results, which indicates the instruments were properly calibrated to measure analyte concentrations.
Instrument Performance	According to the LRCs, the serial dilution and ICP interference check samples met method requirements, which indicates that no significant matrix interference exists.
Internal Standards	Internal standards are not used for methods SW846 6010B or EPA 300.0.
Total to Partial Balance	For each metal in every sample, the dissolved metal concentration is at or below the total metal concentration or the difference does not exceed the inherent analytical method error (i.e., \pm 2x MQL difference (if either result is less than 5x MQL) or 30% RPD).
TABLE 1 EXIDE CLASS II LANDFILL GROUNDWATER SAMPLING – APRIL 2013

SAMPLES ANALYZED

						QC Batch	
Lab ID	Field ID	Sample Type	Sample Matrix	Sample Date	Total Metals (Se) 3010A/6010B	Dissolved Metals (Se) 3010A/6010B	Sulfate (SO4) 300.0
600-71450-001	LMW-17	INV	Water	4/11/13	NA	NA	103918
600-71450-001	LMW-17	MS	Water	4/11/13	NA	NA	103918
600-71450-001	LMW-17	MSD	Water	4/11/13	NA	NA	103918
600-71450-002	PMW-20R	INV	Water	4/11/13	103951	103951	103918
600-71450-003	LMW-21	INV	Water	4/11/13	103951	103951	103918
600-71532-001	LMW-9	INV	Water	4/12/13	103951	103951	104032
600-71532-002	LMW-8	INV	Water	4/12/13	103951	103951	104032
600-71532-003	LMW-22	INV	Water	4/12/13	NA	NA	104032
600-71532-004	LMW-5	INV	Water	4/12/13	NA	NA	104032
600-71532-005	MW-28	INV	Water	4/12/13	NA	NA	104032

INV - Investigative

MS – Matrix Spike

MSD – Matrix Spike Duplicate

NA - Not Analyzed

ATTACHMENT 1

APPLICABLE PAGES OF THE LABORATORY ACCREDITATION CERTIFICATE



Texas Commission on Environmental Quality



NELAP - Recognized Laboratory Fields of Accreditation

	Certificate:	T104704223-12-9
TestAmerica Laboratories, Inc Houston	Expiration Date:	10/31/2013
6310 Rothway Drive Houston, TX 77040-5056	Issue Date:	11/1/2012

These fields of accreditation supercede all previous fields. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current accreditation status for particular methods and analyses.

Matrix: Non-Potable Water			
Sodium	ТХ	1155	10013806
Strontium	ТХ	1160	10013806
Thallium	ТХ	1165	10013806
Tin	ТХ	1175	10013806
Titanium	ТХ	1180	10013806
Vanadium	ТХ	1185	10013806
Zinc	ТХ	1190	10013806
Method EPA 245.1			
Analyte	AB	Analyte ID	Method ID
Mercury	ТХ	1095	10036609
Method EPA 300.0			
Analyte	AB	Analyte ID	Method ID
Bromide	ТХ	1540	10053006
Chloride	ТХ	1575	10053006
Fluoride	ТХ	1730	10053006
Nitrate as N	ТХ	1810	10053006
Nitrate-nitrite	ТХ	1820	10053006
Nitrite as N	ТХ	1840	10053006
Sulfate	ТХ	2000	10053006
Method EPA 305.1			
Analyte	AB	Analyte ID	Method ID
Acidity, as CaCO3	ТХ	1500	10054203
Method EPA 310.1			
Analyte	AB	Analyte ID	Method ID
Alkalinity as CaCO3	ТХ	1505	10054805
Method EPA 330.4			
Analyte	AB	Analyte ID	Method ID
Total residual chlorine	IX	1940	10059208
Method EPA 335.1			
Analyte	AB	Analyte ID	Method ID
Amenable cyanide	IX	1510	10060001



Texas Commission on Environmental Quality

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6310 Rothway Drive Houston, TX 77040-5056

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Matrix: Non-Potable Water			
Method EPA 415.1 Analyte Total Organic Carbon (TOC)	AB TX	Analyte ID 2040	Method ID 10078407
Method FPA 420.2			
Analyte	AB	Analyte ID	Method ID
Total phenolics	ТХ	1905	10079808
Method EPA 420.4			
Analyte	AB	Analyte ID	Method ID
Total phenolics	ТХ	1905	10080203
Method EPA 425.1			
Analyte	AB	Analyte ID	Method ID
Surfactants - MBAS	ТХ	2025	10080601
Method EPA 6010			
Analyte	AB	Analyte ID	Method ID
Aluminum	ТХ	1000	10155609
Antimony	ТХ	1005	10155609
Arsenic	ТХ	1010	10155609
Barium	ТХ	1015	10155609
Beryllium	ТХ	1020	10155609
Boron	ТХ	1025	10155609
Cadmium	ТХ	1030	10155609
Calcium	ТХ	1035	10155609
Chromium	ТХ	1040	10155609
Cobalt	ТХ	1050	10155609
Copper	ТХ	1055	10155609
Iron	ТХ	1070	10155609
Lead	ТХ	1075	10155609
Magnesium	ТХ	1085	10155609
Manganese	ТХ	1090	10155609
Molybdenum	ТХ	1100	10155609
Nickel	ТХ	1105	10155609



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Matrix: Non-Potable Water			
Potassium	ΤX	1125	10155609
Selenium	ТХ	1140	10155609
Silica as SiO2	ТХ	1990	10155609
Silver	ТХ	1150	10155609
Sodium	ТХ	1155	10155609
Strontium	ТХ	1160	10155609
Thallium	ТХ	1165	10155609
Tin	ТΧ	1175	10155609
Titanium	ТХ	1180	10155609
Vanadium	ТХ	1185	10155609
Zinc	ТХ	1190	10155609
Method EPA 602			
Analyte	AB	Analyte ID	Method ID
Benzene	ТΧ	4375	10102202
Ethylbenzene	ТХ	4765	10102202
m+p-xylene	ТХ	5240	10102202
o-Xylene	ТХ	5250	10102202
Toluene	ТХ	5140	10102202
Xylene (total)	ТХ	5260	10102202
Method EPA 608			
Analyte	AB	Analyte ID	Method ID
4,4'-DDD	ТХ	7355	10103603
4,4'-DDE	ТХ	7360	10103603
4,4'-DDT	ТΧ	7365	10103603
Aldrin	ТΧ	7025	10103603
alpha-BHC (alpha-Hexachlorocyclohexane)	ТХ	7110	10103603
alpha-Chlordane	ТХ	7240	10103603
Aroclor-1016 (PCB-1016)	ТХ	8880	10103603
Aroclor-1221 (PCB-1221)	ТХ	8885	10103603
Aroclor-1232 (PCB-1232)	ТХ	8890	10103603
Aroclor-1242 (PCB-1242)	ТХ	8895	10103603



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: 600-71450-1

Client Project/Site: Exide Recycling Center, Frisco TX Projec

For:

Pastor, Behling & Wheeler LLC 2201 Double Creek Dr Suite 4004 Round Rock, Texas 78664

Attn: Eric Pastor

Authorized for release by: 4/18/2013 5:19:15 PM Cathy Upton Data Delivery Analyst cathy.upton@testamericainc.com

Designee for

Sachin Kudchadkar Project Manager II sachin.kudchadkar@testamericainc.com

LINKS Review your project results through TOTOLACCESS 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

This report has been electronically signed and authorized by the signatory. Electronic signature is

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

intended to be the legally binding equivalent of a traditionally handwritten signature.

at the e-mail address or telephone number listed on this page.

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TestAmerica Houston TRRP Data Package Cover Page

Job Number:

600-71450-1

Project Name/Number:

Exide Recycling Center, Frisco TX Project

This Data Package consists of:

X

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

- X R1 Field Chain-of-Custody Form
- X R2 Sample Identification Cross-reference;
- Х 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).
- X R4 Surrogate Recovery Data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- X R5 Test Reports/Summary Forms for Blank Samples;
- X 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
- X 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.
- List of method quantitation limit (MQL) and detectability check sample results for each analyte for each method and X R9 matrix;
- X 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 Name (printed) Data Delivery Analyst

Official Title (printed)

Signature

04/18/2013

Date

Laboratory Name: TestAmerica-Houston LRC Date: 04/17/13 Project Name: Exide Recycling Center, Frisco TX Project Laboratory Job Number; 600-71450 Reviewer Name: BDG Prep Batch Number; 600-713918 – Sulfate R Chain-of-custody (C-O-C) Yes No No <t< th=""><th>A</th><th>pper</th><th>ndix A (cont'd): Laboratory Review Check</th><th>list: Reportable Data</th><th></th><th></th><th></th><th></th><th></th></t<>	A	pper	ndix A (cont'd): Laboratory Review Check	list: Reportable Data					
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R6 OI Laboratory control samples (LCS): X Were all COCs included in the LCS? X X Was each LCS taken through the entire analytical procedure, including prep and cleanup steps? X X Were LCSs analyzed at the required frequency? X X X Were LCS (and LCSD), if applicable) %Rs within the laboratory QC limits? X 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 X Was the LCSD RPD within QC limits? X X X R7 OI Matrix spike (MS) and matrix spike duplicate (MSD) data X X Were the project/method specified analytes included in the MS and MSD? X X X Were MS/MSD analyzed at the appropriate frequency? X X X Were MS/MSD RPDs within laboratory QC limits? X X X R8 OI Analytical duplicates analyzed at the appropriate frequency? X X Were appropriate analytical duplicates analyzed for each matrix? X X X Were analytical duplicates analyzed at the appropriate frequency? X X X			Were blank concentrations < MQL?		X				
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R8 OI Analytical duplicate data Image: A state of the state			Were MS/MSD RPDs within laboratory OC limits?	ry QC minits?		X			1
Rest OI Many item duplicate data X 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): X Are the MQLs for each method analyte included in the laboratory data package? X X Do the MQLs correspond to the concentration of the lowest non-zero calibration standard? X X Are unadjusted MQLs and DCSs included in the laboratory data package? X X R10 OI Other problems/anomalies X Are all known problems/anomalies/special conditions noted in this LRC and ER? X X	R8	OI	Analytical duplicate data			Λ			1
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R9 OI Method quantitation limits (MQLs): Image: Constraint of the laboratory data package? X Image: Are the MQLs for each method analyte included in the laboratory data package? X Image: Constraint of the lowest non-zero calibration standard? X Image: Do the MQLs correspond to the concentration of the lowest non-zero calibration standard? X Image: Constraint of the lowest non-zero calibration standard? X R10 OI Other problems/anomalies Image: Constraint of the lowest non-zero calibration standard? X R10 OI Other problems/anomalies Image: Constraint of the lowest non-zero calibration standard? X Image: Constraint of the lowest non-zero calibration standard? X Image: Constraint of the lowest non-zero calibration standard? R10 OI Other problems/anomalies Image: Constraint of the lowest non-zero calibration standard? X R10 Image: Constraint of the lowest non-zero calibration standard? X Image: Constraint of the lowest non-zero calibration standard? Marce and Expected of the lowest non-zero calibration standard? X Image: Constraint of the lowest non-zero calibration standard?			Were RPDs or relative standard deviations within the labora	tory QC limits?			X		
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	R9	OI	Method quantitation limits (MQLs):						
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R10 OI Other problems/anomalies Image: Comparison of the second se			Are unadjusted MQLs and DCSs included in the laboratory of	data package?	Х				
Are all known problems/anomalies/special conditions noted in this LRC and ER? X	R10	OI	Other problems/anomalies						
			Are all known problems/anomalies/special conditions noted	in this LRC and ER?	Χ				
Was applicable and available technology used to lower the SDL to minimize the matrix interference X	1		Was applicable and available technology used to lower the S	DL to minimize the matrix interference	Х		1	1	2
affects on the sample results?			affects on the sample results?				-	<u> </u>	
Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the X			Is the laboratory NELAC-accredited under the Texas Labora	atory Accreditation Program for the	X			1	
analytes, matrices and methods associated with this laboratory data package?	1	1	analytes, matrices and methods associated with this labor	atory data package?	nort(c)	Ita	no : 4 -	ntific	1 br 41-

letter "S" should be retained and made available upon request for the appropriate retention period.

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 NA = Not applicable;

 4. NR = Not reviewed;
 5. ER# = Exception Re ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

A1

Ap	pen	dix A (cont'd): Laboratory Review Checklist:	Reportable Data					
Lab	orato	ry Name: TestAmerica-Houston LRC	C Date: 04/17/13					
Pro	Project Name: Exide Recycling Center, Frisco TX Project Laboratory Job Number: 600-71450							
Rev	Reviewer Name: BDG Prep Batch Number(s): 600-103918 – Su							
# ¹	A^2	Description		Yes	No	NA ³	NR^4	ER# ⁵
<u>\$1</u>	OI	Initial calibration (ICAL)						
51	01	Were response factors and/or relative response factors for each anal	lyte within OC limits?	x				
		Were percent RSDs or correlation coefficient criteria met?	lyte within QC mints.	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 s	second source standard?	X				
S 2	OI	Initial and continuing calibration verification (ICCV and CCV)) and continuing calibration					
	01	Was the CCV analyzed at the method-required frequency?) and continuing canor ation	x				
		Were percent differences for each analyte within the method-require	red OC limits?	X				
		Was the ICAL curve verified for each analyte?						
		Was the absolute value of the analyte concentration in the inorganic CCB \leq MDI ?					-	
\$3	0	Mass spectral tuning:						
55	0	Was the appropriate compound for the method used for tuning?				v		
		Were ion abundance data within the method required OC limits?				Λ V		
S 4	0	Internal standards (IS):				Λ		
54	0	Were IS area counts and retention times within the method required	d OC limits?			v		
85	OI	Paw data (NELAC saction 5.5.10)				Λ		
35	01	Wara the raw data (for example, chromatograms, spectral data) raw	iowed by an analyst?	v				
		Were data associated with manual integrations flagged on the row of	lewed by all allaryst?	Λ		v		
56	0	Were data associated with manual integrations flagged on the raw data?				Λ		
50	0	Dual column confirmation				v		
\$7	0	Tentatively identified compounds (TICs):	51			Λ		
57	0	If TICs were requested, were the mass spectra and TIC data subject	t to appropriate abacks?			v		
58	T	In the swele requested, were the mass spectra and the data subject	t to appropriate checks?			Λ		
50	1	Wara parcent recoveries within method OC limits?				v		
59	T	Sorial dilutions, post digestion spikes, and method of standard s	additions			Λ		
57	1	Wara parcent differences, recoveries, and the linearity within the O	C limits spacified in the method?			v		
\$10	OI	Method detection limit (MDL) studies	c mints specified in the method?			Λ		
510	01	Was a MDL study performed for each reported analyte?		v				
		Is the MDL sitter adjusted or supported by the analysis of DCSs?		Λ V				
\$11	OI	Proficional test reports:		Λ				
511		Was the laboratory's performance acceptable on the applicable prof	ficiency tests or evaluation studies?	v				
\$12	OI	Standards documentation	terency tests of evaluation studies:	Λ				
512	01	Are all standards used in the analyses NIST traceable or obtained fr	rom other appropriate sources?	v				
S13	OI	Compound/analyte identification procedures	tom other appropriate sources:	Λ				
515	01	Are the precedures for compound/analyte identification documente	49	v				
S14	OI	Demonstration of analyst compound/analyte (DOC)		Λ				
514	01	Was DOC conducted consistent with NELAC Chapter 5?		v				
		Is documentation of the analyst's competency up to date and on file	e?	X V				
\$15	OI	Varification/validation documentation for methods (NFLAC C)	benter 5)	Λ				
515		Are all the methods used to generate the data documented varified	and validated where applicable?	v				
S1 4	OT	I abaratary standard aparating denote (COD-).	, and vandated, where applicable?	Λ				
510		Laboratory standard operating procedures (SUPS):	19	v				
		Are laboratory SOF's current and on the for each method performed	1.	Λ				
	ı	1 Items identified by the letter "R" should be included in the laboratory	data package submitted to the TCEQ in	the T	RRP	-reauir	ed repo	rt(s).

I 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.

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						
Laborat	Laboratory Name: TestAmerica-Houston LRC Date: 04/17/13					
Project Name: Exide Recycling Center, Frisco TX Project		Laboratory Job Number: 600-71450				
Reviewer Name: BDG		Prep Batch Number(s): 600-103918 – Sulfate				
ER # ¹	DESCRIPTION					
1	The matrix spike recovery for batch 103918 was outside control limits due to a missed spiking event. The associated					
	laboratory control sample (LCS) and Matrix Spike Duplicate (MSD) recoveries met acceptance criteria.					
2	The Sulfate SDLs for samples $600-71450 - 1$, 2 and 3 were elevated due to the high concentrations of this analyte.					

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

A	oper	ndix A (cont'd): Laboratory Review Checklis	t: Reportable Data					
Lab	orator	ry Name: TestAmerica-Houston	LRC Date: 04/16/13					
Proj	ect N	ame: Exide Recycling Center, Frisco TX	Laboratory Job Number: 600-71450					
Rev	Reviewer Name: TWR Pren Batch Number(s): 600-103951- IC							
#1	$\#^2$ Description					NA ³	ND^4	FD # ⁵
#	A	Choin of output		Tes	NO	INA	INK	EK#
D1	OI		1 (111)	V				
KI	01	Did samples meet the laboratory's standard conditions of samp	le acceptability upon receipt?	X		v		
DJ	OI	Sample and quality control (QC) identification	xception report?	_		Λ		
K2	01	Are all field sample ID numbers cross referenced to the laboration	tory ID numbers?	v				
		Are all laboratory ID numbers cross-referenced to the correspo	nding OC data?	X				
R3	OI	Test reports		Λ				
		Were all samples prepared and analyzed within holding times?		X				
		Other than those results $<$ MOL, were all other raw values brack	keted by calibration standards?	X				
		Were calculations checked by a peer or supervisor?		X	1			
		Were all analyte identifications checked by a peer or superviso	r?	X				
		Were sample detection limits reported for all analytes not detect	ted?	X				
		Were all results for soil and sediment samples reported on a dr	y weight basis?			Х		
		Were % moisture (or solids) reported for all soil and sediment	samples?			Х		
		Were bulk soil/solid samples for volatile analysis extracted wit	h methanol per SW846 Method 5035?			Х		
		If required for the project, TICs reported?	1		1	Х		
R4	0	Surrogate recovery data						
		Were surrogates added prior to extraction?			1	Х		
		Were surrogate percent recoveries in all samples within the lab	oratory QC limits?			Х		
R5	OI	Test reports/summary forms for blank samples						
		Were appropriate type(s) of blanks analyzed?		Х				
		Were blanks analyzed at the appropriate frequency?		Х				
		Were method blanks taken through the entire analytical process	s, including preparation and, if	Х				
		applicable, cleanup procedures?						
		Were blank concentrations < MQL?		Х				
R6	OI	Laboratory control samples (LCS):						
		Were all COCs included in the LCS?		Х				
		Was each LCS taken through the entire analytical procedure, in	cluding prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?		X				
		Were LCS (and LCSD, if applicable) %Rs within the laborator	y QC limits?	X				
		Does the detectability check sample data document the laborate	bry's capability to detect the COCs at	Х				
		the MDL used to calculate the SDLs?				v		
D7	OI	Was the LCSD RPD within QC limits?				Λ		
К/	01	Were the project/method specified analytes included in the MS	and MSD?	v				
		Were MS/MSD analyzed at the appropriate frequency?	and MSD:	X				
		Were MS (and MSD if applicable) %Rs within the laboratory	OC limits?	~			x	1
		Were MS/MSD RPDs within laboratory OC limits?	QC mmts.				X	1
R8	OI	Analytical duplicate data						-
	01	Were appropriate analytical duplicates analyzed for each matri	x?	X	1	1	1	
		Were analytical duplicates analyzed at the appropriate frequence	ev?	X				
		Were RPDs or relative standard deviations within the laborator	v OC limits?				Х	2
R9	OI	Method quantitation limits (MOLs):						
	-	Are the MQLs for each method analyte included in the laborate	ory data package?	Х	1	1	1	
		Do the MQLs correspond to the concentration of the lowest no	n-zero calibration standard?	Х				
		Are unadjusted MQLs and DCSs included in the laboratory dat	a package?	Х	1	1		
R10	OI	Other problems/anomalies	· · ·					
1		Are all known problems/anomalies/special conditions noted in	this LRC and ER?	Х				
		Was applicable and available technology used to lower the SD	L to minimize the matrix interference	Х				
1		affects on the sample results?						
		Is the laboratory NELAC-accredited under the Texas Laboratory	ry Accreditation Program for the	Х		1		
		analytes, matrices and methods associated with this laborate	bry data package?					
	1.	Items identified by the letter "R" must be included in the laboratory data	a package submitted in the TRRP-required re	port(s)). Iter	ns ide	ntified	1 by the

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
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٨	nor	div A (cont'd). I shorstory Raview Checklist. D	enortable Data					
Lab	orato	ry Name: TestAmerica-Houston	Date: 04/16/13					
Pro	iect N	Jame: Exide Recycling Center, Erisco TX Labo	ratory Job Number: 600-71450					
110 <u>.</u>	Designed Name, TWD							
Rev	iewei	wer Name: TWR Prep Batch Number(s): 600-103951- I				2		
#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 analyt	e within QC limits?			Х		
		Were percent RSDs or correlation coefficient criteria met?				X		
		Was the number of standards recommended in the method used for al	l analytes?	X				
		Were all points generated between the lowest and highest standard us	ed to calculate the curve?			X		
		Are ICAL data available for all instruments used?		X				
~ •		Has the initial calibration curve been verified using an appropriate sec	cond source standard?	X				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) a	nd continuing calibration					
		Was the CCV analyzed at the method-required frequency?		Х				
		Were percent differences for each analyte within the method-required	QC limits?	Х				
		Was the ICAL curve verified for each analyte?		Х				
		Was the absolute value of the analyte concentration in the inorganic C	CCB < MDL?	Х				
S 3	0	Mass spectral tuning:						
		Was the appropriate compound for the method used for tuning?	or tuning?					
		Were ion abundance data within the method-required QC limits?			Х			
S4	0	Internal standards (IS):						
		Were IS area counts and retention times within the method-required Q	QC limits?			Х		
S5	OI	Raw data (NELAC section 5.5.10)						
		Were the raw data (for example, chromatograms, spectral data) review	ved by an analyst?	Х				
		Were data associated with manual integrations flagged on the raw dat	a?			Х		
S6	0	Dual column confirmation						
		Did dual column confirmation results meet the method-required QC?				Х		
S7	0	Tentatively identified compounds (TICs):						
		If TICs were requested, were the mass spectra and TIC data subject to	appropriate checks?			Х		
S8	Ι	Interference Check Sample (ICS) results:						
		Were percent recoveries within method QC limits?		Х				
S9	Ι	Serial dilutions, post digestion spikes, and method of standard ad	ditions					
		Were percent differences, recoveries, and the linearity within the QC	limits specified in the method?				Х	3
S10	OI	Method detection limit (MDL) studies						
		Was a MDL study performed for each reported analyte?		Х				
		Is the MDL either adjusted or supported by the analysis of DCSs?		Х				
S11	OI	Proficiency test reports:						
		Was the laboratory's performance acceptable on the applicable profici	iency tests or evaluation studies?	Х				
S12	OI	Standards documentation						
~		Are all standards used in the analyses NIST-traceable or obtained from	m other appropriate sources?	X				
S13	OI	Compound/analyte identification procedures						
		Are the procedures for compound/analyte identification documented?		Х				
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?		Х				
S15	OI	Verification/validation documentation for methods (NELAC Cha	pter 5)	_				
		Are all the methods used to generate the data documented, verified, and	nd validated, where applicable?	Х				
S16	OI	Laboratory standard operating procedures (SOPs):						
		Are laboratory SOPs current and on file for each method performed?		Х				
I	I	1 Items identified by the letter "R" should be included in the laboratory da	ata package submitted to the TCEO in	the T	RRP.	-require	ed repo	rt(s).

Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-requ
Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).

2 3 4 0 NA = Not applicable.

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					
Laborat	Laboratory Name: TestAmerica-Houston LRC Date: 04/16/13				
Project	Project Name: Exide Recycling Center, Frisco TX Laboratory Job Number: 600-71450				
Review	Reviewer Name: TWR Prep Batch Number(s): 600-103951- ICP				
ER # ¹	DESCRIPTION				
1	The laboratory selected a sample from another group to perform as the MS/MSD.				
2	The laboratory selected a sample from another group to perform as the DUP.				
3	The laboratory selected a sample from another group to perform as the PDS and SD.				

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: Water Method: 300.0, 9056 Preparation: N/A Date Analyzed: 01/29/2013 Date Prepared: 01/29/2013 TALs Batches: N/A Units: mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Fluoride	0.08	0.075	0.354	0.2
Chloride	0.127	0.1	1.02	0.4
Nitrite	0.105	0.05	0.347	0.2
Bromide	0.071	0.2	0.307	0.2
Nitrate	0.032	0.04	0.476	0.2
Orthophosphate	0.117	0.25	0.305	0.2
Sulfate	0.137	0.15	0.256	0.4

Detection Check Standard

Matrix:	Water			
Method:	200.7/6010			
Preparation:	200.7P/3010			
Date Analyzed:	3/29/2013			
Date Prepared:	3/28/2013			
Instrument:	Thermo 6500			
TALs Batches:	102868, 10275	5р		
Units:	mg/L			
Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.0177	0.5
Antimony	0.0063	0.01	0.0105	0.05
Arsenic	0.0033	0.01	0.0077	0.01
Barium	0.0022	0.005	0.0026	0.02
Beryllium	0.00134	0.002	0.0042	0.005
Boron	0.0077	0.02	0.0193	0.2
Cadmium	0.00073	0.001	0.001	0.005
Calcium	0.022	0.05	0.0583	1
Chromium	0.0016	0.002	0.0037	0.01
Cobalt	0.00063	0.001	0.0012	0.01
Copper	0.0014	0.002	0.0012	0.01
Iron	0.087	0.1	0.1011	0.4
Lithium	0.0024	0.005	0.0043	0.2
Lead	0.0029	0.005	0.005	0.01
Selenium	0.0042	0.01	0.0083	0.04
Manganese	0.00084	0.002	0.002	0.01
Molybdenum	0.0027	0.005	0.0048	0.01
Nickel	0.00179	0.005	0.0043	0.01
Silver	0.0012	0.0025	0.0024	0.01
Sodium	0.02	0.05	0.0465	1
Strontium	0.0005	0.001	0.001	0.005
Thallium	0.0078	0.02	0.0184	0.03
Tin	0.0028	0.005	0.0049	0.01
Titanium	0.0011	0.002	0.0023	0.01
Vanadium	0.0017	0.002	0.0048	0.01
Zinc	0.0022	0.005	0.0065	0.01

Job ID: 600-71450-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative 600-71450-1

Comments

No additional comments.

Receipt

The samples were received on 4/12/2013 8:51 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.0° C.

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TestAmerica Houston

Sample Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-71450-1

Project/Site: Exide	ing & Wheeler LLC Recycling Center, Frisco TX Projec		I estAmerica Job IL	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Lab Sample ID	Client Sample ID	Matrix	Collected	Received 3
600-71450-1	LMW-17	Water	04/11/13 13:00	04/12/13 08:51
600-71450-2 600-71450-3	PMW-20R LMW-21	Water Water	04/11/13 13:00 04/11/13 14:55	04/12/13 08:51
				5
				7
				8
				9
				10
				13

TestAmerica Houston

Client Sample Results

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-71450-1

Client Sample ID: LMW-17							Lab Sample ID: 600-71450-1		
Date Collected: 04/11/13 13:00							Matrix: Water		
Date Received: 04/12/13 08:51									
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	142		5.00	1.37	mg/L			04/12/13 18:50	10
Client Sample ID: PMW-20R							Lab Sam	ple ID: 600-7	1450-2
Date Collected: 04/11/13 13:00								Matrix	c: Water
Date Received: 04/12/13 08:51									
Method: 6010B - Metals (ICP)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.00900	J	0.0400	0.00417	mg/L		04/15/13 12:02	04/16/13 08:35	1
Method: 6010B - Metals (ICP) - Diss	solved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium, Dissolved	0.00730	J	0.0400	0.00417	mg/L		04/15/13 12:02	04/16/13 08:38	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	268		50.0	13.7	mg/L			04/12/13 19:44	100
Client Sample ID: LMW-21							Lab Sam	ple ID: 600-7	1450-3
Date Collected: 04/11/13 14:55								Matrix	c: Water
Date Received: 04/12/13 08:51									
Method: 6010B - Metals (ICP)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.00417	U	0.0400	0.00417	mg/L		04/15/13 12:02	04/16/13 08:40	1
Method: 6010B - Metals (ICP) - Diss	solved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium, Dissolved	0.00417	U	0.0400	0.00417	mg/L		04/15/13 12:02	04/16/13 08:43	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	406		50.0	13.7	mg/L			04/12/13 20:02	100

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

5

Qualifiers

Metals	
Qualifier	Qualifier Description

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

Qualifier	Qualifier Description
N	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.

Glossary

Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	9
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	10
%R	Percent Recovery	
CNF	Contains no Free Liquid	
DER	Duplicate error ratio (normalized absolute difference)	
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	13
MDC	Minimum detectable concentration	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
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)	

Matrix: Water Prep type: Total/N Analysis Batch: 104043 Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dill Fr Selenium 0.00417 U 0.00400 0.00417 mg/L 0/4/15/13 12:02 0/4/16/13 08:31 Dill Fr Selenium, Dissolved 0.00417 U 0.0400 0.00417 mg/L 0/4/16/13 12:02 0/4/16/13 08:31 Lab Sample ID: LCS 600-103951/2-A Katrix: Water Analyte Spike LCS LCS LCS Kee. Analyte Selenium 1:00 1:028 mg/L 0 9/4/16/13 08:31 Selenium Selenium Dissolved 0:0417 U 0:0400 0:00417 mg/L 0/4/16/13 12:02 0/4/16/13 08:31 Analyte Spike LCS LCS Kes Kee. Netrix: 10395 Analyte Spike LCS LCS mg/L 101 D %Rec. Lab Sample ID: MB 600-103918/3 MB MB MB Prep Type: Total/N Analyte Result Qualifier MQL (Adj) SDL Unit D Prep Type: Total/N Suifate 0:137 U 0:500 0:137	Lab Sample ID: MB 600-103951/1-A	x								Client Sa	ample ID: Me	thod	Blank
Analysis Batch: 104043 MB MB MB MB MA Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fr Selenium 0.00417 U 0.0400 0.00417 mg/L 0/15/13 12:02 0/4/16/13 08:31 Dil Fr Selenium, Dissolved 0.00417 U 0.0400 0.00417 mg/L 0/4/15/13 12:02 0/4/16/13 08:31 Lab Sample ID: LCS 600-103951/2-A Client Sample ID: Lab Control Sample Prep Type: Total/N, Analyte Added Result Qualifier Unit D %Rec. Analyte Added Result Qualifier Unit D %Rec. WRec. Selenium, Dissolved 1:00 1:028 mg/L 1:03 80 - 120 Selenium, Dissolved 1:00 1:028 mg/L 1:03 80 - 120 Method: 300.0 - Anions, Ion Chromatography Client Sample ID: Method Bian Prep Type: Total/N, Lab Sample ID: MB 600-103918/3 Matrix: Water Analysis Batch: 103918 MB MB MB MD 0.500 0.137 D Prepared Analyzed Dil Fz Spike LCS ECS WRec, Client Sample ID: Lab Contro	Matrix: water										Prep Typ	e: 10	
AnalyteResult QualifierMQL (Adj) USDL 0.0400Unit mg/LDPrepared 04/15/13 12:02Analyzed 04/16/13 08:31Selenium0.00417U0.04000.00417mg/L04/16/13 12:0204/16/13 08:31Selenium, Dissolved0.00417U0.04000.00417mg/L04/16/13 12:0204/16/13 08:31Lab Sample ID: LCS 600-103951/2-A Matrix: Water Analysis Batch: 104043SikeLCSLCSClient Sample ID: Lab Control Sampl Prep Type: Total/NAnalyteAddedResult QualifierQualifierUnitD%Rec.Selenium1.001.028mg/L10380.120Selenium, Dissolved1.001.028mg/L10380.120Method: 300.0 - Anions, Ion Chromatography1.001.028mg/L10380.120Lab Sample ID: IMB 600-103918/3 Matrix: Water Analysis Batch: 103918MBMBClient Sample ID: Method Blan Prep Type: Total/NAnalyteResult 0.137QualifierMQL (Adj)SDL 0.500UnitDPrepared AnalyzedAnalyzedLab Sample ID: LCS 600-103918/4 Matrix: Water Analysis Batch: 103918MBMBClient Sample ID: Lab Control SamplLab Sample ID: LCS 600-103918/4 Matrix: Water Analysis Batch: 103918MB MBME LCSLCSVirec.Lab Sample ID: LCS 600-103918/4 Matrix: Water Analysis Batch: 103918SalikeLCS LCSVirec.Lab Sample ID: LCS 600-103918/4 Matrix: Water Analysis Batch: 103918 </th <th>Analysis Batch: 104043</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>Ргер Ва</th> <th>cn: 1</th> <th>03951</th>	Analysis Batch: 104043										Ргер Ва	cn: 1	03951
Analyte Total examine Index (Rs) Unit D D Total examine Dirt Selenium 0.0407 0.0400 0.0400 0.04017 mg/L 04/15/13 12:02 04/16/13 08:31 Selenium, Dissolved 0.00417 0 0.0400 0.00417 mg/L 04/15/13 12:02 04/16/13 08:31 Lab Sample ID: LCS 600-103951/2-A Spike LCS LCS Client Sample ID: Lab Control Sample Analyte Added Result Qualifier Unit D %Rec. Analyte 1.00 1.028 mg/L 103 80 - 120 Method: 30.0 - Anions, Ion Chromatography 103 80 - 120 Selenium Lab Sample ID: MB 600-103918/3 MB MB Client Sample ID: Method Blan Matrix: Water Result Qualifier Unit D Prep Type: Total/N. Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fe Suifate 0.137 0 0.500 0.137 mg/L D Od/12/13 17:55 Dil Fe <td< th=""><th>Analyte</th><th>Ro</th><th>wid wid sult Qualifia</th><th></th><th></th><th>SDI Unit</th><th></th><th>п</th><th>р</th><th>renared</th><th>Analyzed</th><th></th><th>Dil Fac</th></td<>	Analyte	Ro	wid wid sult Qualifia			SDI Unit		п	р	renared	Analyzed		Dil Fac
Selenium, Dissolved 0.00417 U 0.0400 0.00417 mg/L 04/16/13 12:02 04/16/13 08:31 Lab Sample ID: LCS 600-103951/2-A Matrix: Water Analysis Batch: 104043 Client Sample ID: Lab Control Sample Prep Type: Total/N 	Selenium	0.00			0.00)417 mg/l			04/1	5/13 12·02	- 04/16/13 08·	<u> </u>	1
Lab Sample ID: LCS 600-103951/2-A Client Sample ID: Lab Control Sample ID: MB 600-103918/3 Matrix: Water Analyte Selenium 1.00 1.028 mg/L 103 80 - 120 Method: 300.0 - Anions, Ion Chromatography I.00 1.028 mg/L 103 80 - 120 Method: 300.0 - Anions, Ion Chromatography Client Sample ID: MB 600-103918/3 Client Sample ID: Method Blan Matrix: Water Result Qualifier MQL (Adj) SDL Unit D Prep Type: Total/N. Analyte MB MB MB MB Sulfate 0.137 U 0.500 0.137 mg/L D Prepared Analyzed Dil Fa Lab Sample ID: LCS 600-103918/4 Matrix: Water Client Sample ID: Lab Control Sample Dil Fa Dil Fa Dil Fa Dil Fa Analysis Batch: 103918 Spike LCS LCS %Rec. Wethod Elsen Dil Fa	Selenium Dissolved	0.00	417 11	0.0400	0.00)417 mg/L			04/1	5/13 12:02	04/16/13 08:	31	1
Lab Sample ID: LCS 600-103951/2-A Client Sample ID: Lab Control Sample Matrix: Water Analyte Spike LCS LCS LCS VRec. Limits Prep Type: Total/N. Analyte Added Result Qualifier Unit D %Rec. Limits		0.00		0.0400	0.00	Jenn mg/L			04/1	0/10 12.02	04/10/10 00.		
Matrix: Water Prep Type: Total/N. Analyte Spike LCS LCS V/Rec. Analyte Added Result Qualifier Unit D %Rec. Selenium 1.00 1.028 mg/L 103 80.120 Selenium, Dissolved 1.00 1.028 mg/L 103 80.120 Method: 300.0 - Anions, Ion Chromatography Lab Sample ID: MB 600-103918/3 Client Sample ID: Method Blan Matrix: Water Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fe Sulfate 0.137 U 0.500 0.137 mg/L D Prepared Analyzed Dil Fe Lab Sample ID: LCS 600-103918/4 KB MGL (Adj) SDL Unit D Prepared Analyzed Dil Fe Sulfate 0.137 U 0.500 0.137 mg/L Client Sample ID: Lab Control Sampl Lab Sample ID: LCS 600-103918/4 Client Sample ID: Lab Control Sampl Prep Type: Total/N. Matrix: Water Analysis Batch: 103918 Spike LCS LCS %Rec.	Lab Sample ID: LCS 600-103951/2-	Α						С	lient	Sample	ID: Lab Cont	rol S	ample
Analysis Batch: 104043 Prep Batch: 10395 Analyte Spike LCS LCS <thl< td=""><td>Matrix: Water</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Prep Tvp</td><td>e: To</td><td>tal/NA</td></thl<>	Matrix: Water										Prep Tvp	e: To	tal/NA
Spike LCS LCS LCS MRec. Analyte Added Result Qualifier Unit D %Rec. Limits 0 100 100 100 100 100 100 100 80 - 120	Analysis Batch: 104043										Prep Bat	ch: 1	03951
Analyte Added Result Qualifier Unit D %Rec Limits Selenium 1.00 1.028 mg/L 103 80.120 Selenium, Dissolved 1.00 1.028 mg/L 103 80.120 Method: 300.0 - Anions, Ion Chromatography 1.00 1.028 mg/L 103 80.120 Method: 300.0 - Anions, Ion Chromatography Client Sample ID: MB 600-103918/3 Client Sample ID: Method Blan Matrix: Water MB MB Prep Type: Total/N. Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fa Sulfate 0.137 U 0.500 0.137 mg/L D Prepared Analyzed Dil Fa Lab Sample ID: LCS 600-103918/4 Client Sample ID: Lab Control Sampl Prep Type: Total/N. Matrix: Water Analysis Batch: 103918 Spike LCS LCS %Rec.				Spike	LCS	LCS					%Rec.		
Selenium 1.00 1.028 mg/L 103 80 - 120 Selenium, Dissolved 1.00 1.028 mg/L 103 80 - 120 Method: 300.0 - Anions, Ion Chromatography Lab Sample ID: MB 600-103918/3 Matrix: Water Analysis Batch: 103918 Client Sample ID: Method Blan Prep Type: Total/N. MB MB MB Prep Type: Total/N. Sulfate 0.137 U 0.500 0.137 mg/L D Prepared Analyzed 04/12/13 17:55 Dil Fa Lab Sample ID: LCS 600-103918/4 Matrix: Water Analysis Batch: 103918 Spike LCS LCS Spike LCS %Rec.	Analyte			Added	Result	Qualifier	Unit		D	%Rec	Limits		
Selenium, Dissolved 1.00 1.028 mg/L 103 80 - 120 Method: 300.0 - Anions, Ion Chromatography Lab Sample ID: MB 600-103918/3 Matrix: Water Analysis Batch: 103918 Client Sample ID: Method Blan Prep Type: Total/NL Matrix: Water Analyte MB MB Sulfate 0.137 Qualifier MQL (Adj) SDL 0.500 Unit mg/L D Prepared 04/12/13 17:55 Dil Fa Lab Sample ID: LCS 600-103918/4 Matrix: Water Analysis Batch: 103918 Client Sample ID: Lab Control Sample Prep Type: Total/NL	Selenium			1.00	1.028		mg/L		·	103	80 - 120		
Method: 300.0 - Anions, Ion Chromatography Lab Sample ID: MB 600-103918/3 Client Sample ID: Method Blan Matrix: Water Prep Type: Total/N. Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fa Sulfate 0.137 U 0.500 0.137 mg/L D Analyzed Dil Fa Lab Sample ID: LCS 600-103918/4 Client Sample ID: Lab Control Sample Client Sample ID: Lab Control Sample Prep Type: Total/N. Matrix: Water Analysis Batch: 103918 Spike LCS LCS %Rec.	Selenium, Dissolved			1.00	1.028		mg/L			103	80 - 120		
Method: 300.0 - Anions, Ion Chromatography Lab Sample ID: MB 600-103918/3 Matrix: Water Analysis Batch: 103918 Client Sample ID: Method Blan Prep Type: Total/N. Analyte MB MB Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fa Sulfate 0.137 U 0.500 0.137 mg/L D Client Sample ID: Lab Control Sample Lab Sample ID: LCS 600-103918/4 Matrix: Water Analysis Batch: 103918 Client Sample ID: Lab Control Sample Drep Type: Total/N.													
Lab Sample ID: MB 600-103918/3 Matrix: Water Analysis Batch: 103918 Client Sample ID: Method Blan Prep Type: Total/N. MB MB Analyte Result 0.137 Sulfate 0.137 MB MQL (Adj) Sulfate 0.137 U 0.500 O.137 U Matrix: Water Analysis Batch: 103918 Spike LCS LCS %Rec.	Method: 300.0 - Anions, Ion Cl	hromate	ography										
Matrix: Water Prep Type: Total/N. Analysis Batch: 103918 MB Matrix: Batch: 103918 MB Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fa Sulfate 0.137 U 0.500 0.137 mg/L D Analyzed Dil Fa Lab Sample ID: LCS 600-103918/4 U 0.500 0.137 mg/L Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/N. Analysis Batch: 103918 Spike LCS LCS %Rec.	Lab Sample ID: MB 600-103918/3									Client Sa	ample ID: Me	thod	Blank
Analysis Batch: 103918 MB MB Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fa Sulfate 0.137 U 0.500 0.137 mg/L D Od/12/13 17:55 Dil Fa Lab Sample ID: LCS 600-103918/4 Matrix: Water Analysis Batch: 103918 Client Sample ID: Lab Control Sample Prep Type: Total/N	Matrix: Water										Prep Typ	e: To	tal/NA
MB MB MB Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fa Sulfate 0.137 0 0.500 0.137 mg/L D Od/12/13 17:55 Dil Fa Lab Sample ID: LCS 600-103918/4 Matrix: Water Analysis Batch: 103918 Spike LCS LCS Client Sample ID: Lab Control	Analysis Batch: 103918												
Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Dil Fa Sulfate 0.137 U 0.500 0.137 mg/L D Prepared Analyzed Dil Fa Lab Sample ID: LCS 600-103918/4 Matrix: Water Client Sample ID: Lab Control Sample Analysis Batch: 103918 Spike LCS LCS %Rec.	-		MB MB										
Sulfate 0.137 0 0.500 0.137 mg/L 04/12/13 17:55 Lab Sample ID: LCS 600-103918/4 Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/N/ Analysis Batch: 103918 Spike LCS LCS %Rec.	Analyte	Re	sult Qualifier	· MQL (Adj)		SDL Unit		D	Р	repared	Analyzed		Dil Fac
Lab Sample ID: LCS 600-103918/4 Client Sample ID: Lab Control Sampl Matrix: Water Prep Type: Total/N. Analysis Batch: 103918 Spike LCS LCS %Rec.	Sulfate	0.	.137 U	0.500	0	.137 mg/L					04/12/13 17:	55	1
Lab Sample ID: LCS 600-103918/4 Client Sample ID: Lab Control Sample Matrix: Water Prep Type: Total/N, Analysis Batch: 103918 Spike LCS LCS %Rec.													
Matrix: Water Prep Type: Total/N. Analysis Batch: 103918 Spike LCS LCS %Rec.	Lab Sample ID: LCS 600-103918/4							C	lient	Sample	ID: Lab Cont	rol S	ample
Analysis Batch: 103918 Spike LCS LCS %Rec.	Matrix: Water										Prep Typ	e: To	tal/NA
Spike LCS LCS %Rec.	Analysis Batch: 103918												
· ·				Spike	LCS	LCS					%Rec.		
Analyte Added Result Qualifier Unit D %Rec Limits	Analyte			Added	Result	Qualifier	Unit		D	%Rec	Limits		
Sulfate 20.0 20.67 mg/L 103 90 - 110	Sulfate			20.0	20.67		mg/L			103	90 - 110		
	_ 												
Lab Sample ID: 600-71450-1 MS Client Sample ID: LMW-1	Lab Sample ID: 600-71450-1 MS									Cli	ient Sample I	D: LN	/W-17
Matrix: Water Prep Type: Total/N	Matrix: Water										Prep Тур	e: To	tal/NA
Analysis Batch: 103918	Analysis Batch: 103918												
Sample Sample Spike MS MS %Rec.		Sample	Sample	Spike	MS	MS					%Rec.		
Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit		D	%Rec	Limits		
Sulfate 142 1000 13.7 U N mg/L 0 80 - 120	Sulfate	142		1000	13.7	UN	mg/L			0	80 - 120		
Lab Sample ID: 600-71450-1 MSD	Lab Sample ID: 600-71450-1 MSD									CI	ient Sample I	עוים א	/W_17
Matrix: Water Drop Tupo: Tatal/N	Matrix: Wator											0. LI	tal/NA
Analysis Batch: 103918	Analysis Batch: 102018										i ieh i îh	0.10	
Sample Sample Spike MSD MSD %Rec RP	Analysis Daten. 103310	Sample	Sample	Spike	MSD	MSD					%Rec		RbD
Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Lim	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit		п	%Rec	Limits	RPD	Limit
Sulfate 142 1000 947.7 ma/l ma/l 81 80 120 NC 2	Sulfato	142		1000	947 7				_	81	80 120	NC	

Unadjusted Detection Limits

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-71450-1

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Selenium	0.0400	0.00417	mg/L	6010B
Method: 6010B - Metals (ICP) - Di	ssolved			
Analyte	MQL	MDL	Units	Method
Selenium, Dissolved	0.0400	0.00417	mg/L	6010B
General Chemistry				
Analyte	MQL	MDL	Units	Method
Sulfate	0.500	0.137	mg/L	300.0

TestAmerica Houston

QC Association Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

12

Metals

Prep Batch: 103951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-71450-2	PMW-20R	Total/NA	Water	3010A	
600-71450-2	PMW-20R	Dissolved	Water	3010A	
600-71450-3	LMW-21	Total/NA	Water	3010A	
600-71450-3	LMW-21	Dissolved	Water	3010A	
LCS 600-103951/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-103951/1-A	Method Blank	Total/NA	Water	3010A	
Analysis Batch: 10404	3				
Analysia Databy 40404	n				
Analysis Batch: 10404 – Lab Sample ID	3 Client Sample ID	Prep Type	Matrix	Method	Prep Batch
Analysis Batch: 10404 Lab Sample ID 600-71450-2	3 Client Sample ID PMW-20R	Prep Type Total/NA	Matrix Water	<u>Method</u> 6010B	Prep Batch 103951
Analysis Batch: 10404 Lab Sample ID 600-71450-2 600-71450-2	3 Client Sample ID PMW-20R PMW-20R	Prep Type Total/NA Dissolved	Matrix Water Water	Method 6010B 6010B	Prep Batch 103951 103951
Analysis Batch: 10404 - Lab Sample ID 600-71450-2 600-71450-2 600-71450-3	3 Client Sample ID PMW-20R PMW-20R LMW-21	Prep Type Total/NA Dissolved Total/NA	Matrix Water Water Water	Method 6010B 6010B 6010B	Prep Batch 103951 103951 103951 103951
Lab Sample ID 600-71450-2 600-71450-3 600-71450-3	3 Client Sample ID PMW-20R PMW-20R LMW-21 LMW-21	Prep Type Total/NA Dissolved Total/NA Dissolved	Matrix Water Water Water Water	Method 6010B 6010B 6010B 6010B	Prep Batch 103951 103951 103951 103951 103951
Lab Sample ID 600-71450-2 600-71450-3 600-71450-3 LCS 600-103951/2-A	3 Client Sample ID PMW-20R PMW-20R LMW-21 LMW-21 LAb Control Sample	Prep Type Total/NA Dissolved Total/NA Dissolved Total/NA	Matrix Water Water Water Water Water Water	Method 6010B 6010B 6010B 6010B 6010B 6010B	Prep Batch 103951 103951 103951 103951 103951 103951

General Chemistry

Analysis Batch: 103918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-71450-1	LMW-17	Total/NA	Water	300.0	
600-71450-1 MS	LMW-17	Total/NA	Water	300.0	
600-71450-1 MSD	LMW-17	Total/NA	Water	300.0	
600-71450-2	PMW-20R	Total/NA	Water	300.0	
600-71450-3	LMW-21	Total/NA	Water	300.0	
LCS 600-103918/4	Lab Control Sample	Total/NA	Water	300.0	
MB 600-103918/3	Method Blank	Total/NA	Water	300.0	

Lab Sample ID: 600-71450-1

Lab Sample ID: 600-71450-2

Matrix: Water

Matrix: Water

Number	of Analyzeu	Analyst	Lub	
103951	04/15/13 12:02	NER	TAL HOU	
104043	04/16/13 08:35	DCL	TAL HOU	
103951	04/15/13 12:02	NER	TAL HOU	
104043	04/16/13 08:38	DCL	TAL HOU	
103918	04/12/13 19:44	DAW	TAL HOU	
			Lab Sample ID: 600-71450-3	13
			Matrix: Water	
Batch	Prepared			
Number	or Analyzed	Analyst	Lab	
400054	04/45/40 40 00		TALLIOU	

Client Sample ID: LMW-17 Date Collected: 04/11/13 13:00 Date Received: 04/12/13 08:51

B	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре Т	Гуре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA A	Analysis	300.0		10	103918	04/12/13 18:50	DAW	TAL HOU

Client Sample ID: PMW-20R Date Collected: 04/11/13 13:00 Date Received: 04/12/13 08:51

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			103951	04/15/13 12:02	NER	TAL HOU
Total/NA	Analysis	6010B		1	104043	04/16/13 08:35	DCL	TAL HOU
Dissolved	Prep	3010A			103951	04/15/13 12:02	NER	TAL HOU
Dissolved	Analysis	6010B		1	104043	04/16/13 08:38	DCL	TAL HOU
Total/NA	Analysis	300.0		100	103918	04/12/13 19:44	DAW	TAL HOU

Client Sample ID: LMW-21 Date Collected: 04/11/13 14:55 Date Received: 04/12/13 08:51

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			103951	04/15/13 12:02	NER	TAL HOU
Total/NA	Analysis	6010B		1	104043	04/16/13 08:40	DCL	TAL HOU
Dissolved	Prep	3010A			103951	04/15/13 12:02	NER	TAL HOU
Dissolved	Analysis	6010B		1	104043	04/16/13 08:43	DCL	TAL HOU
Total/NA	Analysis	300.0		100	103918	04/12/13 20:02	DAW	TAL HOU

Laboratory References:

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

4/18/2013

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-71450-1

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	08-04-12 *
Louisiana	NELAP	6	01967	06-30-13
Oklahoma	State Program	6	9503	08-31-13
Texas	NELAP	6	T104704223-10-6-TX	10-31-13
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	GULF	10-31-13

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

3. Relindeshed by MUUMAA	1. Responsibled By Date Date Date Date Date Date Date Date	Tym Around Time Required	Possible Hazard Identification		LMW-21 A INN	Lmw-21 144.	UNW-21 144	Amw-20R 1355	PMW-20R 135	PMW-20R 135:	Lmw-17 4-11-13 130	Sample I.D. No. and Description (Containers for each sample may be combined on one line) Date Time	Contract/Purchase Order/Quote No.	Project Name and Location (State) EXLOE - FRUSCO LANDFUL Ca	Bound Rick R 7844 Sin	Address 2201 DIVELE CREEK DR 5	Cilem PBW Pro	Custouy necoru Dr.	Chain of Ter	2 3 4 5 6 7 8 9 10 11
te Time 3. Received By	ite 1-11-1.3 Time 1. Received By 1. Receive	OC Requirements (Specify Other	Sample Disposal Nown Beturn To Client Disposal By Lab		XXX	X X X	X	XXX	X	X	X	6 Alir Aqueous Sed. Soil Unpres. H2SO4 HNO3 HCI NaOH ZnAc/ NaOH	Matrix Containers & Preservatives	arrier/Waybill Number	te Contact	Septone Number (Area Code)/Fax Number	roject Manager ERIC PASTOR	rinking Water? Yes□ No□ THE L	Inperature on Receipt	12 13 14 15 16
	Gre	<i>V</i>	Archive For Months longer than 1 mon		X	X	×	X	X	×		SUL SEL	ENIL	E /M - 1 /M -	more space is needed)	Lab Number	a dulla	EADER IN ENVIRONMENTAL TESTING	stAmerica	
Date Time ref / 12/13 2287	Date		essed if samples are retained th)			stody	sn 🔿 J	o nis	240 (971.		9	Conditions of Receip	Special Instructions/		Page of	Chain of Custody Number 225377			

,

1111

Client: Pastor, Behling & Wheeler LLC

Login Number: 71450 List Number: 1

Creator: Pulumbarit, Josh

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.0
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.	True	

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Job Number: 600-71450-1

List Source: TestAmerica Houston



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: 600-71532-1

Client Project/Site: Exide Recycling Center, Frisco TX Projec

For:

Pastor, Behling & Wheeler LLC 2201 Double Creek Dr Suite 4004 Round Rock, Texas 78664

Attn: Eric Pastor

Authorized for release by: 4/25/2013 12:10:04 PM Donnie Combs Data Review Analyst I donnie.combs@testamericainc.com

Designee for

Sachin Kudchadkar Project Manager II sachin.kudchadkar@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: 600-71532 Exide Recycling Center, Frisco TX Project Project Name/Number: This Data Package consists of: This signature page, the laboratory review checklist, and the following Reportable Data: X R1 Field Chain-of-Custody Form X R2 Sample Identification Cross-reference; X 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). X R4 Surrogate Recovery Data including: a) Calculated recovery (%R), and b) The laboratory's surrogate QC limits. X R5 Test Reports/Summary Forms for Blank Samples; Test Reports/Summary Forms for Laboratory Control Samples (LCSs) including: X R6 a) LCS spiking amounts, b) Calculated %R for each analyte, and d) The laboratory's LCS QC limits Test Reports for Matrix Spike/Matrix Spike Duplicates (MS/MSDs) including: X R7 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

Laboratory analytical duplicates (if applicable) recovery and precision, including: X R8

a) the amount of analyte measured in the duplicate,

b) the calculated RPD, and

c) the laboratory's QC limits for analytical duplicates.

X R9 List of method quantitation limit (MQL) and detectability check sample results for each analyte for each method and matrix;

X 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.

Donnie Combs Name (printed)

Quality Control Assistant

Official Title (printed)

Loa 4/25/13

Signature

Date

A	oper	ndix A (cont'd): Laboratory Review Checkl	ist: Reportable Data							
Laboratory Name: TestAmerica-Houston LRC Date: 04/17/13										
Proi	Project Name: Exide Recycling Center, Frisco TX Projec Laboratory Job Number: 600-71532									
n		Name: DDC	Due \mathbf{D}_{res} be real problem (a) (00, 104022). See	6-4-						
Rev	reviewer Name: BDG [Prep Batch Number(s): 600-104032 – Suns						1	5		
#1	A ²	Description			No	NA ³	NR⁺	ER#'		
		Chain-of-custody (C-O-C)								
R1	OI	Did samples meet the laboratory's standard conditions of sar	nple acceptability upon receipt?	Х						
		Were all departures from standard conditions described in an	exception report?			Х				
R2	OI	Sample and quality control (QC) identification								
		Are all field sample ID numbers cross-referenced to the labo	ratory ID numbers?	X						
		Are all laboratory ID numbers cross-referenced to the corres	ponding QC data?	X						
R3	OI									
		Were all samples prepared and analyzed within holding time	s?	X						
		Other than those results < MQL, were all other raw values by	racketed by calibration standards?	X						
		Were calculations checked by a peer or supervisor?	0	X		-				
		Were all analyte identifications checked by a peer or supervi	sor?	X		-				
		Were sample detection limits reported for all analytes not de		X		v				
		Were all results for soil and sediment samples reported on a	dry weight basis?	_	-	X				
		Were % moisture (or solids) reported for all soli and sedimer	nt samples?	-		X				
		Were bulk soil/solid samples for volatile analysis extracted v	with methanol per SW846 Method 5035?	-		X				
D 4	0	If required for the project, TICs reported?				Λ				
K4	0	Surrogate recovery data				v	1			
		Were surrogates added prior to extraction?	aboratory OC limita?							
R5	OI	Test reports/summery forms for blank samples				Λ				
K3	01	Were appropriate type(s) of blanks analyzed?								
		Were blanks analyzed at the appropriate frequency?								
		Were method blanks taken through the entire analytical proc	ere method blanks taken through the entire analytical process, including preparation and, if							
		applicable cleanup procedures?	ess, meruding preparation and, n	Λ						
		Were blank concentrations < MOL?		x						
R6	OI	Laboratory control samples (LCS):								
	01	Were all COCs included in the LCS?		X	1	1				
		Was each LCS taken through the entire analytical procedure.	including prep and cleanup steps?	X						
		Were LCSs analyzed at the required frequency?		Х						
		Were LCS (and LCSD, if applicable) %Rs within the laborat	tory OC limits?	Х						
		Does the detectability check sample data document the labor	atory's capability to detect the COCs at	Х	1	1				
		the MDL used to calculate the SDLs?								
		Was the LCSD RPD within QC limits?				Х				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data								
		Were the project/method specified analytes included in the M	AS and MSD?	Х						
		Were MS/MSD analyzed at the appropriate frequency?		Х						
		Were MS (and MSD, if applicable) %Rs within the laborator	ry QC limits?				Х	1		
		Were MS/MSD RPDs within laboratory QC limits?					Х	1		
R8	OI	Analytical duplicate data								
		Were appropriate analytical duplicates analyzed for each mat	trix?			Х				
		Were analytical duplicates analyzed at the appropriate freque	ency?			Х				
		Were RPDs or relative standard deviations within the laborat	tory QC limits?			X				
R9	OI	Method quantitation limits (MQLs):								
		Are the MQLs for each method analyte included in the labor	atory data package?	X						
		Do the MQLs correspond to the concentration of the lowest n	non-zero calibration standard?	Х						
		Are unadjusted MQLs and DCSs included in the laboratory of	lata package?	X						
R10	OI	Other problems/anomalies								
		Are all known problems/anomalies/special conditions noted	in this LRC and ER?	X	<u> </u>	┨───				
		Was applicable and available technology used to lower the S	DL to minimize the matrix interference	X				2		
		arrects on the sample results?	term Arene ditest: D C d	17		<u> </u>				
		is the laboratory NELAC-accredited under the Texas Labora	tory Accreditation Program for the	X						
I	1	analytes, mainces and methods associated with this labor	atory uata package?	nort(c)	L Tear	 no : 4 -	ntific	1 br 41-		

letter "S" should be retained and made available upon request for the appropriate retention period.

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 NA = Not applicable;

 4. NR = Not reviewed;
 5. ER# = Exception Re ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

A1

Laboratory Name: TestAmerica-Houston LRC Date: 04/17/13								
Project Name: Exide Recycling Center, Frisco TX Projec Laboratory Job Number: 600-71532								
Res	viewei	Name: BDG	$r_{\rm p}$ Batch Number(s): 600-104032 – Si	ulfate	<u>`</u>			
				Voc	No	NIA ³	ND ⁴	ED
#	A			res	NO	NA	INK	EK+
51	01	Initial calibration (ICAL)		37				
		Were response factors and/or relative response factors for each and	alyte within QC limits?	X				_
		Were percent RSDs or correlation coefficient criteria met?		X				_
		Was the number of standards recommended in the method used to	r all analytes?	X				_
		Were all points generated between the lowest and highest standard	l 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	7) and continuing calibration					
		Was the CCV analyzed at the method-required frequency?		Х				
		Were percent differences for each analyte within the method-requi	ired QC limits?	Х				
		Was the ICAL curve verified for each analyte?		Х				
		Was the absolute value of the analyte concentration in the inorgan	ic CCB < MDL?	Х				
S3	0	Mass spectral tuning:						
		Was the appropriate compound for the method used for tuning?				Х		
		Were ion abundance data within the method-required QC limits?				Х		
S4	0	Internal standards (IS):						
		Were IS area counts and retention times within the method-require			Х			
S5	OI	Raw data (NELAC section 5.5.10)						
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?						
		Were data associated with manual integrations flagged on the raw	data?			Х		
S6	0	Dual column confirmation						
		Did dual column confirmation results meet the method-required Q	C?			Х		
S7	0	 Tentatively identified compounds (TICs): 						
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?						
S8	Ι	Interference Check Sample (ICS) results:						
		Were percent recoveries within method QC limits?			Х			
S9	Ι	Serial dilutions, post digestion spikes, and method of standard	additions					
		Were percent differences, recoveries, and the linearity within the (OC limits specified in the method?			X		
S10	OI	Method detection limit (MDL) studies						
		Was a MDL study performed for each reported analyte?		Х				
		Is the MDL either adjusted or supported by the analysis of DCSs?		X				
S11	OI	Proficiency test reports:						
	01	Was the laboratory's performance acceptable on the applicable pro	ficiency 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						
	01	Are the procedures for compound/analyte identification document	ed?	X				
S14	OI	Demonstration of analyst competency (DOC)						
<u></u>		Was DOC conducted consistent with NFLAC Chapter 5?		x				
		Is documentation of the analyst's competency un-to-date and on fi	le?	x		1	1	+
S 15	OI	Verification/validation documentation for methods (NFLAC C	Thanter 5)	Λ				
512		Are all the methods used to generate the data documented varified	and validated where applicable?	v				
<u>614</u>	OT	I above to memory at and and a part time time the data documented, verified	, and vanualed, where applicable?	Λ				-
310		Laboratory standard operating procedures (SUPS):	49	v				
		Are laboratory SOP's current and on the for each method performe	su :	А				
	•	1 Items identified by the letter "R" should be included in the laborator	y data package submitted to the TCEQ in	the T	RRP	-requir	ed repo	ort(s).

NA = Not applicable.

NR = Not Reviewed.

2

3

4

5

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

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports						
Laborat	tory Name: TestAmerica-Houston	LRC Date: 04/17/13				
Project Name: Exide Recycling Center, Frisco TX Projec		Laboratory Job Number: 600-71532				
Reviewer Name: BDG		Prep Batch Number(s): 600-104032 – Sulfate				
ER # ¹	DESCRIPTION					
1	The laboratory selected a sample from another group to perform as the MS/MSD.					
2	The Sulfate SDLs for samples $600-71450 - 1$, 2, 3, 4 and 5 were elevated due to the high concentrations of this analyte.					

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

A	pper	ndix A (cont'd): Laboratory Review Checklis	t: Reportable Data					
Laboratory Name: TestAmerica-Houston LRC Date: 04/17/13								
Project Name: Exide Recycling Center, Frisco TX Laboratory Job Number: 600-71532								
Reviewer Name: TWR Prep Batch Number(s): 600-103951- ICP								
$=$ $\frac{1}{4}$ $\frac{1}{4}$ Description					No	NA ³	NR^4	ER# ⁵
	Л	Chain-of-custody (C-O-C)		105	110	1.1.1	1.11	LIC
R1	ОТ	Did samples meet the laboratory's standard conditions of samp	la accontability upon receipt?	v				
	01	Were all departures from standard conditions described in an ex-	xception report?	Λ		x		
R2	OI	Sample and quality control (QC) identification				Λ		
	01	Are all field sample ID numbers cross-referenced to the laborat	ory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the correspondence	nding QC data?	X				
R3	OI	Test reports						
		Were all samples prepared and analyzed within holding times?				1		
		Other than those results < MQL, were all other raw values brac	keted by calibration standards?	Х				
		Were calculations checked by a peer or supervisor?		Х				
		Were all analyte identifications checked by a peer or supervisor	r?	Х				
		Were sample detection limits reported for all analytes not detection	eted?	Х				
		Were all results for soil and sediment samples reported on a dry	y weight basis?			Х		
		Were % moisture (or solids) reported for all soil and sediment s	samples?			Х		
		Were bulk soil/solid samples for volatile analysis extracted with methanol per SW846 Method 5035?				X		
D 4		If required for the project, TICs reported?				X		
R4	0	Surrogate recovery data				v		
		Were surrogates added prior to extraction?	- meterine OC lineite?			X		
D5	OI	Were surrogate percent recoveries in all samples within the laboratory QC limits?				Λ		
KS	01	Wara appropriate type(s) of blanks analyzed?		v				
		Were blanks analyzed at the appropriate frequency?		X				
		Were method blanks taken through the entire analytical process	s including preparation and if	X				
		applicable, cleanup procedures?	, menualing proparation and, if					
	Were blank concentrations < MQL?			Х				
R6	OI	Laboratory control samples (LCS):						
		Were all COCs included in the LCS?		Х				
		Was each LCS taken through the entire analytical procedure, in	cluding prep and cleanup steps?	Х				
		Were LCSs analyzed at the required frequency?		Х				
		Were LCS (and LCSD, if applicable) %Rs within the laborator	y QC limits?	Х				
	Does the detectability check sample data document the laboratory's capability to detect the COC		ory's capability to detect the COCs at	Х				
		the MDL used to calculate the SDLs?						
D7		Was the LCSD RPD within QC limits?		_	<u> </u>	X		
к/	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data	and MSD9	v				
		Were MS/MSD analyzed at the appropriate frequency?	and MSD?					
		Were MS (and MSD, if applicable) % Rs within the laboratory (OC limits?	Λ			x	1
		Were MS/MSD RPDs within laboratory OC limits?	QC mints:				X	1
R8	OI	Analytical duplicate data						1
	01	Were appropriate analytical duplicates analyzed for each matrix	x?	X		1		
		Were analytical duplicates analyzed at the appropriate frequence	xv?	X				
		Were RPDs or relative standard deviations within the laborator	y QC limits?				Х	2
R9	OI	Method quantitation limits (MQLs):						
		Are the MQLs for each method analyte included in the laborate	ory data package?	Х				
		Do the MQLs correspond to the concentration of the lowest nor	n-zero calibration standard?	Х				
		Are unadjusted MQLs and DCSs included in the laboratory dat	a package?	Х				
R10	OI	Other problems/anomalies						
		Are all known problems/anomalies/special conditions noted in	this LRC and ER?	Х		<u> </u>		
		Was applicable and available technology used to lower the SDI affects on the sample results?	L to minimize the matrix interference	X				
		Is the laboratory NELAC-accredited under the Texas Laborator	ry Accreditation Program for the	X				
 I analytes, matrices and methods associated with this laboratory data package? Items identified by the letter "R" must be included in the laboratory data package submitted in the 			ory data package? a package submitted in the TRRP-required re	port(s)). Iter	ns ide	ntifiea	l by the

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 NA = Not applicable;

 4. NR = Not reviewed;
 5. ER# = Exception Re ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Page 7 of 23

Aŗ	ppen	dix A (cont'd): Laboratory Review Checklist: R	eportable Data					
Lab	Laboratory Name: TestAmerica-Houston LRC Date: 04/17/13							
Pro	Project Name: Exide Recycling Center, Frisco TX Laboratory Job Number: 600-71532							
Rev	viewe	r Name: TWR Prep	Batch Number(s): 600-103951-1	СР				
#1	$\#^1 \land A^2$ Description			Yes	No	NA ³	NR^4	ER# ⁵
S 1	OI Initial calibration (ICAI)			105	110			Dit.
	01	Were response factors and/or relative response factors for each analy	te within OC limits?			x		
		Were percent RSDs or correlation coefficient criteria met?	te within QC limits:			X		
		Was the number of standards recommended in the method used for a	ll analytes?	v		Λ		
		Were all points generated between the lowest and highest standard us	sed to calculate the curve?	1		x		
		Are ICAL data available for all instruments used?	sed to calculate the curve?	x		1		
		Has the initial calibration curve been verified using an appropriate se	cond source standard?	X				
S 2	OI	Initial and continuing calibration verification (ICCV and CCV) s	and continuing calibration	11	CP Yes No NA ³ NR ⁴ EF I I I I I X I I I X I I I X I I X I X I X I X I X I I I X I I I X I I I X I I I X I I I X I I I X I I I X I I I X I I I X I I I X I I I X I I I X I I I X I I I X I I I X I I I X I I I X I I I X I I X I I			
	01	Was the CCV analyzed at the method-required frequency?	and continuing canoration	x				
		Were percent differences for each analyte within the method-required	d OC limits?	X				
		Was the ICAL curve verified for each analyte?	d QC mints:	X				
		Was the absolute value of the analyte concentration in the inorganic t	CCB < MDL 2	Y				
\$3	0	Was the absolute value of the analyte concentration in the morganic v	CCB < MDL!	Λ				
55		Was the appropriate compound for the method used for tuning?				v		
		Were ion abundance data within the method required OC limits?				X		
S 4	0	Internal standards (IS):				Λ		
57	0	Internal standards (IS):						
S 5	OI	were is area counts and retention times within the method-required QC limits?						
	01	Kaw data (NELAU Section 5.5.10) Were the raw data (for avample, chromatograms, spectral data) raviowed by an analyst?						
		Were data associated with manual integrations flagged on the raw da	to?	Λ		v		
56	0	Dual column confirmation				Λ		
50		Did dual column confirmation results meet the method required ΩC^{2})			v		
\$7	0	Tontatively identified compounds (TICe):				Λ		
57	0	If TICs were requested, were the mass spectra and TIC data subject t	o appropriate checks?			v		
S 8	T	Interference Check Sample (ICS) results:				Λ		
50	1	Were percent recoveries within method OC limits?		x				
S 9	т	Seriel dilutions, nost digestion spikes, and method of standard ad	Iditions	Λ				
57	1	Were percent differences, recoveries, and the linearity within the OC	limits specified in the method?				v	3
S10	OI	Method detection limit (MDL) studies	mints speemed in the method:					5
010	01	Was a MDL study performed for each reported analyte?		x				
		Is the MDL either adjusted or supported by the analysis of DCSs?		Y				
S 11	OI	Proficiency test reports:		Λ				
511		Was the laboratory's performance acceptable on the applicable profic	viency tests or evaluation studies?	x				
S12	OI	Standards documentation	hency tests of evaluation studies.	11				
	01	Are all standards used in the analyses NIST-traceable or obtained fro	om other appropriate sources?	x				
S13	OI	Compound/analyte identification procedures	in other appropriate sources:	Λ				
010	01	Are the procedures for compound/analyte identification documented	9	x				
S14	OI	Demonstration of analyst competency (DOC)	•	Λ				
511	01	Was DOC conducted consistent with NELAC Chapter 5?		x				
		Is documentation of the analyst's competency up to date and on file?)	X			+	
S15	OT	Verification/validation documentation for methods (NFLAC Che	anter 5)	Δ				
~10		Are all the methods used to generate the data documented verified a	and validated where applicable?	x			1	
\$16	OT	I abaratory standard anarating presedures (SODs).	and validated, where applicable:					
510		Are laboratory SOPs current and on file for each method performed?		v				
		a laboratory SOI's current and on the for each method performed?		Λ				
		1 Items identified by the letter "R" should be included in the laboratory d Items identified by the letter "S" should be retained and made available	lata package submitted to the TCEQ in e upon request for the appropriate reten	the T	RRP- eriod	-requir	ed repo	rt(s).

NR = Not Reviewed.

2 3 4

5

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

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable). NA = Not applicable.
Appendix A (cont'd): Laboratory Review Checklist: Exception Reports							
Laboratory Name: TestAmerica-Houston LRC Date: 04/17/13							
Project	Name: Exide Recycling Center, Frisco TX	Laboratory Job Number: 600-71532					
Review	ver Name: TWR	Prep Batch Number(s): 600-103951- ICP					
ER # ¹	DESCRIPTION	·					
1	The laboratory selected a sample from another gro	oup to perform as the MSs/MSDs					
2	The laboratory selected a sample from another group to perform as the DUP.						
3	The laboratory selected a sample from another group to perform as the PDS and SD.						

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: Water Method: 300.0, 9056 Preparation: N/A Date Analyzed: 01/29/2013 Date Prepared: 01/29/2013 TALs Batches: N/A Units: mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Fluoride	0.08	0.075	0.354	0.2
Chloride	0.127	0.1	1.02	0.4
Nitrite	0.105	0.05	0.347	0.2
Bromide	0.071	0.2	0.307	0.2
Nitrate	0.032	0.04	0.476	0.2
Orthophosphate	0.117	0.25	0.305	0.2
Sulfate	0.137	0.15	0.256	0.4

Detection Check Standard

Matrix:	Water			
Method:	200.7/6010			
Preparation:	200.7P/3010			
Date Analyzed:	3/29/2013			
Date Prepared:	3/28/2013			
Instrument:	Thermo 6500			
TALs Batches:	102868, 10275	5p		
Units:	mg/L			
Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.0177	0.5
Antimony	0.0063	0.01	0.0105	0.05
Arsenic	0.0033	0.01	0.0077	0.01
Barium	0.0022	0.005	0.0026	0.02
Beryllium	0.00134	0.002	0.0042	0.005
Boron	0.0077	0.02	0.0193	0.2
Cadmium	0.00073	0.001	0.001	0.005
Calcium	0.022	0.05	0.0583	1
Chromium	0.0016	0.002	0.0037	0.01
Cobalt	0.00063	0.001	0.0012	0.01
Copper	0.0014	0.002	0.0012	0.01
Iron	0.087	0.1	0.1011	0.4
Lithium	0.0024	0.005	0.0043	0.2
Lead	0.0029	0.005	0.005	0.01
Selenium	0.0042	0.01	0.0083	0.04
Manganese	0.00084	0.002	0.002	0.01
Molybdenum	0.0027	0.005	0.0048	0.01
Nickel	0.00179	0.005	0.0043	0.01
Silver	0.0012	0.0025	0.0024	0.01
Sodium	0.02	0.05	0.0465	1
Strontium	0.0005	0.001	0.001	0.005
Thallium	0.0078	0.02	0.0184	0.03
Tin	0.0028	0.005	0.0049	0.01
Titanium	0.0011	0.002	0.0023	0.01
Vanadium	0.0017	0.002	0.0048	0.01
Zinc	0.0022	0.005	0.0065	0.01

Job ID: 600-71532-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative 600-71532-1

Comments

No additional comments.

Receipt

The samples were received on 4/13/2013 10:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.0° C.

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Nethod	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TestAmerica Houston

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-71532-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-71532-1	LMW-9	Water	04/12/13 07:55	04/13/13 10:25
600-71532-2	LMW-8	Water	04/12/13 08:20	04/13/13 10:25
600-71532-3	LMW-22	Water	04/12/13 08:45	04/13/13 10:25
600-71532-4	LMW-5	Water	04/12/13 09:15	04/13/13 10:25
600-71532-5	MW-28	Water	04/12/13 09:30	04/13/13 10:25

TestAmerica Houston

Client Sample Results

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-71532-1

Client Sample ID: LMW-9							Lab Sam	ple ID: 600-7	1532-1
Date Collected: 04/12/13 07:55								Matrix	: Water
Date Received: 04/13/13 10:25									
Method: 6010B - Metals (ICP)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.944		0.0400	0.00417	mg/L		04/15/13 12:02	04/16/13 08:45	1
Method: 6010B - Metals (ICP) - Dis	solved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium, Dissolved	0.844		0.0400	0.00417	mg/L		04/15/13 12:02	04/16/13 08:48	
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1770		50.0	13.7	mg/L			04/15/13 14:47	100
Client Sample ID: LMW-8							Lab Sam	ple ID: 600-7	1532-2
Date Collected: 04/12/13 08:20								Matrix	: Water
Date Received: 04/13/13 10:25									
Method: 6010B - Metals (ICP)									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.00550	J	0.0400	0.00417	mg/L		04/15/13 12:02	04/16/13 08:50	1
Method: 6010B - Metals (ICP) - Dis	solved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium, Dissolved	0.00560	J	0.0400	0.00417	mg/L		04/15/13 12:02	04/16/13 08:53	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	130		5.00	1.37	mg/L			04/15/13 16:55	10
Client Sample ID: LMW-22							Lab Sam	ple ID: 600-7	1532-3
Date Collected: 04/12/13 08:45								Matrix	: Wate
Date Received: 04/13/13 10:25									
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	99.0		5.00	1.37	mg/L			04/15/13 17:13	10
Client Sample ID: LMW-5							Lab Sam	ple ID: 600-7	1532-4
Date Collected: 04/12/13 09:15								Matrix	: Wate
Date Received: 04/13/13 10:25									
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	157		50.0	13.7	mg/L			04/15/13 16:18	100
Client Sample ID: MW-28							Lab Sam	ple ID: 600-7	1532-5
Date Collected: 04/12/13 09:30								Matrix	: Wate
Date Received: 04/13/13 10:25									
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	174		50.0	13.7	mg/L			04/15/13 16:37	100

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Qualifiers

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.	0
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	9
%R	Percent Recovery	
CNF	Contains no Free Liquid	
DER	Duplicate error ratio (normalized absolute difference)	
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	13
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
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)
method.	00100	moturo	

Lab Sample ID: MB 600-103951/1-A										Client Sa	mple ID: Metho	d Blank
Matrix: Water											Prep Type: 1	otal/NA
Analysis Batch: 104043											Prep Batch	103951
-	MB	MB										
Analyte	Result	Qualifier	MQL (Adj)		SDL	Unit		D	Р	repared	Analyzed	Dil Fac
Selenium	0.00417	U	0.0400	0.0	0417	mg/L			04/1	5/13 12:02	04/16/13 08:31	1
Selenium, Dissolved	0.00417	U	0.0400	0.0	0417	mg/L			04/1	5/13 12:02	04/16/13 08:31	1
_ Lab Sample ID: LCS 600-103951/2-A								с	lient	Sample	ID: Lab Control	Sample
Matrix: Water											Prep Type: 1	otal/NA
Analysis Batch: 104043											Prep Batch	103951
-			Spike	LCS	LCS						%Rec.	
Analyte			Added	Result	Qual	ifier	Unit		D	%Rec	Limits	
Selenium			1.00	1.028			mg/L			103	80 - 120	
Selenium, Dissolved			1.00	1.028			mg/L			103	80 - 120	
Method: 300.0 - Anions, Ion Chro Lab Sample ID: MB 600-104032/3 Matrix: Water	omatogr	aphy								Client Sa	Imple ID: Metho	d Blank
Analysis Batch: 104032											Fiep Type.	Utal/INA
Analysis Datch. 104032	мв	мв										
Analyte	Result	Qualifier	MQL (Adi)		SDL	Unit		D	Р	repared	Analvzed	Dil Fac
Sulfate	0.137	U	0.500	(0.137	mg/L				•	04/15/13 12:04	1
Lab Sample ID: LCS 600-104032/4								С	lient	Sample	ID: Lab Control	Sample
Matrix: Water											Prep Type: 1	otal/NA
Analysis Batch: 104032												
			Spike	LCS	LCS						%Rec.	
Analyte			Added	Result	Qual	ifier	Unit		D	%Rec	Limits	
Sulfate			20.0	20.42			mg/L			102	90 _ 110	

Unadjusted Detection Limits

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-71532-1

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Selenium	0.0400	0.00417	mg/L	6010B
Method: 6010B - Metals (ICP) - Di	ssolved			
Analyte	MQL	MDL	Units	Method
Selenium, Dissolved	0.0400	0.00417	mg/L	6010B
General Chemistry				
Analyte	MQL	MDL	Units	Method
Sulfate	0.500	0.137	mg/L	300.0

TestAmerica Houston

QC Association Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

12

Metals

Pre	bВ	atc	h:	10	39	51
		alu	•••		~~	•••

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-71532-1	LMW-9	Total/NA	Water	3010A	
600-71532-1	LMW-9	Dissolved	Water	3010A	
600-71532-2	LMW-8	Total/NA	Water	3010A	
600-71532-2	LMW-8	Dissolved	Water	3010A	
LCS 600-103951/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-103951/1-A	Method Blank	Total/NA	Water	3010A	
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
Lah Sampla ID	Client Semple ID	Bron Tuno	Motrix	Mathod	Bron Botob
600-71532-1	LMW-9	Total/NA	Water	6010B	103951
600-71532-1	LMW-9	Dissolved	Water	6010B	103951
600-71532-2	LMW-8	Total/NA	Water	6010B	103951
600-71532-2	LMW-8	Dissolved	Water	6010B	103951
LCS 600-103951/2-A	Lab Control Sample	Total/NA	Water	6010B	103951
MB 600-103951/1-A	Method Blank	Total/NA	Water	6010B	103951

General Chemistry

Analysis Batch: 104032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-71532-1	LMW-9	Total/NA	Water	300.0	
600-71532-2	LMW-8	Total/NA	Water	300.0	
600-71532-3	LMW-22	Total/NA	Water	300.0	
600-71532-4	LMW-5	Total/NA	Water	300.0	
600-71532-5	MW-28	Total/NA	Water	300.0	
LCS 600-104032/4	Lab Control Sample	Total/NA	Water	300.0	
MB 600-104032/3	Method Blank	Total/NA	Water	300.0	

Slient Sampi		9						Lab Sample I	D: 600-71532-1
ate Conected: ate Received:	04/12/13 07:5	25							
-	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3010A			103951	04/15/13 12:02	NER	TAL HOU	
Total/NA	Analysis	6010B		1	104043	04/16/13 08:45	DCL	TAL HOU	
Dissolved	Prep	3010A			103951	04/15/13 12:02	NER	TAL HOU	
Dissolved	Analysis	6010B		1	104043	04/16/13 08:48	DCL	TAL HOU	
Total/NA	Analysis	300.0		100	104032	04/15/13 14:47	DAW	TAL HOU	
lient Sampl	e ID: LMW-	8						Lab Sample I	D: 600-71532-2
ate Collected: ate Received:	: 04/12/13 08:2 04/13/13 10:2	20 25							Matrix: Water
_	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3010A			103951	04/15/13 12:02	NER	TAL HOU	
I otal/NA	Analysis	6010B		1	104043	04/16/13 08:50	DCL	TAL HOU	
Dissolved	Prep	3010A			103951	04/15/13 12:02	NER	TAL HOU	
Dissolved	Analysis	6010B		1	104043	04/16/13 08:53	DCL	TAL HOU	
Total/NA	Analysis	300.0		10	104032	04/15/13 16:55	DAW	TAL HOU	
lient Sampl	le ID: LMW-	22						Lab Sample I	D: 600-71532-3
ate Collected:	. 04/12/13 08:4	45							Matrix: Water
Date Received:	04/13/13 10:2	25							
-	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	300.0		10	104032	04/15/13 17:13	DAW	TAL HOU	
Client Sampl	le ID: LMW-	5						Lab Sample I	D: 600-71532-4
Date Collected:	. 04/12/13 09:1	15							Matrix: Water
ate Received:	04/13/13 10:2	25							
_	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	300.0		100	104032	04/15/13 16:18	DAW	TAL HOU	
	le ID: MW-2	8						Lab Sample I	D: 600-71532-5
Client Sampl								-	Matrix: Water
Client Sampl	04/12/13 09:3	30							
Client Sampl Date Collected: Date Received:	: 04/12/13 09:3 04/13/13 10:2	30 25							
Client Sampl Date Collected: Date Received:	04/12/13 09:3 04/13/13 10:2 Batch	30 25 Batch		Dilution	Ratch	Prenared			
Client Sampl Date Collected: Date Received:	: 04/12/13 09:: 04/13/13 10:2 Batch Type	30 25 Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analvzed	Analvst	Lab	

Laboratory References:

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

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-71532-1

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	08-04-12 *
Louisiana	NELAP	6	01967	06-30-13
Oklahoma	State Program	6	9503	08-31-13
Texas	NELAP	6	T104704223-10-6-TX	10-31-13
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	GULF	10-31-13

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

TestAmerica Houston

3. Helinquismed by WWCWWC	2. Heminiques no Bly	A Relingested By	14. 24 Hours 14. 48 Hours 7 Days 14.	Hossible Hazard Identification Non-Hazard				MM-28	LMW-S	Lmw-22	Lmw-8	Lnu-9	Sample I.D. No. and Description (Containers for each sample may be combined on one line	Contract Purchase Order/Quote No.	EXIDE KEISCO- LANDFLU	Kound Rock R	2201 Double creenc DR	Client PW	TAL-4124 (1007)	Chain of Custody Becord	
Mare Jane 3. Hecene	4/12/13 1505 / Hecept	Date 412-13 110 7. Receive	Days 21 Days Other	Poison B Unknown Return To Client Dispose				4 0930	X SIBO	084S	X 0230	4-12-13 0755 X	e Date Time Air Aqueous Sed. Soll Unpres. H2SO4 HNO3	Matrix Conta Prese	Carner/Waybill Number	The Contact Lab Contact	lelephone Number (Area Code)/Fax Number	Project Manager ERIC PASTOR	Drinking Water? Yes No	Temperature on Receipt	1
ed by	Welfre		irements (Speciny)	al By Lab Archive For Months longer than 1 n					×.	×	XXX	XXX	HCI NaOH ZNAC/ SEL SEL SUL	ainers & Niller	11A- 11A-1 DE	Analysis (Attach list if Smore space is needed)		e 4-12-13	THE LEADER IN ENVIRONMENTAL TESTING	lestAmerica	•
Date Inne	YR S SOT	Hiz/13 Time		ssessed if samples are retained onth)			Λpc	D C Laste		35 C	:9LZ-	009	- - - - - - - - - - - - - - - - - - -	Conditions of Receipt	Special Instructions/		Page of	Chain of Custody Number 243410	4/05	/0040	

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Client: Pastor, Behling & Wheeler LLC

Login Number: 71532 List Number: 1 Crootor: Bulumbarit Losh

Creator:	Pulumbarit,	Josn

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.0
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.	True	

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Job Number: 600-71532-1

List Source: TestAmerica Houston

DATA USABILITY SUMMARY

SITE:	Exide Former Operating Plant Frisco, Texas	
CLIENT:	Pastor, Behling & Wheeler, LLC (PBW) Round Rock, Texas	
EVENT:	Groundwater Sampling – April 2013 and May 2013	
INTENDED USE:	Affected Property Assessment	
LABORATORY:	TestAmerica – Houston, TX TLAP Certification T104704223 Work Order: 600-71309-1, 600-71389-1, 600-73081-1	
TESTS/ METHODS:	Total Metals (Cd, Pb)	SW846 3010A/6010B
	Dissolved Metals (Cd, Pb)	SW846 3010A/6010B
	Sulfate (SO4)	EPA 300.0
	Polynuclear Aromatic Hydrocarbons (PAH)	SW846 3501C/8270C LL (18 analytes)
	Total Petroleum Hydrocarbons (TPH)	TX 1005 (4 C-ranges)
SAMPLES:	16 groundwater samples, 1 field duplicate, 2 laboratory (see Table 1 for a complete listing)	MS/MSD

QAA completed a third-party 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).

All samples collected during the event were reviewed. QAA completed the review using the following laboratory and project submittals:

- Laboratory reportable data as defined in TRRP-13;
- Laboratory review checklists (LRCs) 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, QAA used the LRCs to evaluate the following QC parameters:

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

Criteria used for the data usability review are as follows:

- Inorganics: 70-130% spike recovery (and not less than 30% or data is rejected) and <u>+MQL</u> difference or 30% RPD (for laboratory duplicates) as recommended in TRRP-13
- Organics: 60-140% spike recovery (and not less than 10% or data is rejected) and <u>+</u>MQL difference or 40% RPD (for laboratory duplicates) as recommended in TRRP-13
- Groundwater Samples: <u>+</u> 2x MQL difference (if either result is less than 5x MQL) or 30% 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 form except for 1-Methylnaphthalene by SW-846 8270, which is reported for one aqueous sample. The TCEQ does not offer accreditation for this analyte, in this matrix, analyzed by this method. The reviewer qualified the result for 1-Methylnaphthalene as

DATA USABILITY SUMMARY

not offered for accreditation (X7). 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 1 to this DUS.

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 LRCs, an MDL study was performed for each analyte and the MDLs were checked for reasonableness. The levels of required performance (LORPs) have been established by PBW as the lower of the TRRP residential Tier 1 ^{GW}GW_{Ing} and ^{Air}GW_{Inh-V} 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 All data is usable for the intended use. As shown in Table 2, the reviewer qualified the single result for 1-Methynaphthalene as not accredited (X7) because the TCEQ does not offer accreditation for this analyte, in this matrix, analyzed by this method. QC results are reported for the analyte and meet the requirements for all of the blanks and spikes plus the laboratory is accredited for other analytes by this method. Additionally, 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.

QAA Reviewer:

Taryn G. Scholz (Name) 6/17/13 (Date)

DATA USABILITY SUMMARY

QC PARAMETER QC OUTCOME

Data The laboratory data packages contain all necessary data (i.e., the laboratory reportable data per Completeness TRRP-13) and the EDD contain all sample results in acceptable format. No report revisions were required.

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 record is complete and agrees with that in the field notes and laboratory report, and results for all tests are reported as requested on the custody record.

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.

Field Procedures Readings for temperature, pH, specific conductivity, and turbidity were recorded in the field notes. Each well was either purged until the well conditions stabilized and sampled immediately or purged until dry and sampled the next day after recovery (for MW-21, MW-22, MW-26, MW-27, and MW-29). Samples were collected in containers provided by the laboratory, placed on ice, and delivered to the laboratory by overnight courier. All dissolved sample aliquots were field-filtered using a 0.45-micron filter. Aliquots for total metals were filtered using a 10-micron filter for wells with a turbidity greater than 10-NTU (for MW-21, MW-26, MW-27, MW-29, MW-30, MW-31, and P-1). Only dedicated or disposable equipment was used. One field duplicate was collected with the 16 investigative samples.

Results Reporting 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 µg/L for PAH and in mg/L for the remaining tests. 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.

Each of the sulfate samples required dilution due to a high concentration of this analyte. There are no elevated reporting limits for non-detects.

MQLs The LORPs have been established by PBW as the lower of the TRRP residential Tier 1 ^{GW}GW_{Ing} and ^{Air}GW_{Inh-V} PCLs for a 30-acre source area. The Unadjusted MQLs are at or below the LORPs for all applicable analytes.

MDLs According to the LRCs, 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 (DCSs) as required per TRRP-13. Results for the DCS are included in the laboratory data package.

Laboratory Blanks No analytes are reported above the detection limit in the laboratory blanks, which confirms that no contamination was introduced in the laboratory.

Field QC Blanks No field QC blanks were collected with the samples.

Laboratory Control The laboratory prepared one laboratory control spike (LCS) for each analytical batch and the spike solution contained all of the analytes. The LCS recoveries are within the TRRP recommended limits, which indicates good accuracy for the preparation and analysis technique on a sample free of matrix effects.

QC PARAMETER QC OUTCOME

 Matrix Spike
 The laboratory prepared one Matrix Spike (MS) and Matrix Spike Duplicate (MSD) for each analytical

 Recovery
 batch and the spike solution contained all of the analytes. Recoveries are reported for MS/MSD prepared using a sample from the site.

MS/MSD pairs were prepared using sample P-1 for Sulfate and sample MW-27 for TPH. The recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on the given sample matrix.

 Surrogate
 The laboratory used one to six surrogates for each organic analysis. Surrogate recoveries are within

 Recovery
 the laboratory limits, which indicates that the overall accuracy of the preparation and analysis technique is good for each particular sample.

LaboratoryThe laboratories prepared one Matrix Spike Duplicate (MSD) for each analytical batch. Additionally, theDuplicatelaboratory prepared one Matrix Duplicate (MD) with each metals analytical batch. RPDs are reportedPrecisionfor MSD and MD prepared using a sample from the site.

MSD were prepared using sample P-1 for Sulfate and sample MW-27 for TPH. The RPDs are within the TRRP recommended criteria, which indicates good precision for the preparation and analysis technique on the given sample matrix.

- Field DuplicateOne field duplicate was collected with the samples and analyzed for Total Metals (Cd, Pb), DissolvedPrecisionMetals (Cd, Pb) and Sulfate. 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 for both
metals for one pair, which indicates good precision for the sampling, preparation, and analysis
technique on the given sample matrix.
- Instrument Tuning According to the LRC, instrument tuning met method requirements for the samples, which indicates the GC/MS instrument was properly set up to identify analytes.
- InstrumentAccording to the LRCs, initial and continuing calibration data met method requirements for all reportedCalibrationresults, which indicates the instruments were properly calibrated to measure analyte concentrations.
- Instrument According to the LRCs, 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.

Total to PartialFor each metal in every sample, the dissolved metal concentration is at or below the total metalBalanceconcentration or the difference does not exceed the inherent analytical method error (i.e., ± 2x MQLdifference (if either result is less than 5x MQL) or 30% RPD).

TABLE 1 EXIDE FORMER OPERATING PLANT GROUNDWATER SAMPLING – APRIL 2013 AND MAY 2013

SAMPLES ANALYZED

		Comple	Comple	Samula	QC Prep Batch						
Lab ID	Field ID	Type	Matrix	Date	Total	Dissolved	Sulfate	РАН	трн		
		- 71			Cd, Pb	Cd, Pb					
600-71309-001	MW-27	INV	Water	4/9/13	103647	103647	103704	103645	103646		
600-71309-001	MW-27	MS	Water	4/9/13	NA	NA	NA	NA	103646		
600-71309-001	MW-27	MSD	Water	4/9/13	NA	NA	NA	NA	103646		
600-71309-002	MW-29	INV	Water	4/9/13	103647	103647	103704	NA	NA		
600-71309-003	MW-26	INV	Water	4/9/13	103647	103647	103704	NA	NA		
600-71309-004	MW-22	INV	Water	4/9/13	103647	103647	103704	NA	NA		
600-71309-005	P-1	INV	Water	4/9/13	103647	103647	103704	NA	NA		
600-71309-005	P-1	MS	Water	4/9/13	NA	NA	103704	NA	NA		
600-71309-005	P-1	MSD	Water	4/9/13	NA	NA	103704	NA	NA		
600-71309-006	MW-16S	INV	Water	4/9/13	103647	103647	103704	NA	NA		
600-71309-007	MW-16	INV	Water	4/9/13	103647	103647	103704	NA	NA		
600-71389-001	MW-21	INV	Water	4/9/13	103804	103804	103807	NA	NA		
600-71389-002	MW-11	INV	Water	4/9/13	103804	103804	103807	NA	NA		
600-71389-003	MW-15	INV	Water	4/10/13	103804	103804	103807	NA	NA		
600-71389-004	B9N	INV	Water	4/10/13	103804	103804	103807	NA	NA		
600-71389-005	DUP-2	FD of B9N	Water	4/10/13	103804	103804	103807	NA	NA		
600-71389-006	MW-30	INV	Water	4/10/13	103804	103804	103807	NA	NA		
600-71389-007	MW-13	INV	Water	4/9/13	NA	NA	103807	NA	NA		
600-71389-008	MW-14	INV	Water	4/9/13	NA	NA	103807	NA	NA		
600-71389-009	MW-12	INV	Water	4/10/13	NA	NA	103807	NA	NA		
600-73081-001	MW-31	INV	Water	5/13/13	106133	106133	106122	NA	NA		

INV - Investigative

MS - Matrix Spike

MSD – Matrix Spike Duplicate

NA - Not Analyzed

TABLE 2 EXIDE FORMER OPERATING PLANT GROUNDWATER SAMPLING – APRIL 2013 AND MAY 2013

QUALIFIED SAMPLE RESULTS

Lab ID	Field ID	Sample Date	Analyte	Lab Result	DVQ	QC_Comment					
600-71309-001	MW-27	4/9/13	1-Methylnaphthalene	1.38 J µg/L	X7, J	Result is between SDL and MQL					
Note: In addition to the above results, all detects between the SDL and MQL (i.e., results with a laboratory J-flag) should be considered estimated since the reported concentration is below the calibration range.											
J Estimated data; The analyte was detected and identified. The associated numerical value (i.e., the reported sample concentration) is the approximate concentration of the analyte in the sample.											
NJ Tentatively identitive identiti	ntified, estimated fication and the a	data; The analysi ssociated numeric	s indicates the presence cal value represents its a	of the analyte for v pproximate concen	which there i tration.	is presumptive evidence to make a					
NS Not selected; A outcomes and/	nother result (fro	m a secondary dil entrations.	ution, different analytical	method, re-sampli	ng, etc.) is s	selected for use based on QC					
R Rejected data;	The data is unus	able. Serious QC	deficiencies make it imp	ossible to verify the	absence of	r presence of this analyte.					
U Not detected; 7 considered not	he analyte was r detected above	not detected >5x (the level of the as	10x for common contami sociated numerical value	nants) the level in a (i.e., the reported	an associate sample con	ed blank and thus should be centration).					
UJ Estimated data and may be ina	; The analyte wa accurate.	s not detected abo	ove the reported sample	detection limit (SDI	.). The num	erical value of the SDL is estimated					
X7 The laboratory method. The 1	is not NELAC ac CEQ does not of	credited under the	e Texas Laboratory Accre or this analyte, in this ma	editation Program fo atrix, analyzed by th	or this analy is method.	te in this matrix analyzed by this					
X8 The laboratory method. The T this matrix by t	is not NELAC ac CEQ offers accre his method. The	credited under the editation for this a analyte result is v	Texas Laboratory Accre nalyte in this matrix by th alidated and reported as	editation Program for is method, but the part of a suite of a	or this analy aboratory is nalytes for t	te in this matrix analyzed by this s not accredited for this analyte in he method.					
H Bias in sampleL Bias in sample	result is likely to result is likely to	be high be low									
NOTE: For multiple	QC issues, the re	eviewer applied th	e most severe flag. (R >l	J >NJ >J >JL/JH fo	r detects ar	nd R >UJ >UJL for non-detects)					

TABLE 3 EXIDE UNDEVELOPED BUFFER PROPERTY VCP INVESTIGATION GROUNDWATER SAMPLING – APRIL 2013

FIELD DUPLICATE RESULTS

Field Duplicate	Original Sample	Sample Date	Method	Analyte	Field Duplicate Result		Field Duplicate Result		Original Sample Result		RPD	Absolute Difference	2x MQL	Qualified
DUP-2	B9N	4/10/13	300	Sulfate	726		mg/L	720		mg/L	0.83	NA	100	no
DUP-2	B9N	4/10/13	6010B	Cadmium	0.00035	U	mg/L	0.00035	U	mg/L	NA	0	0.01	no
DUP-2	B9N	4/10/13	6010B	Cadmium, Dissolved	0.00035	U	mg/L	0.00035	U	mg/L	NA	0	0.01	no
DUP-2	B9N	4/10/13	6010B	Lead	0.0029	U	mg/L	0.0029	U	mg/L	NA	0	0.02	no
DUP-2	B9N	4/10/13	6010B	Lead, Dissolved	0.0029	U	mg/L	0.0029	U	mg/L	NA	0	0.02	no

Note: The RPD test (<30%) applies if both results are greater than 5x MQL. Otherwise, the absolute difference test (< 2x MQL) applies.

ATTACHMENT 1

APPLICABLE PAGES OF THE LABORATORY ACCREDITATION CERTIFICATE





NELAP - Recognized Laboratory Fields of Accreditation

	Certificate:	T104704231-12-10
ALS Laboratory Group, Environmental Services Division (Houston, Texas)	Expiration Date:	4/30/2013
10450 Stancliff Road, Suite 210 Houston, TX 77099-4341	Issue Date:	5/1/2012

Matrix: Non-Potable Water			
Titanium	ТХ	1180	10014605
Uranium	ТХ	3035	10014605
Vanadium	ТХ	1185	10014605
Zinc	ТХ	1190	10014605
Method EPA 245.1			
Analyte	AB	Analyte ID	Method ID
Mercury	ТХ	1095	10036609
Method EPA 300.0			
Analyte	AB	Analyte ID	Method ID
Bromide	TX	1540	10053006
Chloride	ТХ	1575	10053006
Fluoride	ТХ	1730	10053006
Nitrate as N	ТХ	1810	10053006
Nitrate-nitrite	ТХ	1820	10053006
Nitrite as N	ТХ	1840	10053006
Orthophosphate as P	ТХ	1870	10053006
Sulfate	ТХ	2000	10053006
Method EPA 305.1			
Analyte	AB	Analyte ID	Method ID
Acidity, as CaCO3	ТХ	1500	10054203
Method EPA 310.1			
Analyte	AB	Analyte ID	Method ID
Alkalinity as CaCO3	ТХ	1505	10054805
Method EPA 335.1			
Analyte	AB	Analyte ID	Method ID
Amenable cyanide	ТХ	1510	10060001
Method EPA 335.2			
Analyte	AB	Analyte ID	Method ID
Total cyanide	ТХ	1645	10060205
Method EPA 335.3			
Analyte	AB	Analyte ID	Method ID





NELAP - Recognized Laboratory Fields of Accreditation

	Certificate:	T104704231-12-10
ALS Laboratory Group, Environmental Services Division (Houston, Texas)	Expiration Date:	4/30/2013
10450 Stancliff Road, Suite 210 Houston, TX 77099-4341	Issue Date:	5/1/2012

Matrix: Non-Potable Water			
Total Organic Carbon (TOC)	TX	2040	10078407
Method EPA 420.1			
Analyte	AB	Analyte ID	Method ID
Total phenolics	ТХ	1905	10079400
Method EPA 425.1			
Analyte	AB	Analyte ID	Method ID
Surfactants - MBAS	ТХ	2025	10080601
Method EPA 602			
Analyte	AB	Analyte ID	Method ID
Benzene	ТХ	4375	10102202
Ethylbenzene	ТХ	4765	10102202
m+p-xylene	ТХ	5240	10102202
Methyl tert-butyl ether (MTBE)	ТХ	5000	10102202
o-Xylene	ТХ	5250	10102202
Toluene	ТХ	5140	10102202
Xylene (total)	ТХ	5260	10102202
Method EPA 6020			
Analyte	AB	Analyte ID	Method ID
Aluminum	ТХ	1000	10156408
Antimony	ТХ	1005	10156408
Arsenic	ТХ	1010	10156408
Barium	ТХ	1015	10156408
Beryllium	ТХ	1020	10156408
Boron	ТХ	1025	10156408
Cadmium	ТХ	1030	10156408
Calcium	ТХ	1035	10156408
Chromium	ТХ	1040	10156408
Cobalt	ТХ	1050	10156408
Copper	ТΧ	1055	10156408
Iron	ТХ	1070	10156408
Lead	ТΧ	1075	10156408





NELAP - Recognized Laboratory Fields of Accreditation

	Certificate:	T104704231-12-10
ALS Laboratory Group, Environmental Services Division (Houston, Texas)	Expiration Date:	4/30/2013
10450 Stancliff Road, Suite 210 Houston, TX_77099-4341	Issue Date:	5/1/2012

These fields of accreditation supercede all previous fields. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current accreditation status for particular methods and analyses.

Matrix: Non-Potable Water

Lithium	ТХ	1080	10156408
Magnesium	ТХ	1085	10156408
Manganese	ТХ	1090	10156408
Molybdenum	ТХ	1100	10156408
Nickel	ТХ	1105	10156408
Potassium	ТХ	1125	10156408
Selenium	ТХ	1140	10156408
Silver	ТХ	1150	10156408
Sodium	ТХ	1155	10156408
Strontium	ТХ	1160	10156408
Thallium	ТХ	1165	10156408
Tin	ТХ	1175	10156408
Titanium	ТХ	1180	10156408
Vanadium	ТХ	1185	10156408
Zinc	ТХ	1190	10156408
Method EPA 608			
Method EPA 608 Analyte	AB	Analyte ID	Method ID
Method EPA 608 Analyte 4,4'-DDD	AB TX	Analyte ID 7355	Method ID 10103603
Method EPA 608 Analyte 4,4'-DDD 4,4'-DDE	AB TX TX	Analyte ID 7355 7360	Method ID 10103603 10103603
Method EPA 608 Analyte 4,4'-DDD 4,4'-DDE 4,4'-DDT	AB TX TX TX	Analyte ID 7355 7360 7365	Method ID 10103603 10103603 10103603
Method EPA 608 Analyte 4,4'-DDD 4,4'-DDE 4,4'-DDT Aldrin	AB TX TX TX TX	Analyte ID 7355 7360 7365 7025	Method ID 10103603 10103603 10103603 10103603
Method EPA 608 Analyte 4,4'-DDD 4,4'-DDE 4,4'-DDT Aldrin alpha-BHC (alpha-Hexachlorocyclohexane)	AB TX TX TX TX TX	Analyte ID 7355 7360 7365 7025 7110	Method ID 10103603 10103603 10103603 10103603 10103603
Method EPA 608 Analyte 4,4'-DDD 4,4'-DDE 4,4'-DDT Aldrin alpha-BHC (alpha-Hexachlorocyclohexane) alpha-Chlordane	AB TX TX TX TX TX TX	Analyte ID 7355 7360 7365 7025 7110 7240	Method ID 10103603 10103603 10103603 10103603 10103603 10103603
Method EPA 608 Analyte 4,4'-DDD 4,4'-DDE 4,4'-DDT Aldrin alpha-BHC (alpha-Hexachlorocyclohexane) alpha-Chlordane Aroclor-1016 (PCB-1016)	AB TX TX TX TX TX TX TX	Analyte ID 7355 7360 7365 7025 7110 7240 8880	Method ID 10103603 10103603 10103603 10103603 10103603 10103603 10103603
Method EPA 608 Analyte 4,4'-DDD 4,4'-DDE 4,4'-DDT Aldrin alpha-BHC (alpha-Hexachlorocyclohexane) alpha-Chlordane Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221)	AB TX TX TX TX TX TX TX TX TX	Analyte ID 7355 7360 7365 7025 7110 7240 8880 8885	Method ID 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603
Method EPA 608 Analyte 4,4'-DDD 4,4'-DDE 4,4'-DDT Aldrin alpha-BHC (alpha-Hexachlorocyclohexane) alpha-Chlordane Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232)	AB TX TX TX TX TX TX TX TX TX	Analyte ID 7355 7360 7365 7025 7110 7240 8880 8885 8890	Method ID 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603
Method EPA 608 Analyte 4,4'-DDD 4,4'-DDE 4,4'-DDT Aldrin alpha-BHC (alpha-Hexachlorocyclohexane) alpha-Chlordane Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242)	AB TX TX TX TX TX TX TX TX TX TX	Analyte ID 7355 7360 7365 7025 7110 7240 8880 8885 8890 8895	Method ID 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603
Method EPA 608 Analyte 4,4'-DDD 4,4'-DDE 4,4'-DDT Aldrin alpha-BHC (alpha-Hexachlorocyclohexane) alpha-Chlordane Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1248)	AB TX TX TX TX TX TX TX TX TX TX TX	Analyte ID 7355 7360 7365 7025 7110 7240 8880 8885 8890 8885 8890 8895 8900	Method ID 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603
Method EPA 608 Analyte 4,4'-DDD 4,4'-DDE 4,4'-DDT Aldrin alpha-BHC (alpha-Hexachlorocyclohexane) alpha-Chlordane Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1248 (PCB-1248) Aroclor-1254 (PCB-1254)	AB TX TX TX TX TX TX TX TX TX TX TX TX	Analyte ID 7355 7360 7365 7025 7110 7240 8880 8885 8880 8885 8890 8895 8900 8905	Method ID 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603
Method EPA 608 Analyte 4,4'-DDD 4,4'-DDE 4,4'-DDT Aldrin alpha-BHC (alpha-Hexachlorocyclohexane) alpha-Chlordane Aroclor-1016 (PCB-1016) Aroclor-1221 (PCB-1221) Aroclor-1232 (PCB-1232) Aroclor-1242 (PCB-1242) Aroclor-1248 (PCB-1242) Aroclor-1254 (PCB-1254) Aroclor-1260 (PCB-1260)	AB TX TX TX TX TX TX TX TX TX TX TX TX TX	Analyte ID 7355 7360 7365 7025 7110 7240 8880 8885 8890 8885 8890 8895 8900 8905 8910	Method ID 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603 10103603





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Tetrachloroethylene (Perchloroethylene)	ТХ	5115	10184404	
Toluene	ТХ	5140	10184404	
trans-1,2-Dichloroethylene	ТХ	4700	10184404	
trans-1,3-Dichloropropylene	ТХ	4685	10184404	
trans-1,4-Dichloro-2-butene	ТХ	4605	10184404	
Trichloroethene (Trichloroethylene)	ТХ	5170	10184404	
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	ТХ	5175	10184404	
Vinyl acetate	ТХ	5225	10184404	
Vinyl chloride	ТХ	5235	10184404	
Xylene (total)	ТХ	5260	10184404	
Method EPA 8270				
Analyte	AB	Analyte ID	Method ID	
1,2,4,5-Tetrachlorobenzene	ТХ	6715	10185203	
1,2,4-Trichlorobenzene	ТХ	5155	10185203	
1,2-Dibromo-3-chloropropane (DBCP)	ТХ	4570	10185203	
1,2-Dichlorobenzene	ТХ	4610	10185203	
1,2-Dinitrobenzene	ТХ	6155	10185203	
1,2-Diphenylhydrazine	ТХ	6220	10185203	
1,3,5-Trinitrobenzene (1,3,5-TNB)	ТХ	6885	10185203	
1,3-Dichlorobenzene	ТХ	4615	10185203	
1,3-Dinitrobenzene (1,3-DNB)	ТХ	6160	10185203	
1,4-Dichlorobenzene	ТХ	4620	10185203	
1,4-Dinitrobenzene	ТХ	6165	10185203	
1,4-Naphthoquinone	ТХ	6420	10185203	
1,4-Phenylenediamine	ТХ	6630	10185203	
1-Chloronaphthalene	ТХ	5790	10185203	
1-Naphthylamine	ТХ	6425	10185203	
2,3,4,6-Tetrachlorophenol	ТХ	6735	10185203	
2,4,5-Trichlorophenol	ТХ	6835	10185203	
2,4,5-Trimethylaniline	ТХ	6880	10185203	





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Matrix: Non-Potable Water			
2,4,6-Trichlorophenol	ТХ	6840	10185203
2,4-Diaminotoluene	ТХ	5880	10185203
2,4-Dichlorophenol	ТХ	6000	10185203
2,4-Dimethylphenol	ТХ	6130	10185203
2,4-Dinitrophenol	ТХ	6175	10185203
2,4-Dinitrotoluene (2,4-DNT)	ТХ	6185	10185203
2,6-Dichlorophenol	ТХ	6005	10185203
2,6-Dinitrotoluene (2,6-DNT)	ТХ	6190	10185203
2-Acetylaminofluorene	ТХ	5515	10185203
2-Chloronaphthalene	ТХ	5795	10185203
2-Chlorophenol	ТХ	5800	10185203
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	ТХ	6360	10185203
2-Methylaniline (o-Toluidine)	ТХ	5145	10185203
2-Methylnaphthalene	ТХ	6385	10185203
2-Methylphenol (o-Cresol)	ТХ	6400	10185203
2-Naphthylamine	ТХ	6430	10185203
2-Nitroaniline	ТХ	6460	10185203
2-Nitrophenol	ТХ	6490	10185203
2-Picoline (2-Methylpyridine)	ТХ	5050	10185203
3,3'-Dichlorobenzidine	ТХ	5945	10185203
3,3'-Dimethylbenzidine	ТХ	6120	10185203
3-Methylcholanthrene	ТХ	6355	10185203
3-Methylphenol (m-Cresol)	ТХ	6405	10185203
3-Nitroaniline	ТХ	6465	10185203
4-Aminobiphenyl	ТХ	5540	10185203
4-Bromophenyl phenyl ether (BDE-3)	ТХ	5660	10185203
4-Chloro-3-methylphenol	ТХ	5700	10185203
4-Chloroaniline	ТХ	5745	10185203
4-Chlorophenyl phenylether	ТХ	5825	10185203
4-Dimethyl aminoazobenzene	ТХ	6105	10185203





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Matrix: Non-Potable Water			
4-Methylphenol (p-Cresol)	ТХ	6410	10185203
4-Nitroaniline	ТХ	6470	10185203
4-Nitrobiphenyl	ТХ	6480	10185203
4-Nitrophenol	ТХ	6500	10185203
5-Chloro-2-methylaniline	ТХ	5695	10185203
5-Nitro-o-toluidine	ТХ	6570	10185203
7,12-Dimethylbenz(a) anthracene	ТХ	6115	10185203
a-a-Dimethylphenethylamine	ТХ	6125	10185203
Acenaphthene	ТХ	5500	10185203
Acenaphthylene	ТХ	5505	10185203
Acetophenone	ТХ	5510	10185203
Aniline	ТХ	5545	10185203
Anthracene	ТХ	5555	10185203
Aramite	ТХ	5560	10185203
Atrazine	ТХ	7065	10185203
Azinphos-methyl (Guthion)	ТХ	7075	10185203
Azobenzene	ТХ	5562	10185203
Benzenethiol (Thiophenol)	ТХ	6750	10185203
Benzidine	ТХ	5595	10185203
Benzo(a)anthracene	ТХ	5575	10185203
Benzo(a)pyrene	ТХ	5580	10185203
Benzo(b)fluoranthene	ТХ	5585	10185203
Benzo(e)pyrene	ТХ	5605	10185203
Benzo(g,h,i)perylene	ТХ	5590	10185203
Benzo(k)fluoranthene	ТХ	5600	10185203
Benzoic acid	ТХ	5610	10185203
Benzyl alcohol	ТХ	5630	10185203
Biphenyl	ТХ	5640	10185203
bis(2-Chloroethoxy)methane	ТХ	5760	10185203
bis(2-Chloroethyl) ether	ТХ	5765	10185203





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Matrix: Non-Potable Water			
bis(2-Chloroisopropyl) ether	TX	5780	10185203
bis(2-Ethylhexyl) phthalate (DEHP)	ТХ	6255	10185203
Butyl benzyl phthalate	TX	5670	10185203
Caprolactam	TX	7180	10185203
Captan	TX	7190	10185203
Carbaryl (Sevin)	ТХ	7195	10185203
Carbazole	TX	5680	10185203
Carbophenothion	ТΧ	7220	10185203
Chlorobenzilate	ТХ	7260	10185203
Chrysene	ТХ	5855	10185203
Coumaphos	ТХ	7315	10185203
Demeton	ТΧ	7390	10185203
Demeton	ТХ	7390	10185203
Demeton-o	ТХ	7395	10185203
Demeton-s	ТХ	7385	10185203
Diallate	ТХ	7405	10185203
Dibenz(a,h) anthracene	ТХ	5895	10185203
Dibenz(a,j) acridine	ТХ	5900	10185203
Dibenzofuran	ТХ	5905	10185203
Dichlorovos (DDVP, Dichlorvos)	ТХ	8610	10185203
Diethyl phthalate	ТХ	6070	10185203
Dimethoate	ТХ	7475	10185203
Dimethoate	ТХ	7475	10185203
Dimethyl phthalate	ТХ	6135	10185203
Di-n-butyl phthalate	ТХ	5925	10185203
Di-n-octyl phthalate	ТХ	6200	10185203
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	ТХ	8620	10185203
Dioxathion	ТХ	7495	10185203
Diphenylamine	ТХ	6205	10185203
Disulfoton	ТХ	8625	10185203





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Ethion	TX	7565	10185203
Ethyl methanesulfonate	ТХ	6260	10185203
Famphur	ТХ	7580	10185203
Fluoranthene	ТХ	6265	10185203
Fluorene	ТХ	6270	10185203
Hexachlorobenzene	ТХ	6275	10185203
Hexachlorobutadiene	ТХ	4835	10185203
Hexachlorocyclopentadiene	ТХ	6285	10185203
Hexachloroethane	ТХ	4840	10185203
Hexachlorophene	ТХ	6290	10185203
Hexachloropropene	ТХ	6295	10185203
Indeno(1,2,3-cd) pyrene	ТХ	6315	10185203
Isodrin	ТХ	7725	10185203
Isophorone	ТХ	6320	10185203
Isosafrole	ТХ	6325	10185203
Kepone	ТХ	7740	10185203
Maleic anhydride	ТХ	6335	10185203
Methapyrilene	ТХ	6345	10185203
Methyl methanesulfonate	ТХ	6375	10185203
Methyl parathion (Parathion, methyl)	ТХ	7825	10185203
Mevinphos	ТХ	7850	10185203
Naled	ТХ	7905	10185203
Naphthalene	ТХ	5005	10185203
Nitrobenzene	ТХ	5015	10185203
Nitroquinoline-1-oxide	ТХ	6515	10185203
n-Nitrosodiethylamine	ТХ	6525	10185203
n-Nitrosodimethylamine	ТХ	6530	10185203
n-Nitrosodi-n-butylamine	ТХ	5025	10185203
n-Nitrosodi-n-propylamine	ТХ	6545	10185203
n-Nitrosodiphenylamine	ТХ	6535	10185203





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Matrix: Non-Potable Water			
n-Nitrosomethylethylamine	TX	6550	10185203
n-Nitrosomorpholine	ТХ	6555	10185203
n-Nitrosopiperidine	ТХ	6560	10185203
n-Nitrosopyrrolidine	ТХ	6565	10185203
o,o,o-Triethyl phosphorothioate	ТХ	8290	10185203
o-Anisidine	ТХ	5550	10185203
Parathion, ethyl	ТХ	7955	10185203
p-Cresidine	ТХ	5860	10185203
Pentachlorobenzene	ТХ	6590	10185203
Pentachloronitrobenzene (PCNB)	ТХ	6600	10185203
Pentachlorophenol	ТХ	6605	10185203
Phenacetin	ТХ	6610	10185203
Phenanthrene	ТХ	6615	10185203
Phenol	ТХ	6625	10185203
Phorate	ТХ	7985	10185203
Phosmet (Imidan)	ТХ	8000	10185203
Phthalic anhydride	ТХ	6640	10185203
Pronamide (Kerb)	ТХ	6650	10185203
Pyrene	ТХ	6665	10185203
Pyridine	ТХ	5095	10185203
Quinoline	ТХ	6670	10185203
Resorcinol	ТХ	6680	10185203
Safrole	ТХ	6685	10185203
Sulfotepp	ТХ	8155	10185203
Terbufos	ТХ	8185	10185203
Tetrachlorvinphos (Stirophos, Gardona)	ТХ	8197	10185203
Thionazin (Zinophos)	ТХ	8235	10185203
Toluene diisocyanate	ТХ	6775	10185203
Trifluralin (Treflan)	ТХ	8295	10185203





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These fields of accreditation supercede all previous fields. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current accreditation status for particular methods and analyses.

Matrix: Non-Potable Water

Sulfide	ТΧ	2005	20125400
Method SM 4500-S2 [−] F			
Analyte	AB	Analyte ID	Method ID
Sulfide	ТХ	2005	20126209
Method SM 4500-SiO2 D			
Analyte	AB	Analyte ID	Method ID
Silica as SiO2	ТХ	1990	20018206
Method SM 4500-SO3 B			
Analyte	AB	Analyte ID	Method ID
Sulfite-SO3	ТΧ	2015	20026806
Method SM 5210 B			
Analyte	AB	Analyte ID	Method ID
Biochemical oxygen demand (BOD)	ТΧ	1530	20027401
Carbonaceous BOD, CBOD	тх	1555	20027401
Method SM 5310 B			
Analyte	AB	Analyte ID	Method ID
Total Organic Carbon (TOC)	ТΧ	2040	20028006
Method SM 5310 C			
Analyte	AB	Analyte ID	Method ID
Total Organic Carbon (TOC)	ТХ	2040	20028200
Method SM 5540 C			
Analyte	AB	Analyte ID	Method ID
Surfactants - MBAS	ТХ	2025	20029009
Method TCEQ 1005			
Analyte	AB	Analyte ID	Method ID
Total Petroleum Hydrocarbons (TPH)	ТХ	2050	90019208



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: 600-71309-1

Client Project/Site: Exide Recycling Center, Frisco TX Projec

For:

Pastor, Behling & Wheeler LLC 2201 Double Creek Dr Suite 4004 Round Rock, Texas 78664

Attn: Eric Pastor

Authorized for release by: 4/15/2013 5:09:45 PM Cathy Upton Data Delivery Analyst cathy.upton@testamericainc.com

Designee for

Sachin Kudchadkar Project Manager II sachin.kudchadkar@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

600-71309-1 Job Number: Exide Recycling Center, Frisco TX Project Project Name/Number: This Data Package consists of: This signature page, the laboratory review checklist, and the following Reportable Data: X R1 Field Chain-of-Custody Form X R2 Sample Identification Cross-reference; Х 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). X R4 Surrogate Recovery Data including: a) Calculated recovery (%R), and b) The laboratory's surrogate QC limits. X R5 Test Reports/Summary Forms for Blank Samples; X 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 X 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 X 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;

 \mathbf{X} 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 Name (printed) Data Delivery Analyst

Official Title (printed)

Signature

04/15/2013

A	Appendix A (cont'd): Laboratory Review Checklist: Reportable Data								
Lab	orator	ry Name: TestAmerica-Houston	LRC Date: 04/15/13						
Proi	ect N	ame: Exide Recycling Center, Frisco TX Project	Laboratory Job Number: 600-71309						
Dou	Deviation Name: DC								
Reviewei Name. BDO						3743	1104	ED 115	
#'	A²	Description		Yes	No	NA	NR⁺	ER#	
		Chain-of-custody (C-O-C)							
R1	OI	Did samples meet the laboratory's standard conditions of sar	nple acceptability upon receipt?	X					
		Were all departures from standard conditions described in ar	n exception report?			X			
R2	OI	Sample and quality control (QC) identification							
		Are all field sample ID numbers cross-referenced to the labo	bratory ID numbers?	X					
D2	OI	Are all laboratory ID numbers cross-referenced to the corresponding QC data?		X					
КS	01	Very all complex properts		v					
		Were all samples prepared and analyzed within holding time Other then these results $< MOL$ were all other rew values by	s?						
		Were calculations checked by a near or supervisor?	racketed by calibration standards?						
		Were all analyte identifications checked by a peer of supervisor?	sor9						
		Were sample detection limits reported for all analytes not de	tected?	A V					
		Were all results for soil and sediment samples reported on a	dry weight basis?	Λ		x			
		Were % moisture (or solids) reported for all soil and sedimer	nt samples?			X			
		Were bulk soil/solid samples for volatile analysis extracted y	with methanol per SW846 Method 5035?			X			
		If required for the project TICs reported?	via mediaior per 5 v 646 mediod 5655.			X			
R4	0	Surrogate recovery data							
	0	Were surrogates added prior to extraction?				X			
		Were surrogate percent recoveries in all samples within the l	aboratory OC limits?			X			
R5	OI	I Test reports/summary forms for blank samples							
		Were appropriate type(s) of blanks analyzed?		Х			1		
		Were blanks analyzed at the appropriate frequency?		Х					
	Were method blanks taken through the entire analytical process, including preparation and, if		Х						
		applicable, cleanup procedures?							
		Were blank concentrations < MQL?		Х					
R6	OI	Laboratory control samples (LCS):							
		Were all COCs included in the LCS?		Х					
		Was each LCS taken through the entire analytical procedure.	, including prep and cleanup steps?	Х					
		Were LCSs analyzed at the required frequency?		Х					
		Were LCS (and LCSD, if applicable) %Rs within the laborat	tory QC limits?	X					
		Does the detectability check sample data document the labor	atory's capability to detect the COCs at	Х					
		the MDL used to calculate the SDLs?				v			
D7	OI	was the LCSD RPD within QC limits?				X			
К/	0I	Matrix spike (MS) and matrix spike duplicate (MSD) dat	a A ANDO	v					
		Were MS (MSD analyzed at the appropriate frequency?)							
		Were MS/MSD analyzed at the appropriate nequency:	ry OC limits?	A V					
		Were MS/MSD RPDs within laboratory OC limits?	y de mints:	X					
R8	OI	Analytical dunlicate data							
110	01	Were appropriate analytical duplicates analyzed for each ma	trix?			X			
		Were analytical duplicates analyzed at the appropriate freque	ency?			X			
		Were RPDs or relative standard deviations within the laborat	tory OC limits?			X			
R9	OI	Method quantitation limits (MOLs):							
		Are the MQLs for each method analyte included in the labor	atory data package?	X					
		Do the MQLs correspond to the concentration of the lowest	non-zero calibration standard?	Х					
		Are unadjusted MQLs and DCSs included in the laboratory of	data package?	Х					
R10	OI	Other problems/anomalies							
1		Are all known problems/anomalies/special conditions noted	in this LRC and ER?	Х					
		Was applicable and available technology used to lower the S	DL to minimize the matrix interference	Х				1	
		affects on the sample results?							
		Is the laboratory NELAC-accredited under the Texas Labora	tory Accreditation Program for the	Χ					
		analytes, matrices and methods associated with this labor	atory data package?						
	1.	Items identified by the letter "R" must be included in the laboratory of	lata package submitted in the TRRP-required re	port(s)	. Iter	ns ide	ntified	i bv the	

letter "S" should be retained and made available upon request for the appropriate retention period. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 NA = Not applicable;

4. NR = Not reviewed;

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked). 5.

Ap	pen	dix A (cont'd): Laboratory Review Checklist:	Reportable Data					
Lab	orato	ry Name: TestAmerica-Houston Ll	RC Date: 04/15/13					
Pro	ject N	ame: Exide Recycling Center, Frisco TX Project	aboratory Job Number: 600-71309					
Rev	iewei	Name: BDG Pr	rep Batch Number(s): 600-103704 – S	ulfate	;			
$\#^{1}$	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 and	nalyte within OC limits?	Х				
		Were percent RSDs or correlation coefficient criteria met?		Х				
		Was the number of standards recommended in the method used f	for all analytes?	Х				
		Were all points generated between the lowest and highest standar	rd used to calculate the curve?	Х				
		Are ICAL data available for all instruments used?	AL data available for all instruments used?					
		Has the initial calibration curve been verified using an appropriat	ppropriate second source standard?					
S2	OI	Initial and continuing calibration verification (ICCV and CC	CV) and continuing calibration					
		Was the CCV analyzed at the method-required frequency?		Х				
		Were percent differences for each analyte within the method-requ	uired QC limits?	Х				
		Was the ICAL curve verified for each analyte?	L curve verified for each analyte?					
		Was the absolute value of the analyte concentration in the inorga	nic CCB < MDL?	Х				
S3	0	Mass spectral tuning:						
		Was the appropriate compound for the method used for tuning?				Х		
		Were ion abundance data within the method-required QC limits?				Х		
S4	0	Internal standards (IS):						
		Were IS area counts and retention times within the method-required QC limits?				Х		
S5	OI	Raw data (NELAC section 5.5.10)						
		Were the raw data (for example, chromatograms, spectral data) re	eviewed by an analyst?	Х				
	Were data associated with manual integrations flagged on the raw data?					Х		
S6	0	Dual column confirmation						
		Did dual column confirmation results meet the method-required	QC?			Х		
S7	0	Tentatively identified compounds (TICs):						
		If TICs were requested, were the mass spectra and TIC data subjection of the state	ect to appropriate checks?			X		
S8	Ι	Interference Check Sample (ICS) results:						
~~		Were percent recoveries within method QC limits?				X		
S 9	I	Serial dilutions, post digestion spikes, and method of standard	d 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				
011		Is the MDL either adjusted or supported by the analysis of DCSs	?	X				
<u>S11</u>	OI	Proficiency test reports:	<u> </u>					
G10	01	Was the laboratory's performance acceptable on the applicable pr	roficiency tests or evaluation studies?	X				
512	OI	Standards documentation	16 1 2	N				
612	01	Are all standards used in the analyses NIST-traceable or obtained	a from other appropriate sources?	X				
515	OI	Compound/analyte identification procedures	(10	v		-		-
614	OI	Are the procedures for compound/analyte identification document	nted?	X				
514	0I	Wes DOC and least a series tent with NELAC Chapter 52		v				
		Was DOC conducted consistent with NELAC Chapter 5?	£1.2					
S15	OT	Is documentation of the analyst's competency up-to-date and on the varification/validation documentation for matheds (NELAC)	Chapter 5)	Λ				
513	01	Are all the methods used to generate the data decumental	Chapter 5)	v				
617		Are an the methods used to generate the data documented, verifie	eu, and vandateu, where applicable?	Λ				
510	UI	Laboratory standard operating procedures (SUPs):	aad	v				
		Are laboratory SOPS current and on file for each method perform	ieu :	X				
		1 Items identified by the letter "R" should be included in the laborate	ory data package submitted to the TCEO in	the T	RRP	-require	ed repo	rt(s).

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-HoustonLRC Date: 04/15/13						
Project Name: Exide Recycling Center, Frisco TX Project Laboratory Job Number: 600-71309						
Reviewer Nan	ne: BDG	Prep Batch Number(s): 600-103704 – Sulfate				
ER # ¹ DESC	CRIPTION					
1 The S	The Sulfate SDLs for samples 600-71309 – 1, 2, 3, 4, 5, 6 and 7 were elevated due to the high concentrations of this					
analy	/te.	-				

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

Ap	Appendix A (cont'd): Laboratory Review Checklist: Reportable Data							
Labo	orator	ry Name: TestAmerica-Houston LR	C Date: 04/11/13					
Proj	ect N	ame: Exide Recycling Center, Frisco TX	boratory Job Number: 600-71309					
Rov	iowor	Name: TWP Pre	$r = R_{abc} N_{umber(s)} = 600, 103647, 1000000000000000000000000000000000000$	P				
<u>и</u> 1			p Baten Number(s). 000-103047-10	J Vac	No	NIA3	ND ⁴	ED #5
#	A	Chain of sustain (C.O.C.)		res	NO	INA	INK	EK#
D1	OT	Chain-of-custody (C-O-C)		NZ				
ĸı	01	Did samples meet the laboratory's standard conditions of sample ad	cceptability upon receipt?	X		v		
DJ	OI	were all departures from standard conditions described in an exception of the standard conditin an exception of the standard conditions de	ption report?			Х		
K2	01	Sample and quality control (QC) identification						
		Are all laboratory ID numbers cross referenced to the correspondir	and OC data?	A V				
R3	Are an laboratory ID numbers cross-referenced to the corresponding QC data?			Λ				
10	01	Were all samples prepared and analyzed within holding times?		x				
		Other than those results $<$ MOL, were all other raw values brackete	ed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	ea ey canoradon standards.	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 we	eight basis?			Х		
		Were % moisture (or solids) reported for all soil and sediment sam	ples?			X		
		Were bulk soil/solid samples for volatile analysis extracted with m	ethanol per SW846 Method 5035?			Х		
		If required for the project, TICs reported?	1			Х		
R4	0	Surrogate recovery data						
	Were surrogates added prior to extraction?				Х			
		Were surrogate percent recoveries in all samples within the laborat	ory QC limits?			Х		
R5	OI Test reports/summary forms for blank samples							
		Were appropriate type(s) of blanks analyzed?		Х				
		Were blanks analyzed at the appropriate frequency?		Х				
		Were method blanks taken through the entire analytical process, including preparation and, if						
		applicable, cleanup procedures?						
		Were blank concentrations < MQL?		Х				
R6	OI	Laboratory control samples (LCS):						
		Were all COCs included in the LCS?		Х				
		Was each LCS taken through the entire analytical procedure, include	ding prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	~	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory Q	C limits?	X				
		Does the detectability check sample data document the laboratory's	s capability to detect the COCs at	Х				
		the MDL used to calculate the SDLs?				v		
D7	OI	was the LCSD RPD within QC limits?				Λ		
к/	0I	Water's spike (NIS) and matrix spike duplicate (NISD) data	1 MSD2	v				
		Were MS/MSD analyzed at the appropriate frequency?	I MSD :	A V				
		Were MS (and MSD if applicable) %Rs within the laboratory OC	limits?	~			x	1
		Were MS/MSD RPDs within laboratory OC limits?					X	1
R8	OI	Analytical duplicate data						1
	01	Were appropriate analytical duplicates analyzed for each matrix?		X	1			
		Were analytical duplicates analyzed at the appropriate frequency?		X				
		Were RPDs or relative standard deviations within the laboratory O	C limits?				X	2
R9	OI	Method quantitation limits (MOLs):						
	_	Are the MQLs for each method analyte included in the laboratory of	data package?	Х	1			
		Do the MQLs correspond to the concentration of the lowest non-ze	ero calibration standard?	Х	1		1	
		Are unadjusted MQLs and DCSs included in the laboratory data pa	ackage?	Х				
R10	OI	Other problems/anomalies	· · · ·					
		Are all known problems/anomalies/special conditions noted in this	LRC and ER?	Х				
		Was applicable and available technology used to lower the SDL to	minimize the matrix interference	Х				
		affects on the sample results?						
		Is the laboratory NELAC-accredited under the Texas Laboratory A	ccreditation Program for the	Х				
	ļ	analytes, matrices and methods associated with this laboratory of	data package?	<u> </u>	L			
	1.	Items identified by the letter "R" must be included in the laboratory data pac	ckage submitted in the TRRP-required ren	ort(s)	. Iten	ns ide	ntified	l by tl

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 NA = Not applicable;

4. NR = Not reviewed;

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked). 5.

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Ap	pen	ndix A (cont'd): Laboratory Review Checklist: R	Reportable Data					
Lab	orato	ry Name: TestAmerica-Houston LRC	C Date: 04/11/13					
Pro	ject N	Jame: Exide Recycling Center, Frisco TX Lab	ooratory Job Number: 600-71309					
Rev	iewe	r Name: TWR Prer	p Batch Number(s): 600-103647- I	СР				
$\#^1$	A^2	Description		Yes	No	NA ³	NR^4	ER# ⁵
S1	OI	Initial calibration (ICAL)						
<u> </u>	01	Were response factors and/or relative response factors for each analy	vte within OC limits?			X		1
		Were percent RSDs or correlation coefficient criteria met?				X		
		Was the number of standards recommended in the method used for a	all analytes?	Х				1
		Were all points generated between the lowest and highest standard u	used to calculate the curve?			Х		1
		Are ICAL data available for all instruments used?		Х				1
		Has the initial calibration curve been verified using an appropriate se	econd source standard?	Х				
S2	OI	Initial and continuing calibration verification (ICCV and CCV)	and continuing calibration					
		Was the CCV analyzed at the method-required frequency?	Θ	Х				
		Were percent differences for each analyte within the method-require	ed QC limits?	Х				-
		Was the ICAL curve verified for each analyte?		Х				
		Was the absolute value of the analyte concentration in the inorganic	CCB < MDL?	Х				
S3	0	Mass spectral tuning:						
		Was the appropriate compound for the method used for tuning?				Х		
		Were ion abundance data within the method-required QC limits?				Х		
S4	0	Internal standards (IS):						
		Were IS area counts and retention times within the method-required	QC limits?			Х		
S 5	OI	Raw data (NELAC section 5.5.10)						
		Were the raw data (for example, chromatograms, spectral data) revie	ewed by an analyst?	Х				
		Were data associated with manual integrations flagged on the raw da	ata?			Х		
S6	0	Dual column confirmation						
		Did dual column confirmation results meet the method-required QC	2?			Х		
S7	0	Tentatively identified compounds (TICs):						
		If TICs were requested, were the mass spectra and TIC data subject	to appropriate checks?			Х		
S8	Ι	Interference Check Sample (ICS) results:						
		Were percent recoveries within method QC limits?		Х				
S9	Ι	Serial dilutions, post digestion spikes, and method of standard a	dditions					
		Were percent differences, recoveries, and the linearity within the QC	C limits specified in the method?				Х	3
S10	OI	Method detection limit (MDL) studies						1
		Was a MDL study performed for each reported analyte?		Х				
		Is the MDL either adjusted or supported by the analysis of DCSs?		Х				
S11	OI	Proficiency test reports:						-
		Was the laboratory's performance acceptable on the applicable profit	iciency tests or evaluation studies?	X				
S 12	OI	Standards documentation		X.				
G12	0.T	Are all standards used in the analyses NIST-traceable or obtained fro	om other appropriate sources?	X				
813	OI	Compound/analyte identification procedures	10	X.				
014	OT	Are the procedures for compound/analyte identification documented	1?	Х				
514		Demonstration of analyst competency (DOC)		v				
		Was DOC conducted consistent with NELAC Chapter 5?	0	X				+
617		Its documentation of the analyst's competency up-to-date and on file	2/ 	X				
515		verification/validation documentation for methods (NELAC Ch	apter 5)	v				-
014	0.7	Are an the methods used to generate the data documented, verified, a	and validated, where applicable?	Λ	_			
516	01	Laboratory standard operating procedures (SOPs):	9	V				
		Are laboratory SOPs current and on file for each method performed	<i>′</i>	X				
L		1 Items identified by the letter "R" should be included in the laboratory of	data package submitted to the TCEO in	the TF	R P-	require	ed reno	rt(s)

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.

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable). NA = Not applicable.2

3

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).

Apper	Appendix A (cont'd): Laboratory Review Checklist: Exception Reports					
Laborat	Laboratory Name: TestAmerica-Houston LRC Date: 04/11/13					
Project	Project Name: Exide Recycling Center, Frisco TX Laboratory Job Number: 600-71309					
Review	er Name: TWR	Prep Batch Number(s): 600-103647- ICP				
ER # ¹	DESCRIPTION					
1	The laboratory selected a sample from another group to perform as the MS/MSD.					
2	The laboratory selected a sample from another group to perform as the DUP.					
3	The laboratory selected a sample from another group to perform as the PDS and SD.					

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

Appendix A (cont'd): Laboratory Review Checklist: Reportable Data								
Lab	orator	ry Name: TestAmerica-Houston	LRC Date: 04/12/13					
Proj	ect N	ame: Exide Recycling Center, Frisco TX Project	Laboratory Job Number 600-71309					
Rev	iewer	Name: IOH	Prep Batch Number(s): 600-103645 - SV	J				
#1		Description		Yes	No	NA ³	NR^4	ER# ⁵
π	А	Chain-of-custody (C-O-C)		103	110	1171		LIC
R1	OI Did samples meet the laboratory's standard conditions of sample accentability upon receipt?		v					
	01	Were all departures from standard conditions described in an	exception report?	Λ		x		
R2	OI	Sample and quality control (OC) identification				21		
	Are all field sample ID numbers cross-referenced to the laboratory ID numbers?							
		Are all laboratory ID numbers cross-referenced to the corresp	onding QC data?	Х				
R3	OI	Test reports						
		Were all samples prepared and analyzed within holding times	9?	Х				
		Other than those results < MQL, were all other raw values bra	acketed by calibration standards?	Х				
		Were calculations checked by a peer or supervisor?		Х				
		Were all analyte identifications checked by a peer or supervis	or?	X				
		Were sample detection limits reported for all analytes not dete	ected?	X		37		
		Were all results for soil and sediment samples reported on a d	t complex?			X		
		Were % moisture (or solids) reported for all soli and sedimen	ith mathenal par SW846 Mathed 50352			A V		
		If required for the project TICs reported?	itii methanoi per 5 w 840 Method 5055?			A X		
R4	0	Surrogate recovery data				1		
	Ŭ	Ware sumerates added mice to sutraction?						
		Were surrogates added prior to extraction?						
R5	OI	Test reports/summary forms for blank samples						
R.	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		X					
		applicable, cleanup procedures?	or realized by the second s					
		Were blank concentrations < MQL?		Х				
R6	OI	Laboratory control samples (LCS):						
		Were all COCs included in the LCS?		Х				
		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 laborate	bry QC limits?	X				
		the MDL used to calculate the SDL s?	nory's capability to detect the COCs at	Λ				
		Was the LCSD RPD within OC limits?						
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data	1					
		Were the project/method specified analytes included in the M	IS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?		Х				
		Were MS (and MSD, if applicable) %Rs within the laboratory	y QC limits?			Х		1
		Were MS/MSD RPDs within laboratory QC limits?				Х		1
R8	OI	Analytical duplicate data						
		Were appropriate analytical duplicates analyzed for each matt	rix?			X		
		Were analytical duplicates analyzed at the appropriate frequent	ncy?			X		
Dû	OI	Were RPDs or relative standard deviations within the laborate	bry QC limits?			X		
K9	01	Method quantitation limits (MQLs):	tom data paakaga?	v				
		Do the MOLs correspond to the concentration of the lowest n	on-zero calibration standard?	X				
		Are unadjusted MOLs and DCSs included in the laboratory d	ata package?	X	-		-	
R10	OI	Other problems/anomalies	F					
		Are all known problems/anomalies/special conditions noted in	n this LRC and ER?	X				
		Was applicable and available technology used to lower the SI	DL to minimize the matrix interference	Х			1	
		affects on the sample results?						
		Is the laboratory NELAC-accredited under the Texas Laborat	ory Accreditation Program for the	Х				
	I _	analytes, matrices and methods associated with this labora	tory data package?					
	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).

Ap	pen	dix A (cont'd): Laboratory Review Checklist:	Reportable Data					
Lab	orato	ry Name: TestAmerica-Houston	C Date: 04/12/13					
Pro	ject N	lame: Exide Recycling Center, Frisco TX Project Lab	ooratory Job Number 600-71309					
Rev	viewei	r Name: JOH Pre	p Batch Number(s): 600-103645 - SV					
$\#^{1}$	A^2	Description	•	Yes	No	NA ³	NR^4	ER# ⁵
S1	OI	Initial calibration (ICAL)						
<u> </u>	01	Were response factors and/or relative response factors for each at	nalyte within OC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?		X				
		Was the number of standards recommended in the method used for	for all analytes?	X				
		Were all points generated between the lowest and highest standar	rd used to calculate the curve?	X				
		Are ICAL data available for all instruments used?		Х				
		Has the initial calibration curve been verified using an appropriat	te second source standard?	Х				
S2	OI	Initial and continuing calibration verification (ICCV and CC	V) and continuing calibration					
		Was the CCV analyzed at the method-required frequency?	6	Х				
		Were percent differences for each analyte within the method-requ	uired QC limits?	Х				
		Was the ICAL curve verified for each analyte?	、	Х				
		Was the absolute value of the analyte concentration in the inorgan	nic CCB < MDL?			Х		
S3	0	Mass spectral tuning:						
		Was the appropriate compound for the method used for tuning?		Х				
		Were ion abundance data within the method-required QC limits?		Х				
S4	0	Internal standards (IS):						
		Were IS area counts and retention times within the method-required QC limits?						
S 5	OI	Raw data (NELAC section 5.5.10)						
		Were the raw data (for example, chromatograms, spectral data) re	eviewed by an analyst?	Х				
		Were data associated with manual integrations flagged on the raw	v data?	Х				
S6	0	Dual column confirmation						
		Did dual column confirmation results meet the method-required (QC?			Х		
S7	0	Tentatively identified compounds (TICs):						
		If TICs were requested, were the mass spectra and TIC data subje	ect to appropriate checks?			Х		
S8	Ι	Interference Check Sample (ICS) results:						
		Were percent recoveries within method QC limits?				X		
S9	I	Serial dilutions, post digestion spikes, and method of standard	d 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?		Х				
011		Is the MDL either adjusted or supported by the analysis of DCSs'	?	X				
<u>S11</u>	OI	Proficiency test reports:	<u> </u>	X.				
010	O T	Was the laboratory's performance acceptable on the applicable pr	conciency tests or evaluation studies?	Х				
512	OI	Standards documentation		V				
612	01	Are all standards used in the analyses NIST-traceable or obtained	from other appropriate sources?	Х				
515	OI	Compound/analyte identification procedures	4 10	V				
C14	OT	Are the procedures for compound/analyte identification documen	ited?	Х				
514	01	Weap DOC and used consistent with NELAC Chapter 52		v				
		was DOC conducted consistent with NELAC Unapter 5?	file?	Λ V				
S15	OT	Is documentation of the analyst's competency up-to-date and on 1 Varification/validation documentation for matheds (NET AC)	Chapter 5)	Λ				
513		Are all the methods used to generate the data decumented used	Unapter 5)	v				
617		Are an the methods used to generate the data documented, verifie	eu, and vandateu, where applicable?	Λ				
510	UI	Laboratory standard operating procedures (SUPs):		v				
		Are laboratory SOP's current and on file for each method perform		Λ				
		1 Items identified by the letter "R" should be included in the laborate	ory data package submitted to the TCEO in	the T	RRP	reauire	ed repo	rt(s).

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: 04/12/13						
Project Name	Project Name: Exide Recycling Center, Frisco TX Project Laboratory Job Number 600-71309					
Reviewer Na	Reviewer Name: JOH Prep Batch Number(s): 600-103645 - SV					
ER # ¹ DES	SCRIPTION					
1 The	The laboratory selected a sample from another group to perform as the MS/MSD.					

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

Laboratory Name: TestAmerica-Houston LRC Date: 04/12/13 Project Name: Exide Recycling Center, Frisco TX Project Laboratory Job Number: 600-71209-1 Reviewer Name: RJV Prep Batch Number: 60: 0103646- TX1005 # A Description Yes No NA RI OI Did samples meet the laboratory's standard conditions of sample acceptability upon receipt? X N R2 OI Samples meet the laboratory's standard conditions of sample acceptability upon receipt? X N R3 OI Test reports X N N R4 II aboratory ID numbers cross-referenced to the laboratory iD numbers? X N N R4 OI Test reports X N N N R4 OI Test reports X N N N N N N R4 OI Test reports X N N N N N N N N N N N N N N N N N					Checklist: Reportable Data	pendix A (cont'd): Laboratory Review Check	pen	Ap
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R9 OI Method quantitation limits (MQLs): Image: Constraint of the laboratory data package? X Are the MQLs for each method analyte included in the laboratory data package? X Image: Constraint of the laboratory data package? X Do the MQLs correspond to the concentration of the lowest non-zero calibration standard? X Image: Constraint of the laboratory data package? X Are unadjusted MQLs and DCSs included in the laboratory data package? X Image: Constraint of the laboratory data package? X R10 OI Other problems/anomalies Image: Constraint of the laboratory data package? X Was applicable and evolution of the lowest here the SDL to minimize the method for the standard of the lowest here the SDL to minimize the method for the standard of the lowest here the SDL to minimize the method for the standard of the lowest here the SDL to minimize the method for the standard of the lowest here the standard of the method for the standard of the lowest here the standard of the method standard of the lowest here the standard of the method standard of the method standard of the lowest here the standard of the method standard of the method standard of the lowest here the there there there the lowest here there the lowest here		X		-	the laboratory OC limits?	Were RPDs or relative standard deviations within the labora	-	
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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				X	n the laboratory data package?	Are the MOLs for each method analyte included in the labo		
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 lowne the SDL to minimize the metric interformer. X				Х	he lowest non-zero calibration standard?	Do the MQLs correspond to the concentration of the lowest		
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 metric interference X				Х	aboratory data package?	Are unadjusted MQLs and DCSs included in the laboratory		
Are all known problems/anomalies/special conditions noted in this LRC and ER? X						OI Other problems/anomalies	OI	R10
Was applicable and available technology used to lower the CDL to minimize the methic interference V				Х	ons noted in this LRC and ER?	Are all known problems/anomalies/special conditions noted		
was applicable and available technology used to lower the SDL to minimize the matrix interference X				Χ	ower the SDL to minimize the matrix interference	Was applicable and available technology used to lower the		
affects on the sample results?	\square	\square	 	+		affects on the sample results?		
Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the X				X	Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the			
analytes, matrices and methods associated with this laboratory data package?			т.		h this laboratory data package?	analytes, matrices and methods associated with this labo		

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).

Ap	pen	dix A (cont'd): Laboratory Review Checklist:	Reportable Data					
Lab	orato	ry Name: TestAmerica-Houston LRC	C Date: 04/12/13					
Pro	ject N	Iame: Exide Recycling Center, Frisco TX Project Labo	oratory Job Number: 600-71309-1					
Rev	viewei	r Name: RJV Prep	Batch Number(s): 600-103646- TX1	1005				
$\#^{1}$	A^2	Description		Yes	No	NA ³	NR^4	ER# ⁵
S 1	OI	Initial calibration (ICAL)						
~ -	-	Were response factors and/or relative response factors for each and	alvte within OC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?		Х				
		Was the number of standards recommended in the method used fo	or all analytes?	Х				
		Were all points generated between the lowest and highest standard	d used to calculate the curve?	Х				
		Are ICAL data available for all instruments used?	L data available for all instruments used?					
		Has the initial calibration curve been verified using an appropriate	e second source standard?	Х				
S2	OI	Initial and continuing calibration verification (ICCV and CCV	V) and continuing calibration					
		Was the CCV analyzed at the method-required frequency?		Х				
		Were percent differences for each analyte within the method-requi	ired QC limits?	Х				
		Was the ICAL curve verified for each analyte?	rerified for each analyte?					
		Was the absolute value of the analyte concentration in the inorgan	ic CCB < MDL?			Х		
S3	0	Mass spectral tuning:						
		Was the appropriate compound for the method used for tuning?				Х		
		Were ion abundance data within the method-required QC limits?				Х		
S4	0	Internal standards (IS):						
		Were IS area counts and retention times within the method-required QC limits?				Х		
S 5	OI	Raw data (NELAC section 5.5.10)						
		Were the raw data (for example, chromatograms, spectral data) re-	viewed by an analyst?	Х				
		Were data associated with manual integrations flagged on the raw	data?	Х				
S6	0	Dual column confirmation						
		Did dual column confirmation results meet the method-required Q	QC?			X		
S7	0	Tentatively identified compounds (TICs):						
<i>a</i> 0	-	If TICs were requested, were the mass spectra and TIC data subject	ct to appropriate checks?			X		
<u>88</u>	I	Interference Check Sample (ICS) results:						
CO	-	Were percent recoveries within method QC limits?				X		
59	I	Serial dilutions, post digestion spikes, and method of standard	additions					
G10	01	Were percent differences, recoveries, and the linearity within the	QC limits specified in the method?			X		
510	OI	Method detection limit (MDL) studies		v				
		was a MDL study performed for each reported analyte?		X				
611	OI	Is the MDL either adjusted or supported by the analysis of DCSs?		X				
511	0I	Pronciency test reports:	fician au tasta on avaluation studios?	v				
\$12	OI	Stondards documentation	Shciency tests of evaluation studies?	Λ				
512	01	Standards documentation	from other appropriate courses?	v				
\$13	OI	Compound/analyte identification procedures	from other appropriate sources?	Λ				
515	01	Are the procedures for compound/analyte identification document	ad?	v				
S14	OI	Demonstration of analyst competency (DOC)		Λ				
511	01	Was DOC conducted consistent with NFLAC Chapter 5?		x				
		Is documentation of the analyst's competency up-to-date and on fi	ile?	X				
S15	OI	Verification/validation documentation for methods (NELAC (Chapter 5)					
		Are all the methods used to generate the data documented, verified	d. and validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs).	.,					
		Are laboratory SOPs current and on file for each method performe	ed?	X				
L		a charactering bot b current and on the for each method performe						
		1 Items identified by the letter "R" should be included in the laborator	ry data package submitted to the TCEQ in	the T	RRP	-requir	ed repo	rt(s).

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.

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable). 2

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).

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Appendix A (cont'd): Laboratory Review Checklist: Exception Reports						
Laboratory Name: TestAmerica-Houston	LRC Date: 04/12/13					
Project Name: Exide Recycling Center, Frisco TX Project	Laboratory Job Number: 600-71309-1					
Reviewer Name: RJV	Prep Batch Number(s): 600-103646- TX1005					
ER # ¹ DESCRIPTION						

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

Matrix:	Water
Method:	8270C LL
Preparation:	3510C
Date Analyzed:	1/3/2013
Date Prepared:	1/3/2013
Lab Sample ID:	600-96501/6-A
Units:	ug/L

Analyte	MDL	DCS Spike	DCS Result	MQL
Pyridine	0.04	0.25	0.062	0.5
N-Nitrosodimethylamine	0.26	0.5	0.305	0.5
bis (2-Chloroisopropyl) ether	0.4	0.5	0.692	0.5
Aniline	0.08	0.25	0.143	0.5
Phenol	0.04	0.25	0.087	0.5
bis(2-Chloroethyl)ether	0.15	0.5	0.371	0.5
2-Chlorophenol	0.13	0.5	0.368	0.5
1,3-Dichlorobenzene	0.17	0.5	0.433	0.5
1,4-Dichlorobenzene	0.13	0.5	0.533	0.5
1,2-Dichlorobenzene	0.17	0.5	0.469	0.5
Benzyl alcohol	0.17	0.5	0.211	0.5
2-Methylphenol (o-cresol)	0.12	0.5	0.353	0.5
3&4-Methylphenol (m&p-Cresols)	0.2	0.5	0.287	1
N-Nitroso-di-n-propylamine	0.1	0.5	0.455	0.5
Hexachloroethane	0.1	0.5	0.490	0.5
Dibenzo(a,h)anthracene	0.08	0.25	0.889	0.5
Indeno(1,2,3-cd)pyrene	0.07	0.25	0.972	0.5
Nitrobenzene	0.11	0.25	0.298	0.5
Isophorone	0.11	0.25	0.207	0.5
2-Nitrophenol	0.22	0.5	0.608	0.5
Benzoic acid	2.51	5	7.32	2.5
2,4-Dimethylphenol	0.15	0.5	0.513	0.5
bis(2-Chloroethoxy)methane	0.13	0.5	0.455	0.5
2,4-Dichlorophenol	0.15	0.5	0.457	0.5
1,2,4-Trichlorobenzene	0.12	0.5	0.340	0.5
Naphthalene	0.08	0.25	0.242	0.5
Benzo(a)pyrene	0.08	0.25	0.530	0.5
Hexachlorobutadiene	0.18	0.5	0.611	0.5
4-Chloro-3-methylphenol	0.17	0.5	0.419	0.5
2-Methylnaphthalene	0.07	0.25	0.229	0.5
1-Methylnaphthalene	0.09	0.25	0.215	0.5
Benzo(k)fluoranthene	0.09	0.25	0.196	0.5
Hexachlorocyclopentadiene	0.13	0.5	0.560	0.5
2,4,6-Trichlorophenol	0.18	0.5	0.638	0.5
2,4,5-Trichlorophenol	0.25	0.5	0.656	0.5
2-Chloronaphthalene	0.08	0.25	0.231	0.5
2-Nitroaniline	0.19	0.5	0.787	0.5
1,4-Dinitrobenzene	0.5	0.5	0.747	0.5
1,3-Dinitrobenzene	0.08	0.25	0.637	0.5
1,2-Dinitrobenzene	0.5	0.5	0.832	0.5

Dimethylphthalate	0.07	0.25	0.220	0.5	
Acenaphthylene	0.06	0.25	0.191	0.5	
2,6-Dinitrotoluene	0.08	0.5	0.618	0.5	
Benzo(b)fluoranthene	0.07	0.5	0.701	0.5	
Acenaphthene	0.08	0.5	0.382	0.5	
Di-n-octylphthalate	0.16	0.5	1.910	0.5	
4-Nitrophenol	0.56	2.5	1.34	1	
Dibenzofuran	0.08	0.25	0.181	0.5	
2,4-Dinitrotoluene	0.13	0.5	0.538	0.5	
2,3,4,6-Tetrachlorophenol	0.5	0.5	0.501	0.5	
2,3,5,6-Tetrachlorophenol	0.5	0.5	0.201	0.5	
Diethylphthalate	1.5	0.5	0.584	0.5	
4-Chlorophenyl-phenylether	0.1	0.5	0.544	0.5	
Fluorene	0.07	0.25	0.245	0.5	
4-Nitroaniline	0.25	0.5	1.070	0.5	
Chrysene	0.08	0.25	0.180	0.5	
4,6-Dinitro-2-methylphenol	0.83	2.5	1.27	0.5	
N-Nitrosodiphenylamine	0.1	0.5	0.366	0.5	
Diphenylamine	0.1	0.5	0.344	0.5	
1,2-Diphenylhydrazine	0.11	0.25	0.136	0.5	
Azobenzene	0.07	0.25	0.156	0.5	
4-Bromophenyl-phenylether	0.1	0.5	0.432	0.5	
Hexachlorobenzene	0.11	0.25	0.218	0.5	
Pentachlorophenol	0.61	0.5	1.460	0.5	
Phenanthrene	0.06	0.25	0.222	0.5	
Anthracene	0.05	0.25	0.234	0.5	
Carbazole	0.17	0.5	0.418	0.5	
Di-n-butylphthalate	0.11	0.25	0.503	0.5	
Fluoranthene	0.07	0.25	0.198	0.5	
Benzidine	0.61	1	0.434	0.5	
Pyrene	0.11	0.25	0.205	0.5	
Butylbenzylphthalate	0.12	0.5	0.857	0.5	
3,3'-Dichlorobenzidine	0.18	0.5	0.463	0.5	
Benzo(a)anthracene	0.08	0.25	0.184	0.5	
bis(2-Ethylhexyl)phthalate	0.37	0.5	1.010	0.5	
Benzo(g,h,i)perylene	0.08	0.25	0.554	0.5	
4-Chloroaniline	0.21	0.5	0.380	0.5	
3-Nitroaniline	0.16	0.5	0.691	0.5	

Matrix: Water Method: 300.0, 9056 Preparation: N/A Date Analyzed: 01/29/2013 Date Prepared: 01/29/2013 TALs Batches: N/A Units: mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Fluoride	0.08	0.075	0.354	0.2
Chloride	0.127	0.1	1.02	0.4
Nitrite	0.105	0.05	0.347	0.2
Bromide	0.071	0.2	0.307	0.2
Nitrate	0.032	0.04	0.476	0.2
Orthophosphate	0.117	0.25	0.305	0.2
Sulfate	0.137	0.15	0.256	0.4

Total C6-C35

Matrix:	Water			
Method:	TX1005			
Preparation:	TX1005			
Date Analyzed:	1/3/2013			
Date Prepared:	1/3/2013			
Data File:	FID-12\A010313	_04.d		
Units:	mg/L			
Analyte	MDL	DCS Spike	Measured Result	MQL
C6-C12	0.37	1	0.507	10
>C12-C28	0.96	1	0.46	10

0.96

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0.967

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Matrix:	Water			
Method:	200.7/6010			
Preparation:	200.7P/3010			
Date Analyzed:	3/29/2013			
Date Prepared:	3/28/2013			
Instrument:	Thermo 6500			
TALs Batches:	102868, 10275	5р		
Units:	mg/L			
Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.0177	0.5
Antimony	0.0063	0.01	0.0105	0.05
Arsenic	0.0033	0.01	0.0077	0.01
Barium	0.0022	0.005	0.0026	0.02
Beryllium	0.00134	0.002	0.0042	0.005
Boron	0.0077	0.02	0.0193	0.2
Cadmium	0.00073	0.001	0.001	0.005
Calcium	0.022	0.05	0.0583	1
Chromium	0.0016	0.002	0.0037	0.01
Cobalt	0.00063	0.001	0.0012	0.01
Copper	0.0014	0.002	0.0012	0.01
Iron	0.087	0.1	0.1011	0.4
Lithium	0.0024	0.005	0.0043	0.2
Lead	0.0029	0.005	0.005	0.01
Selenium	0.0042	0.01	0.0083	0.04
Manganese	0.00084	0.002	0.002	0.01
Molybdenum	0.0027	0.005	0.0048	0.01
Nickel	0.00179	0.005	0.0043	0.01
Silver	0.0012	0.0025	0.0024	0.01
Sodium	0.02	0.05	0.0465	1
Strontium	0.0005	0.001	0.001	0.005
Thallium	0.0078	0.02	0.0184	0.03
Tin	0.0028	0.005	0.0049	0.01
Titanium	0.0011	0.002	0.0023	0.01
Vanadium	0.0017	0.002	0.0048	0.01
Zinc	0.0022	0.005	0.0065	0.01

Job ID: 600-71309-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative 600-71309-1

Comments

No additional comments.

Receipt

The samples were received on 4/10/2013 8:51 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.1° C.

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

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Method Method Description Protocol Laboratory 8270C LL Semivolatile Organic Compounds by GCMS - Low Levels SW846 TAL HOU TX 1005 TCEQ TAL HOU Texas - Total Petroleum Hydrocarbon (GC) TAL HOU 6010B Metals (ICP) SW846 300.0 Anions, Ion Chromatography MCAWW TAL HOU Protocol References: MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates. TCEQ = Texas Commission of Environmental Quality Laboratory References: TAL HOU = TestAmerica Houston, 6310 Rothway Street, Houston, TX 77040, TEL (713)690-4444

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-71309-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-71309-1	MW-27	Water	04/09/13 08:45	04/10/13 08:51
600-71309-2	MW-29	Water	04/09/13 09:30	04/10/13 08:51
600-71309-3	MW-26	Water	04/09/13 10:00	04/10/13 08:51
600-71309-4	MW-22	Water	04/09/13 10:50	04/10/13 08:51
600-71309-5	P-1	Water	04/09/13 11:25	04/10/13 08:51
600-71309-6	MW-16S	Water	04/09/13 13:45	04/10/13 08:51
600-71309-7	MW-16	Water	04/09/13 14:50	04/10/13 08:51

Lab Sample ID: 600-71309-1 Matrix: Water

Date Collected: 04/09/13 08:45 Date Received: 04/10/13 08:51

Sulfate

Client Sample ID: MW-27

Method: 8270C LL - Semivolatile	Organic Comp	bounds by	GCMS - Low L	evels						
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
Fluorene	0.190	J	1.50	0.0700	ug/L		04/10/13 11:57	04/11/13 11:44	1	
Acenaphthylene	0.0600	U	1.00	0.0600	ug/L		04/10/13 11:57	04/11/13 11:44	1	
Benzo[g,h,i]perylene	0.0800	U	2.50	0.0800	ug/L		04/10/13 11:57	04/11/13 11:44	1	
Phenanthrene	0.0600	U	1.50	0.0600	ug/L		04/10/13 11:57	04/11/13 11:44	1	
Benzo[k]fluoranthene	0.0900	U	2.00	0.0900	ug/L		04/10/13 11:57	04/11/13 11:44	1	
Benzo[a]pyrene	0.0800	U	1.50	0.0800	ug/L		04/10/13 11:57	04/11/13 11:44	1	
Anthracene	0.0500	U	1.00	0.0500	ug/L		04/10/13 11:57	04/11/13 11:44	1	
2-Methylnaphthalene	0.222	J	1.50	0.0700	ug/L		04/10/13 11:57	04/11/13 11:44	1	
Pyrene	0.110	U	2.00	0.110	ug/L		04/10/13 11:57	04/11/13 11:44	1	
Dibenz(a,h)anthracene	0.0800	U	2.50	0.0800	ug/L		04/10/13 11:57	04/11/13 11:44	1	
Naphthalene	1.52	J	5.00	0.0800	ug/L		04/10/13 11:57	04/11/13 11:44	1	
Fluoranthene	0.0700	U	2.50	0.0700	ug/L		04/10/13 11:57	04/11/13 11:44	1	
Benzo[a]anthracene	0.0800	U	2.00	0.0800	ug/L		04/10/13 11:57	04/11/13 11:44	1	
Indeno[1,2,3-cd]pyrene	0.0700	U	2.00	0.0700	ug/L		04/10/13 11:57	04/11/13 11:44	1	
Chrysene	0.0800	U	1.50	0.0800	ug/L		04/10/13 11:57	04/11/13 11:44	1	
Acenaphthene	0.156	J	1.00	0.0800	ug/L		04/10/13 11:57	04/11/13 11:44	1	
Benzo[b]fluoranthene	0.0700	U	2.00	0.0700	ug/L		04/10/13 11:57	04/11/13 11:44	1	
1-Methylnaphthalene	1.38	J	2.00	0.0900	uq/L		04/10/13 11:57	04/11/13 11:44	1	
		-			0					
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
Phenol-d6	21		12 - 128				04/10/13 11:57	04/11/13 11:44	1	
Terphenyl-d14	95		33 - 141				04/10/13 11:57	04/11/13 11:44	1	
Nitrobenzene-d5	94		47 - 120				04/10/13 11:57	04/11/13 11:44	1	
2-Fluorophenol	42		18 - 120				04/10/13 11:57	04/11/13 11:44	1	
2-Fluorobiphenyl	88		43 - 120				04/10/13 11:57	04/11/13 11:44	1	
2,4,6-Tribromophenol	110		44 - 123				04/10/13 11:57	04/11/13 11:44	1	
Method: TX 1005 - Texas - Total P	etroleum Hyd	rocarbon (GC)							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
C6-C12	0.808	U	4.87	0.808	mg/L		04/10/13 12:04	04/10/13 15:30	1	
>C12-C28	0.935	U	4.87	0.935	mg/L		04/10/13 12:04	04/10/13 15:30	1	
>C28-C35	0.935	U	4.87	0.935	mg/L		04/10/13 12:04	04/10/13 15:30	1	
C6-C35	1.52	U	4.87	1.52	mg/L		04/10/13 12:04	04/10/13 15:30	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
p-Terphenyl	100		70 - 130				04/10/13 12:04	04/10/13 15:30	1	
Method: 6010B - Metals (ICP)										
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac	
Cadmium	0.00100	J	0.00500	0.000350	mg/L		04/10/13 13:36	04/11/13 15:48	1	
Lead	0.00290	J	0.0100	0.00290	mg/L		04/10/13 13:36	04/11/13 15:48	1	
Method: 6010B - Metals (ICP) - Dis	ssolved	0 117				_	. .	.	B -	
Anaiyte	Result	Qualifier	(Adj)	SDL	Unit	D	Prepared	Analyzed	DII Fac	
Cadmium, Dissolved	0.000900	J	0.00500	0.000350	mg/L		04/10/13 13:36	04/11/13 15:50	1	
Lead, Dissolved	0.00350	J	0.0100	0.00290	mg/L		04/10/13 13:36	04/11/13 15:50	1	
General Chemistry	_						_			
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	

TestAmerica Houston

04/11/13 06:00

50.0

1530

13.7 mg/L

100

MQL (Adj)

SDL Unit

D

Prepared

Result Qualifier

Client Sample ID: MW-29

Date Collected: 04/09/13 09:30

Date Received: 04/10/13 08:51

Analyte

Method: 6010B - Metals (ICP)

TestAmerica Job ID: 600-71309-1

Lab Sample ID: 600-71309-2

Analyzed

Matrix: Water

Dil Fac

600-71309-4

Matrix: Water

100

1

1

1

1

600-71309-3

Matrix: Water

100

1

1

1

1

8

9	
	3

Cadmium	0.00150	J	0.00500	0.000350	mg/L		04/10/13 13:36	04/11/13 16:00
Lead	0.00290	U	0.0100	0.00290	mg/L		04/10/13 13:36	04/11/13 16:00
Methods 6010P Metalo (ICD) Die	achied							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed
Cadmium. Dissolved	0.00140	J	0.00500	0.000350	mg/L		04/10/13 13:36	04/11/13 16:03
Lead, Dissolved	0.00290	U	0.0100	0.00290	mg/L		04/10/13 13:36	04/11/13 16:03
General Chemistry								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed
Sulfate	4260		50.0	13.7	mg/L			04/11/13 06:18
Client Sample ID: MW-26							Lab Sam	ple ID: 600-
Date Collected: 04/09/13 10:00								Matı
Date Received: 04/10/13 08:51								
Method: 6010B - Metals (ICP)								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed
Cadmium	0.000600	J	0.00500	0.000350	mg/L		04/10/13 13:36	04/11/13 16:05
Lead	0.00290	U	0.0100	0.00290	mg/L		04/10/13 13:36	04/11/13 16:05
Method: 6010B - Metals (ICP) - Dis	solved							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed
Cadmium, Dissolved	0.000400	J	0.00500	0.000350	mg/L		04/10/13 13:36	04/11/13 16:08
Lead, Dissolved	0.00290	U	0.0100	0.00290	mg/L		04/10/13 13:36	04/11/13 16:08
General Chemistry								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed
Sulfate	2480		50.0	13.7	mg/L			04/11/13 06:36
Client Sample ID: MW-22							Lab Sam	ple ID: 600-
Date Collected: 04/09/13 10:50								Mati
Date Received: 04/10/13 08:51								
Method: 6010B - Metals (ICP)								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed

Cadmium	0.00290	J	0.00500	0.000350	mg/L		04/10/13 13:36	04/11/13 16:10	1
Lead	0.00630	J	0.0100	0.00290	mg/L		04/10/13 13:36	04/11/13 16:10	1
	olved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium, Dissolved	0.00290	J	0.00500	0.000350	mg/L		04/10/13 13:36	04/11/13 16:13	1
Lead, Dissolved	0.00400	J	0.0100	0.00290	mg/L		04/10/13 13:36	04/11/13 16:13	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2180		50.0	13.7	mg/L			04/11/13 06:54	100

TestAmerica Job ID: 600-71309-1

Client Sample ID: P-1 Date Collected: 04/09/13 11:25 Date Received: 04/10/13 08:51

Lab Sample ID:	600-71309-5
	Matrix: Water

5

8

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		04/10/13 13:36	04/11/13 16:16	1
Lead	0.00290	U	0.0100	0.00290	mg/L		04/10/13 13:36	04/11/13 16:16	1
	ssolved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium, Dissolved	0.000350	U	0.00500	0.000350	mg/L		04/10/13 13:36	04/11/13 16:18	1
Lead, Dissolved	0.00290	U	0.0100	0.00290	mg/L		04/10/13 13:36	04/11/13 16:18	1
– General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	169		50.0	13.7	mg/L			04/11/13 04:28	100
Client Sample ID: MW-16S							Lab Sam	ple ID: 600-7	1309-6
Client Sample ID: MW-16S Date Collected: 04/09/13 13:45 Date Received: 04/10/13 08:51							Lab Sam	ple ID: 600-7 Matrix	1309-6 <: Water
Client Sample ID: MW-16S Date Collected: 04/09/13 13:45 Date Received: 04/10/13 08:51 Method: 6010B - Metals (ICP)							Lab Sam	ple ID: 600-7 Matrix	1309-6 c: Water
Client Sample ID: MW-16S Date Collected: 04/09/13 13:45 Date Received: 04/10/13 08:51 Method: 6010B - Metals (ICP) Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Lab Sam	ple ID: 600-7 Matrix Analyzed	1309-6 c: Water Dil Fac
Client Sample ID: MW-16S Date Collected: 04/09/13 13:45 Date Received: 04/10/13 08:51 Method: 6010B - Metals (ICP) Analyte Cadmium		Qualifier J	MQL (Adj) 0.00500	SDL 0.000350	Unit mg/L	<u>D</u>	Prepared 04/10/13 13:36	ple ID: 600-7 Matrix 	1309-6 :: Water Dil Fac 1
Client Sample ID: MW-16S Date Collected: 04/09/13 13:45 Date Received: 04/10/13 08:51 Method: 6010B - Metals (ICP) Analyte Cadmium Lead	Result 0.00120 0.00500	Qualifier J J	MQL (Adj) 0.00500 0.0100	SDL 0.000350 0.00290	Unit mg/L mg/L	D	Prepared 04/10/13 13:36 04/10/13 13:36	Ple ID: 600-7 Matrix Analyzed 04/11/13 16:20 04/11/13 16:20	1309-6 x: Water Dil Fac 1 1
Client Sample ID: MW-16S Date Collected: 04/09/13 13:45 Date Received: 04/10/13 08:51 Method: 6010B - Metals (ICP) Analyte Cadmium Lead Method: 6010B - Metals (ICP) - Dis	Result 0.00120 0.00500 ssolved	Qualifier J J	MQL (Adj) 0.00500 0.0100	SDL 0.000350 0.00290	Unit mg/L mg/L	<u>D</u>	Prepared 04/10/13 13:36 04/10/13 13:36	Analyzed 04/11/13 16:20 04/11/13 16:20	1309-6 x: Water Dil Fac 1 1
Client Sample ID: MW-16S Date Collected: 04/09/13 13:45 Date Received: 04/10/13 08:51 Method: 6010B - Metals (ICP) Analyte Cadmium Lead Method: 6010B - Metals (ICP) - Dis Analyte	Result 0.00120 0.00500 ssolved Result	Qualifier J J Qualifier	MQL (Adj) 0.00500 0.0100 MQL (Adj)	SDL 0.000350 0.00290 SDL	Unit mg/L mg/L Unit	<u>D</u>	Prepared 04/10/13 13:36 04/10/13 13:36 Prepared	Ple ID: 600-7 Matrix Analyzed 04/11/13 16:20 04/11/13 16:20 Analyzed	1309-6 x: Water Dil Fac 1 Dil Fac
Client Sample ID: MW-16S Date Collected: 04/09/13 13:45 Date Received: 04/10/13 08:51 Method: 6010B - Metals (ICP) Analyte Cadmium Lead Method: 6010B - Metals (ICP) - Dis Analyte Cadmium, Dissolved	Result 0.00120 0.00500 ssolved Result 0.000700	Qualifier J J Qualifier J	MQL (Adj) 0.00500 0.0100 MQL (Adj) 0.00500	SDL 0.000350 0.00290 SDL 0.000350	Unit mg/L mg/L Unit mg/L	D	Prepared 04/10/13 13:36 04/10/13 13:36 Prepared 04/10/13 13:36	Ple ID: 600-7 Matrix Analyzed 04/11/13 16:20 04/11/13 16:20 Analyzed 04/11/13 16:23	1309-6 x: Water
Client Sample ID: MW-16S Date Collected: 04/09/13 13:45 Date Received: 04/10/13 08:51 Method: 6010B - Metals (ICP) Analyte Cadmium Lead Method: 6010B - Metals (ICP) - Dis Analyte Cadmium, Dissolved Lead, Dissolved	Result 0.00120 0.00500 SSOIVEd Result 0.000700 0.00410	Qualifier J J Qualifier J J	MQL (Adj) 0.00500 0.0100 MQL (Adj) 0.00500 0.0100	SDL 0.000350 0.00290 SDL 0.000350 0.00290	Unit mg/L mg/L Unit mg/L mg/L	D	Prepared 04/10/13 13:36 04/10/13 13:36 Prepared 04/10/13 13:36 04/10/13 13:36	Analyzed 04/11/13 16:20 04/11/13 16:20 04/11/13 16:23 04/11/13 16:23 04/11/13 16:23	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Client Sample ID: MW-16S Date Collected: 04/09/13 13:45 Date Received: 04/10/13 08:51 Method: 6010B - Metals (ICP) Analyte Cadmium Lead Method: 6010B - Metals (ICP) - Dis Analyte Cadmium, Dissolved Lead, Dissolved General Chemistry	Result 0.00120 0.00500 SSOIVEd Result 0.000700 0.00410	Qualifier J J Qualifier J J	MQL (Adj) 0.00500 0.0100 MQL (Adj) 0.00500 0.0100	SDL 0.000350 0.00290 SDL 0.000350 0.00290	Unit mg/L mg/L Unit mg/L mg/L	D	Prepared 04/10/13 13:36 04/10/13 13:36 Prepared 04/10/13 13:36 04/10/13 13:36 04/10/13 13:36	Analyzed 04/11/13 16:20 04/11/13 16:20 04/11/13 16:20 04/11/13 16:20 04/11/13 16:20	Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Client Sample ID: MW-16S Date Collected: 04/09/13 13:45 Date Received: 04/10/13 08:51 Method: 6010B - Metals (ICP) Analyte Cadmium Lead Method: 6010B - Metals (ICP) - Dis Analyte Cadmium, Dissolved Lead, Dissolved General Chemistry Analyte	Result 0.00120 0.00500 SSOIVed Result 0.000700 0.00410 Result	Qualifier J J Qualifier J Qualifier	MQL (Adj) 0.00500 0.0100 MQL (Adj) 0.00500 0.0100 MQL (Adj)	SDL 0.000350 0.00290 SDL 0.000350 0.00290 SDL	Unit mg/L mg/L Unit mg/L mg/L Unit	D D D	Prepared 04/10/13 13:36 04/10/13 13:36 Prepared 04/10/13 13:36 04/10/13 13:36 04/10/13 13:36 04/10/13 13:36 Prepared	Ple ID: 600-7 Matrix <u>Analyzed</u> 04/11/13 16:20 04/11/13 16:20 <u>Analyzed</u> 04/11/13 16:23 04/11/13 16:23 Analyzed	Dil Fac 1

Client Sample ID: MW-16

Date Received: 04/10/13 08:51

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		04/10/13 13:36	04/11/13 16:33	1
Lead	0.00440	J	0.0100	0.00290	mg/L		04/10/13 13:36	04/11/13 16:33	1
Method: 6010B - Metals (ICP) - Diss	olved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium, Dissolved	0.000350	U	0.00500	0.000350	mg/L		04/10/13 13:36	04/11/13 16:35	1
Lead, Dissolved	0.00390	J	0.0100	0.00290	mg/L		04/10/13 13:36	04/11/13 16:35	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	276		50.0	13.7	mg/L			04/11/13 07:31	100

TestAmerica Houston

Matrix: Water

Date Collected: 04/09/13 14:50

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description	
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.	
U	Analyte was not detected at or above the SDL.	
GC Semi V	'OA	
Qualifier	Qualifier Description	
U	Analyte was not detected at or above the SDL.	
Metals		
Qualifier	Qualifier Description	3
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.	9
General Ch	hemistry	
Qualifier	Qualifier Description	
U	Analyte was not detected at or above the SDL.	1

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	1	
%R	Percent Recovery		
CNF	Contains no Free Liquid		
DER	Duplicate error ratio (normalized absolute difference)		
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	1	
MDL	Method Detection Limit		
ML	Minimum Level (Dioxin)		
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)

трн

(33-141)

95

100

89

NBZ

(47-120)

94

91

79

PHL

(12-128)

21

25

20

Client Sample ID

Lab Control Sample

Method Blank

MW-27

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

Percent Surrogate Recovery (Acceptance Limits)

FBP

(43-120)

88

92

75

твр

(44-123)

110

97

57

2FP

(18-120)

42

44

37

Prep Type: Total/NA

5

Surrogate Legend				
PHL = Phenol-d6				8
TPH = Terphenyl-d14				
NBZ = Nitrobenzene-d5	5			0
2FP = 2-Fluorophenol				3
FBP = 2-Fluorobipheny	1			10
TBP = 2,4,6-Tribromopl	henol			10
Method: TX 1005 -	Texas - Total Petroleun	n Hydrocarbon (G	C)	
Matrix: Water			Prep Type: Total/NA	
			Percent Surrogate Recovery (Acceptance Limits)	
		ОТРН		13
Lab Sample ID	Client Sample ID	(70-130)		
600-71309-1	MW-27	100		
600-71309-1 MS	MW-27	102		
600-71309-1 MSD	MW-27	104		
LCS 600-103646/2-A	Lab Control Sample	108		
MB 600-103646/1-A	Method Blank	105		

Surrogate Legend

Matrix: Water

Lab Sample ID

LCS 600-103645/2-A

MB 600-103645/1-A

600-71309-1

OTPH = o-Terphenyl

Lab Sample ID: MB 600-103645/1-A

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

5

11

1

1

1

1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

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

Matrix: Water							Prep Type: 1	otal/NA	
Analysis Batch: 103780								Prep Batch:	103645
	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.0700	U	1.50	0.0700	ug/L		04/10/13 11:57	04/11/13 10:52	1
Acenaphthylene	0.0600	U	1.00	0.0600	ug/L		04/10/13 11:57	04/11/13 10:52	1
Benzo[g,h,i]perylene	0.0800	U	2.50	0.0800	ug/L		04/10/13 11:57	04/11/13 10:52	1
Phenanthrene	0.0600	U	1.50	0.0600	ug/L		04/10/13 11:57	04/11/13 10:52	1
Benzo[k]fluoranthene	0.0900	U	2.00	0.0900	ug/L		04/10/13 11:57	04/11/13 10:52	1
Benzo[a]pyrene	0.0800	U	1.50	0.0800	ug/L		04/10/13 11:57	04/11/13 10:52	1
Anthracene	0.0500	U	1.00	0.0500	ug/L		04/10/13 11:57	04/11/13 10:52	1
2-Methylnaphthalene	0.0700	U	1.50	0.0700	ug/L		04/10/13 11:57	04/11/13 10:52	1
Pyrene	0.110	U	2.00	0.110	ug/L		04/10/13 11:57	04/11/13 10:52	1
Dibenz(a,h)anthracene	0.0800	U	2.50	0.0800	ug/L		04/10/13 11:57	04/11/13 10:52	1
Naphthalene	0.0800	U	5.00	0.0800	ug/L		04/10/13 11:57	04/11/13 10:52	1
Fluoranthene	0.0700	U	2.50	0.0700	ug/L		04/10/13 11:57	04/11/13 10:52	1
Benzo[a]anthracene	0.0800	U	2.00	0.0800	ug/L		04/10/13 11:57	04/11/13 10:52	1
Indeno[1,2,3-cd]pyrene	0.0700	U	2.00	0.0700	ug/L		04/10/13 11:57	04/11/13 10:52	1
Chrysene	0.0800	U	1.50	0.0800	ug/L		04/10/13 11:57	04/11/13 10:52	1
Acenaphthene	0.0800	U	1.00	0.0800	ug/L		04/10/13 11:57	04/11/13 10:52	1
Benzo[b]fluoranthene	0.0700	U	2.00	0.0700	ug/L		04/10/13 11:57	04/11/13 10:52	1
1-Methylnaphthalene	0.0900	U	2.00	0.0900	ug/L		04/10/13 11:57	04/11/13 10:52	1
	МВ	МВ							
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Phenol-d6	20		12 - 128				04/10/13 11:57	04/11/13 10:52	1
Terphenyl-d14	89		33 - 141				04/10/13 11:57	04/11/13 10:52	1

Terphenyl-d14	89	33 - 141	04/10/13 11:57	04/11/13 10:52
Nitrobenzene-d5	79	47 - 120	04/10/13 11:57	04/11/13 10:52
2-Fluorophenol	37	18 - 120	04/10/13 11:57	04/11/13 10:52
2-Fluorobiphenyl	75	43 - 120	04/10/13 11:57	04/11/13 10:52
2,4,6-Tribromophenol	57	44 - 123	04/10/13 11:57	04/11/13 10:52

Lab Sample ID: LCS 600-103645/2-A Matrix: Water

Analysis Batch: 103780

Analysis Batch: 103780							Prep Batch: 103645
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Fluorene	10.0	8.297		ug/L		83	48 - 127
Acenaphthylene	10.0	8.865		ug/L		89	35 - 135
Benzo[g,h,i]perylene	10.0	11.21		ug/L		112	46 - 133
Phenanthrene	10.0	8.814		ug/L		88	52 _ 121
Benzo[k]fluoranthene	10.0	10.13		ug/L		101	46 - 130
Benzo[a]pyrene	10.0	9.178		ug/L		92	50 - 124
Anthracene	10.0	8.939		ug/L		89	53 - 124
2-Methylnaphthalene	10.0	7.105		ug/L		71	40 _ 121
Pyrene	10.0	9.647		ug/L		96	49 ₋ 121
Dibenz(a,h)anthracene	10.0	10.35		ug/L		103	42 - 134
Naphthalene	10.0	8.080		ug/L		81	39 - 120
Fluoranthene	10.0	8.990		ug/L		90	53 - 127
Benzo[a]anthracene	10.0	8.932		ug/L		89	53 - 122
Indeno[1,2,3-cd]pyrene	10.0	10.52		ug/L		105	45 ₋ 124
Chrysene	10.0	8.482		ug/L		85	49 - 124
Acenaphthene	10.0	8.267		ug/L		83	47 _ 145

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

Lab Sample ID: LCS 600-1036 Matrix: Water Analysis Batch: 103780	645/2-A						Client	Sample	ID: Lab Co Prep T Prep E	ontrol Sample ype: Total/NA Batch: 103645
			Spike	LCS	LCS				%Rec.	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzo[b]fluoranthene			10.0	8.677		ug/L		87	53 _ 131	
1-Methylnaphthalene			10.0	8.469		ug/L		85	45 - 124	
	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							
Phenol-d6	25		12 - 128							
Terphenyl-d14	100		33 - 141							
Nitrobenzene-d5	91		47 - 120							
2-Fluorophenol	44		18 - 120							
2-Fluorobiphenyl	92		43 - 120							
2,4,6-Tribromophenol	97		44 - 123							

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

Lab Sample ID: MB 600-103646/1- Matrix: Water Analysis Batch: 103707	Α					Client Sample ID: Method Prep Type: To Prep Batch: 1				
	MB	MB								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
C6-C12	0.830	U	5.00	0.830	mg/L		04/10/13 12:04	04/10/13 14:23	1	
>C12-C28	0.960	U	5.00	0.960	mg/L		04/10/13 12:04	04/10/13 14:23	1	
>C28-C35	0.960	U	5.00	0.960	mg/L		04/10/13 12:04	04/10/13 14:23	1	
C6-C35	1.56	U	5.00	1.56	mg/L		04/10/13 12:04	04/10/13 14:23	1	
	MB	МВ								
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	

eanegute	,, L		
o-Terphenyl	105	7	0_130

Lab Sample ID: LCS 600-103646/2-A
Matrix: Water
Analysis Batch: 103707

Analysis Batch: 103707							Prep B	atch: 103646
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
C6-C12	33.3	31.73		mg/L		95	75 - 125	
>C12-C28	33.3	33.78		mg/L		101	75 - 125	
C6-C35	66.7	65.51		mg/L		98	75 - 125	

	LCS LCS	
Surrogate	%Recovery Qualifier	Limits
o-Terphenyl	108	70 - 130

Lab Sample ID: 600-71309-1 MS Matrix: Water Analysis Batch: 103707									Client Samp Prep Ty Prep B	le ID: MW-27 /pe: Total/NA atch: 103646
	Sample	Sample	Spike	MS	MS				%Rec.	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
C6-C12	0.808	U	32.4	30.91		mg/L		95	75 - 125	
>C12-C28	0.935	U	32.4	31.35		mg/L		97	75 ₋ 125	
C6-C35	1.52	U	64.8	62.26		mg/L		96	75 - 125	

1

TestAmerica Houston

04/10/13 12:04 04/10/13 14:23

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

2 3 Client Sample ID: MW-27 Prep Type: Total/NA Prep Batch: 103646 6 Client Sample ID: MW-27 Prep Type: Total/NA

Method: TX 1005 - Texas - Total Petroleum Hydroca	rbon (GC) (Continued)
Lab Sample ID: 600-71309-1 MS	
Matrix: Water	

Analysis Batch: 103707									Prep E	Batch: 1	03
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
o-Terphenyl	102		70 - 130								
Lab Sample ID: 600-7130	9-1 MSD								Client Sam	ple ID: N	٨W
Matrix: Water									Prep T	ype: To	tal/
Analysis Batch: 103707									Prep E	Batch: 1	03
-	Sample	Sample	Spike	MSD	MSD				%Rec.		I
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	L
C6-C12	0.808	U	32.5	31.78		mg/L		98	75 - 125	3	
>C12-C28	0.935	U	32.5	31.51		mg/L		97	75 ₋ 125	1	
C6-C35	1.52	U	64.9	63.29		mg/L		97	75 ₋ 125	2	
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
o-Terphenyl	104		70 - 130								

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-103647/1-A Matrix: Water Analysis Batch: 103762							Client Sa	mple ID: Metho Prep Type: 1 Prep Batch:	d Blank Total/NA 103647
	MB	MB							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		04/10/13 13:36	04/11/13 15:30	1
Cadmium, Dissolved	0.000350	U	0.00500	0.000350	mg/L		04/10/13 13:36	04/11/13 15:30	1
Lead	0.00290	U	0.0100	0.00290	mg/L		04/10/13 13:36	04/11/13 15:30	1
Lead, Dissolved	0.00290	U	0.0100	0.00290	mg/L		04/10/13 13:36	04/11/13 15:30	1

Lab Sample ID: LCS 600-103647/2-A					Client	Sample	ID: Lab Co
Matrix: Water							Prep Ty
Analysis Batch: 103762							Prep B
	Spike	LCS	LCS				%Rec.
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Cadmium	0.500	0.5083		mg/L		102	80 - 120
Cadmium, Dissolved	0.500	0.5083		mg/L		102	80 - 120
Lead	1.00	0.9635		mg/L		96	80 - 120
Lead, Dissolved	1.00	0.9635		mg/L		96	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 600-103704/3 Matrix: Water Analysis Batch: 103704							Client S	ample ID: Metho Prep Type: 1	d Blank īotal/NA
	MB	МВ							
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	0.137	U	0.500	0.137	mg/L			04/10/13 15:26	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 600-103704/ Matrix: Water Analysis Batch: 103704	4						Client	Sample	e ID: Lab C Prep	ontrol S Type: To	ample tal/NA
			Spike	LCS	LCS				%Rec.		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Sulfate			20.0	21.03		mg/L		105	90 - 110		
Lab Sample ID: 600-71309-5 MS									Client	Sample I	D: P-1
Matrix: Water									Prep	Туре: То	tal/NA
Analysis Batch: 103704											
	Sample	Sample	Spike	MS	MS				%Rec.		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Sulfate	169		1000	1074		mg/L		91	80 - 120		
 Lab Sample ID: 600-71309-5 MSD)								Client	Sample I	D: P-1
Matrix: Water									Prep	Type: To	tal/NA
Analysis Batch: 103704											
	Sample	Sample	Spike	MSD	MSD				%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Sulfate	169		1000	1085		mg/L		92	80 - 120	1	20

Unadjusted Detection Limits

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

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

Analyte	MQL	MDL	Units	Method
1-Methylnaphthalene	2.00	0.0900	ug/L	8270C LL
2-Methylnaphthalene	1.50	0.0700	ug/L	8270C LL
Acenaphthene	1.00	0.0800	ug/L	8270C LL
Acenaphthylene	1.00	0.0600	ug/L	8270C LL
Anthracene	1.00	0.0500	ug/L	8270C LL
Benzo[a]anthracene	2.00	0.0800	ug/L	8270C LL
Benzo[a]pyrene	1.50	0.0800	ug/L	8270C LL
Benzo[b]fluoranthene	2.00	0.0700	ug/L	8270C LL
Benzo[g,h,i]perylene	2.50	0.0800	ug/L	8270C LL
Benzo[k]fluoranthene	2.00	0.0900	ug/L	8270C LL
Chrysene	1.50	0.0800	ug/L	8270C LL
Dibenz(a,h)anthracene	2.50	0.0800	ug/L	8270C LL
Fluoranthene	2.50	0.0700	ug/L	8270C LL
Fluorene	1.50	0.0700	ug/L	8270C LL
Indeno[1,2,3-cd]pyrene	2.00	0.0700	ug/L	8270C LL
Naphthalene	5.00	0.0800	ug/L	8270C LL
Phenanthrene	1.50	0.0600	ug/L	8270C LL
Pyrene	2.00	0.110	ug/L	8270C LL

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

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

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Cadmium	0.00500	0.000350	mg/L	6010B
Lead	0.0100	0.00290	mg/L	6010B

Method: 6010B - Metals (ICP) - Dissolved

Analyte	MQL	MDL	Units	Method	
Cadmium, Dissolved	0.00500	0.000350	mg/L	6010B	
Lead, Dissolved	0.0100	0.00290	mg/L	6010B	

General Chemistry

Analyte	MQL	MDL	Units	Method
Sulfate	0.500	0.137	mg/L	300.0

QC Association Summary

Prep Type

Total/NA

Total/NA

Total/NA

Prep Type

Total/NA

Total/NA

Total/NA

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Matrix

Water

Water

Water

Matrix

Water

Water

Water

Matrix

Water

Water

Water

Water

Water

Water

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Client Sample ID

Lab Control Sample

Method Blank

MW-27

MW-27

MW-27

MW-27

MW-27

MW-27

MW-27

MW-27

GC/MS Semi VOA Prep Batch: 103645

600-71309-1

Lab Sample ID

600-71309-1

LCS 600-103645/2-A

MB 600-103645/1-A

LCS 600-103645/2-A

MB 600-103645/1-A

GC Semi VOA

600-71309-1

600-71309-1 MS

600-71309-1 MSD

LCS 600-103646/2-A

MB 600-103646/1-A

Lab Sample ID

600-71309-1 MS

600-71309-1 MSD

LCS 600-103646/2-A

MB 600-103646/1-A

600-71309-1

Analysis Batch: 103707

Prep Batch: 103646

Analysis Batch: 103780

Method

3510C

3510C

3510C

Method

8270C LL

8270C LL

8270C LL

Method

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TX_1005_W_Pr

TX_1005_W_Pr

TX 1005 W Pr

TX_1005_W_Pr

TX_1005_W_Pr

Prep Batch

Prep Batch 103645 103645 103645 9 10 10 Prep Batch 12 13 14

16

103646

Prep Type	Matrix	Method	Prep Batch	
Total/NA	Water	TX 1005	103646	11
Total/NA	Water	TX 1005	103646	
Total/NA	Water	TX 1005	103646	
Total/NA	Water	TX 1005	103646	

TX 1005

Metals

Prep Batch: 103647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-71309-1	MW-27	Total/NA	Water	3010A	
600-71309-1	MW-27	Dissolved	Water	3010A	
600-71309-2	MW-29	Total/NA	Water	3010A	
600-71309-2	MW-29	Dissolved	Water	3010A	
600-71309-3	MW-26	Total/NA	Water	3010A	
600-71309-3	MW-26	Dissolved	Water	3010A	
600-71309-4	MW-22	Total/NA	Water	3010A	
600-71309-4	MW-22	Dissolved	Water	3010A	
600-71309-5	P-1	Total/NA	Water	3010A	
600-71309-5	P-1	Dissolved	Water	3010A	
600-71309-6	MW-16S	Total/NA	Water	3010A	
600-71309-6	MW-16S	Dissolved	Water	3010A	
600-71309-7	MW-16	Total/NA	Water	3010A	
600-71309-7	MW-16	Dissolved	Water	3010A	

QC Association Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

13

Metals (Continued)

Prep Batch: 103647 (Continued)

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
LCS 600-103647/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-103647/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 103762

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
600-71309-1	MW-27	Total/NA	Water	6010B	103647
600-71309-1	MW-27	Dissolved	Water	6010B	103647
600-71309-2	MW-29	Total/NA	Water	6010B	103647
600-71309-2	MW-29	Dissolved	Water	6010B	103647
600-71309-3	MW-26	Total/NA	Water	6010B	103647
600-71309-3	MW-26	Dissolved	Water	6010B	103647
600-71309-4	MW-22	Total/NA	Water	6010B	103647
600-71309-4	MW-22	Dissolved	Water	6010B	103647
600-71309-5	P-1	Total/NA	Water	6010B	103647
600-71309-5	P-1	Dissolved	Water	6010B	103647
600-71309-6	MW-16S	Total/NA	Water	6010B	103647
600-71309-6	MW-16S	Dissolved	Water	6010B	103647
600-71309-7	MW-16	Total/NA	Water	6010B	103647
600-71309-7	MW-16	Dissolved	Water	6010B	103647
LCS 600-103647/2-A	Lab Control Sample	Total/NA	Water	6010B	103647
MB 600-103647/1-A	Method Blank	Total/NA	Water	6010B	103647

General Chemistry

Analysis Batch: 103704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-71309-1	MW-27	Total/NA	Water	300.0	
600-71309-2	MW-29	Total/NA	Water	300.0	
600-71309-3	MW-26	Total/NA	Water	300.0	
600-71309-4	MW-22	Total/NA	Water	300.0	
600-71309-5	P-1	Total/NA	Water	300.0	
600-71309-5 MS	P-1	Total/NA	Water	300.0	
600-71309-5 MSD	P-1	Total/NA	Water	300.0	
600-71309-6	MW-16S	Total/NA	Water	300.0	
600-71309-7	MW-16	Total/NA	Water	300.0	
LCS 600-103704/4	Lab Control Sample	Total/NA	Water	300.0	
MB 600-103704/3	Method Blank	Total/NA	Water	300.0	

Dilution

Factor

1

1

1

1

100

Run

Batch

Number

103645

103780

103646

103707

103647

103762

103647

103762

103704

Prepared

or Analyzed

04/10/13 11:57

04/11/13 11:44

04/10/13 12:04

04/10/13 15:30

04/10/13 13:36

04/11/13 15:48

04/10/13 13:36

04/11/13 15:50

04/11/13 06:00

Analyst

MRA

JH

NV

RV

NER

DCL

NER

DCL

DAW

Lab

TAL HOU

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Batch

Туре

Prep

Prep

Prep

Prep

Analysis

Analysis

Analysis

Analysis

Analysis

Batch

Method

3510C

8270C LL

TX 1005

3010A

6010B

3010A

6010B

300.0

TX_1005_W_Prep

Client Sample ID: MW-27

Date Collected: 04/09/13 08:45

Date Received: 04/10/13 08:51

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Dissolved

Dissolved

Total/NA

Lab Sample ID: 600-71309-1 Matrix: Water

14

Lab Sample ID: 600-71309-2

Matrix: Water

Date Collected: 04/09/13 09:30 Date Received: 04/10/13 08:51 Batch Batch

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			103647	04/10/13 13:36	NER	TAL HOU
Total/NA	Analysis	6010B		1	103762	04/11/13 16:00	DCL	TAL HOU
Dissolved	Prep	3010A			103647	04/10/13 13:36	NER	TAL HOU
Dissolved	Analysis	6010B		1	103762	04/11/13 16:03	DCL	TAL HOU
Total/NA	Analysis	300.0		100	103704	04/11/13 06:18	DAW	TAL HOU

Client Sample ID: MW-26

Client Sample ID: MW-29

Date Collected: 04/09/13 10:00 Date Received: 04/10/13 08:51

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			103647	04/10/13 13:36	NER	TAL HOU
Total/NA	Analysis	6010B		1	103762	04/11/13 16:05	DCL	TAL HOU
Dissolved	Prep	3010A			103647	04/10/13 13:36	NER	TAL HOU
Dissolved	Analysis	6010B		1	103762	04/11/13 16:08	DCL	TAL HOU
Total/NA	Analysis	300.0		100	103704	04/11/13 06:36	DAW	TAL HOU

Client Sample ID: MW-22 Date Collected: 04/09/13 10:50

Date	Collected:	04/09/13	10:50
Date	Received:	04/10/13	08:51

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			103647	04/10/13 13:36	NER	TAL HOU
Total/NA	Analysis	6010B		1	103762	04/11/13 16:10	DCL	TAL HOU
Dissolved	Prep	3010A			103647	04/10/13 13:36	NER	TAL HOU
Dissolved	Analysis	6010B		1	103762	04/11/13 16:13	DCL	TAL HOU
Total/NA	Analysis	300.0		100	103704	04/11/13 06:54	DAW	TAL HOU

TestAmerica Houston

Lab Sample ID: 600-71309-4

Lab Sample ID: 600-71309-3

Matrix: Water

Matrix: Water

Lab Sample ID: 600-71309-6

Lab Sample ID: 600-71309-7

Matrix: Water

Client Samp	le ID: P-1						I	Lab Sample	ID: 600-71309-5		
Date Collected	l: 04/09/13 11:2		Matrix: Water								
Date Received: 04/10/13 08:51											
	Batch	Batch		Dilution	Batch	Prepared					
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab			
Total/NA	Prep	3010A			103647	04/10/13 13:36	NER	TAL HOU			
Total/NA	Analysis	6010B		1	103762	04/11/13 16:16	DCL	TAL HOU			
Dissolved	Prep	3010A			103647	04/10/13 13:36	NER	TAL HOU			
Dissolved	Analysis	6010B		1	103762	04/11/13 16:18	DCL	TAL HOU			
Total/NA	Analysis	300.0		100	103704	04/11/13 04:28	DAW	TAL HOU			

Client Sample ID: MW-16S Date Collected: 04/09/13 13:45

Date Received: 04/10/13 08:51

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			103647	04/10/13 13:36	NER	TAL HOU
Total/NA	Analysis	6010B		1	103762	04/11/13 16:20	DCL	TAL HOU
Dissolved	Prep	3010A			103647	04/10/13 13:36	NER	TAL HOU
Dissolved	Analysis	6010B		1	103762	04/11/13 16:23	DCL	TAL HOU
Total/NA	Analysis	300.0		100	103704	04/11/13 07:12	DAW	TAL HOU

Client Sample ID: MW-16 Date Collected: 04/09/13 14:50 Date Received: 04/10/13 08:51

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			103647	04/10/13 13:36	NER	TAL HOU
Total/NA	Analysis	6010B		1	103762	04/11/13 16:33	DCL	TAL HOU
Dissolved	Prep	3010A			103647	04/10/13 13:36	NER	TAL HOU
Dissolved	Analysis	6010B		1	103762	04/11/13 16:35	DCL	TAL HOU
Total/NA	Analysis	300.0		100	103704	04/11/13 07:31	DAW	TAL HOU

Laboratory References:

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

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-71309-1

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	08-04-12 *
Louisiana	NELAP	6	01967	06-30-13
Oklahoma	State Program	6	9503	08-31-13
Texas	NELAP	6	T104704223-10-6-TX	10-31-13
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	GULF	10-31-13

17

* Expired certification is currently pending renewal and is considered valid.
| CO | TESTING | 1 Z Chain of Custody Number
225375 | Page of of | ist if
ded) | Special Instructions/ | Conditions of Receipt | 6 | 00-71 | 1309 | Cha | in of | Cust | tody | | | | | i fee may be assessed if samples are retained
nger than 1 month) | | 4/2/13 1508 | Date | Date Time
BY/p/r3 0857 | |
|---------------------|-----------------------------|---------------------------------------|------------------------------------|--|-----------------------------------|--------------------------------------|---|-------------|-------|-------|-------------|-------|-----------|--------|---|--|--|---|-----------------------------|-------------------------|------------------------|---------------------------|----------|
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ding Water? Yes□ No□ 1 | T Manager ERIC PASTOR | hone Number (Area Code)/Fax Number | contact Lab Contact | ar Waybill Number | Matrix Containers &
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| Temp | Drink | Projec | X DR Telepi | State Zip Code Lo Ly Stie C | A FULMER AREA | | ntion Date Time | 419 h3 0845 | 1 | 000 | 1050 | 125 | 1345 | 4 (H50 | 2 | | | Skin Initant 🗌 Poison B 🔲 Unknow | ajs 🗌 14 Days 🗌 21 Days 🗍 O | -)-
M | L Clare | Date | |
| Chain of | Custody Record | 141-4124 (1007)
CPRN | Address Mubble Call | Prind Rock | Project Name and Location (State) | Contract/Purchase Order/Ougle No. | Sample I.D. No. and Descrip
Containers for each sample may be combin | LZ-MW | Mu-29 | mu-al | MW-32 | | 511-MW 40 | MU-IL | | | | Possible Hazard Identification | Turn Around Time Required | 1. Hein XIV BY KNON | 2. Helinquisheld By | 2 3. Relinquished By | Comments |

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DISTRIBUTION: WHITE - Returned to Client with Report: CANARY - Stays with the Sample; PINK - Field Copy

15 16 17

2

3

Client: Pastor, Behling & Wheeler LLC

Login Number: 71309 List Number: 1

Creator: Pulumbarit, Josh

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.1
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.	True	

List Source: TestAmerica Houston



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: 600-71389-1

Client Project/Site: Exide Recycling Center, Frisco TX Projec

For:

Pastor, Behling & Wheeler LLC 2201 Double Creek Dr Suite 4004 Round Rock, Texas 78664

Attn: Eric Pastor

Authorized for release by: 4/18/2013 3:38:31 PM Cathy Upton Data Delivery Analyst cathy.upton@testamericainc.com

Designee for

Sachin Kudchadkar Project Manager II sachin.kudchadkar@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:

Project Name/Number:

600-71389-1

Exide Recycling Center, Frisco TX Project

This Data Package consists of:

X

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

- X R1 Field Chain-of-Custody Form
- X R2 Sample Identification Cross-reference;
- X 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).
- X R4 Surrogate Recovery Data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- X R5 Test Reports/Summary Forms for Blank Samples;
- X 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
- X 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.
- List of method quantitation limit (MQL) and detectability check sample results for each analyte for each method and X R9 matrix;
- X 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 Name (printed) Data Delivery Analyst

Official Title (printed)

04/18/2013 Date

Signature

Aj	pper	ndix A (cont'd): Laboratory Review Checkl	ist: Reportable Data					
Lab	orator	y Name: TestAmerica-Houston	LRC Date: 04/15/13					
Proj	ject N	ame: Exide Recycling Center, Frisco TX Projec	Laboratory Job Number: 600-71389					
Rev	iewer	Name: BDG	Pren Batch Number(s): 600-103807 – Sul	fate				
#1		Description		Ves	No	NA ³	NR ⁴	FR# ⁵
#	A	Choin of autody (C, Q, C)		105	INU	INA	INK	ĽIXπ
R1	OI	Did complex most the laboratory's standard conditions of car	nnla accontability upon receint?	v				
K1	01	Were all departures from standard conditions described in an	exception report?	Λ		v		
R2	OI	Sample and quality control (OC) identification				Λ		
	01	Are all field sample ID numbers cross-referenced to the labo	ratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the correst	ponding OC data?	X				
R3	OI	Test reports						
		Were all samples prepared and analyzed within holding time	s?	X				
		Other than those results < MQL, were all other raw values br	acketed by calibration standards?	Х				
		Were calculations checked by a peer or supervisor?		Х				
		Were all analyte identifications checked by a peer or supervi	sor?	Х				
		Were sample detection limits reported for all analytes not de	tected?	Х				
		Were all results for soil and sediment samples reported on a	dry weight basis?			Χ		
		Were % moisture (or solids) reported for all soil and sedimen	nt samples?			Х		
		Were bulk soil/solid samples for volatile analysis extracted v	vith methanol per SW846 Method 5035?			Х		
		If required for the project, TICs reported?				X		
R4	0	Surrogate recovery data				37		
		Were surrogates added prior to extraction?				X		
D5	OI	Were surrogate percent recoveries in all samples within the I	aboratory QC limits?			X		
КS	01	Vera appropriate type(a) of blanks apply and 2		v				
		Were blanks analyzed at the appropriate frequency?		A V				
		Were method blanks taken through the entire analytical proc	ess including preparation and if	X				
		applicable, cleanup procedures?	cost, moracing proparation and, if					
		Were blank concentrations < MQL?		Х				
R6	OI	Laboratory control samples (LCS):						
		Were all COCs included in the LCS?		Х				
		Was each LCS taken through the entire analytical procedure,	including prep and cleanup steps?	Х				
		Were LCSs analyzed at the required frequency?		Х				
		Were LCS (and LCSD, if applicable) %Rs within the laborat	ory QC limits?	Х				
		Does the detectability check sample data document the labor	atory's capability to detect the COCs at	Х				
		the MDL used to calculate the SDLs?				37		
D7	OT	Was the LCSD RPD within QC limits?				X		
к/	OI	Matrix spike (MS) and matrix spike duplicate (MSD) dat	a AS and MSD2	v				
		Were MS/MSD analyzed at the appropriate frequency?	AS and MSD?	A V				
		Were MS (and MSD if applicable) %Rs within the laborator	v OC limits?	Λ			x	1
		Were MS/MSD RPDs within laboratory OC limits?					X	1
R8	OI	Analytical duplicate data						-
		Were appropriate analytical duplicates analyzed for each mai	trix?			Х		
		Were analytical duplicates analyzed at the appropriate freque	ency?			Х		
		Were RPDs or relative standard deviations within the laborat	tory QC limits?			Х		
R9	OI	Method quantitation limits (MQLs):						
		Are the MQLs for each method analyte included in the labor	atory data package?	Х				
		Do the MQLs correspond to the concentration of the lowest p	non-zero calibration standard?	Х				
		Are unadjusted MQLs and DCSs included in the laboratory of	lata package?	Х				
R10	OI	Other problems/anomalies						
		Are all known problems/anomalies/special conditions noted	in this LRC and ER?	Ā				
1		Was applicable and available technology used to lower the S	DL to minimize the matrix interference	Х				2
1		affects on the sample results?	tomy A conditation Drammer for the	v	<u> </u>			
		analytes matrices and methods associated with this labor	atory data package?	Х				
I	1.	Items identified by the letter "R" must be included in the laboratory of	lata package submitted in the TRRP-required re	port(s)). Iter	ns ide	ntified	l bv the

letter "S" should be retained and made available upon request for the appropriate retention period.

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 NA = Not applicable;

 4. NR = Not reviewed;
 5. ER# = Exception Re ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

A1

Ap	pen	dix A (cont'd): Laboratory Review Checklist: I	Reportable Data					
Lab	orato	ry Name: TestAmerica-Houston LRC	Date: 04/15/13					
Pro	ject N	Jame: Exide Recycling Center, Frisco TX Projec Labo	ratory Job Number: 600-71389					
Rev	viewe	r Name: BDG Prep	Batch Number(s): 600-103807 – St	ulfate	;			
# ¹	A^2	Description		Yes	No	NA ³	NR^4	ER# ⁵
S 1	OI	Initial calibration (ICAL)						
	01	Were response factors and/or relative response factors for each anal	vte within OC 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 u	used to calculate the curve?	Х				
		Are ICAL data available for all instruments used?		Х				
		Has the initial calibration curve been verified using an appropriate s	econd source standard?	Х				
S2	OI	Initial and continuing calibration verification (ICCV and CCV)	and continuing calibration					
		Was the CCV analyzed at the method-required frequency?		Х				
		Were percent differences for each analyte within the method-require	ed OC limits?	Х				
		Was the ICAL curve verified for each analyte?	~~~~	Х				
		Was the absolute value of the analyte concentration in the inorganic	CCB < MDL?	Х				
S 3	0	Mass spectral tuning:						
		Was the appropriate compound for the method used for tuning?				Х		
		Were ion abundance data within the method-required OC limits?				Х		
S4	0	Internal standards (IS):						
		Were IS area counts and retention times within the method-required	QC limits?			Х		
S 5	OI	Raw data (NELAC section 5.5.10)						
		Were the raw data (for example, chromatograms, spectral data) revi	ewed by an analyst?	Х				1
		Were data associated with manual integrations flagged on the raw d	ata?			Х		
S6	0	Dual column confirmation						
		Did dual column confirmation results meet the method-required QC	?			Х		
S7	0	Tentatively identified compounds (TICs):						
		If TICs were requested, were the mass spectra and TIC data subject	to appropriate checks?			Х		
S8	Ι	Interference Check Sample (ICS) results:						
		Were percent recoveries within method QC limits?				Х		
S9	Ι	Serial dilutions, post digestion spikes, and method of standard a	dditions					
		Were percent differences, recoveries, and the linearity within the Qu	C limits specified in the method?			Х		
S10	OI	Method detection limit (MDL) studies						
		Was a MDL study performed for each reported analyte?		Х				
		Is the MDL either adjusted or supported by the analysis of DCSs?		Х				
S11	OI	Proficiency test reports:						
		Was the laboratory's performance acceptable on the applicable profi	ciency tests or evaluation studies?	Х				
S12	OI	Standards documentation						
		Are all standards used in the analyses NIST-traceable or obtained fr	om other appropriate sources?	Х				
S13	OI	Compound/analyte identification procedures						
		Are the procedures for compound/analyte identification documented	1?	Х				
S14	OI	Demonstration of analyst competency (DOC)						
		Was DOC conducted consistent with NELAC Chapter 5?		Х				
		Is documentation of the analyst's competency up-to-date and on file	?	Х				
S15	OI	Verification/validation documentation for methods (NELAC Ch	apter 5)					
		Are all the methods used to generate the data documented, verified,	and validated, where applicable?	Х				
S16	OI	Laboratory standard operating procedures (SOPs):						
		Are laboratory SOPs current and on file for each method performed	?	Х				1
	1	1 Items identified by the letter "R" should be included in the laboratory	data package submitted to the TCEO in	the T	RPP	-requir	ed repo	rt(s)

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).

Appe	ndix A (cont'd): Laboratory Review Checkli	ist: Exception Reports
Labora	tory Name: TestAmerica-Houston	LRC Date: 04/15/13
Project	Name: Exide Recycling Center, Frisco TX Projec	Laboratory Job Number: 600-71389
Review	ver Name: BDG	Prep Batch Number(s): 600-103807 – Sulfate
ER #1	DESCRIPTION	
1	The laboratory selected a sample from another grou	up to perform as the MS/MSD.
2	The Sulfate SDLs for samples 600-71389 – 1, 2, 3,	4, 5, 6, 7, 8 and 9 were elevated due to the high concentrations of
	this analyte.	

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

Ap	oper	ndix A (cont'd): Laboratory Review Checklis	t: Reportable Data					
Labo	orator	y Name: TestAmerica-Houston	LRC Date: 04/15/13					
Proi	ect N	ame: Exide Recycling Center, Frisco TX	Laboratory Job Number: 600-71389					
Pov	iowor	Name: TWP	Prop Batch Number(s): $600, 103804$ J	CD				
			riep Baten Number(s). 000-103804-1		No	NTA 3	ND ⁴	ED #5
#-	A-	Description		res	NO	NA	INK	EK#
D1	OT	Chain-of-custody (C-O-C)	1	N7				
K1	01	Did samples meet the laboratory's standard conditions of samp	le acceptability upon receipt?	X		v		
D2	OI	were all departures from standard conditions described in an e	xception report?			X		
R2	01	Sample and quality control (QC) identification	tory ID numbers?	v				
		Are all laboratory ID numbers cross referenced to the correspo	nding OC data?	A V				
R3	OI	Test reports	nunig QC uata:	Λ				
10	01	Were all samples prepared and analyzed within holding times?		X				
		Other than those results $<$ MOL, were all other raw values brac	keted by calibration standards?	X				
		Were calculations checked by a peer or supervisor?		X				
		Were all analyte identifications checked by a peer or superviso	r?	Х				
		Were sample detection limits reported for all analytes not detect	cted?	Х				
		Were all results for soil and sediment samples reported on a dr	y weight basis?			Х		
		Were % moisture (or solids) reported for all soil and sediment	samples?			Х		
		Were bulk soil/solid samples for volatile analysis extracted wit	h methanol per SW846 Method 5035?			Х		
		If required for the project, TICs reported?				Х		
R4	0	Surrogate recovery data						
		Were surrogates added prior to extraction?				X		
		Were surrogate percent recoveries in all samples within the lab	oratory QC limits?			X		
R5	OI	Test reports/summary forms for blank samples		X.				
		Were appropriate type(s) of blanks analyzed?		X				
		Were blanks analyzed at the appropriate frequency?	in duding any section and if	X				
		applicable cleanup procedures?	s, including preparation and, if	Λ				
		Were blank concentrations < MOL?		x				
R6	OI	Laboratory control samples (LCS):						
	01	Were all COCs included in the LCS?		X				
		Was each LCS taken through the entire analytical procedure, in	cluding prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?		Х				
		Were LCS (and LCSD, if applicable) %Rs within the laborator	y QC limits?	Х				
		Does the detectability check sample data document the laborate	ory's capability to detect the COCs at	Х				
		the MDL used to calculate the SDLs?						
		Was the LCSD RPD within QC limits?				Х		
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
DS	OI	A nelytical duplicate data					Λ	1
ко	0I	Analytical duplicate data Wara appropriate analytical duplicates analyzed for each matri	v)	v				
		Were appropriate analytical duplicates analyzed for each matrix Were applying duplicates analyzed at the appropriate frequence	X : 					
		Were RPDs or relative standard deviations within the laborator	y OC limits?	Λ			x	2
R9	OI	Method quantitation limits (MOLs).	y qe mints.					2
	01	Are the MOLs for each method analyte included in the laborate	ory data package?	X				
		Do the MOLs correspond to the concentration of the lowest no	n-zero calibration standard?	X		1		
		Are unadjusted MQLs and DCSs included in the laboratory dat	a package?	X				
R10	OI	Other problems/anomalies	1 0					
	· -	Are all known problems/anomalies/special conditions noted in	this LRC and ER?	X			1	
		Was applicable and available technology used to lower the SD	L to minimize the matrix interference	Х		1	1	1
		affects on the sample results?						
		Is the laboratory NELAC-accredited under the Texas Laborator	ry Accreditation Program for the	Х				
		analytes, matrices and methods associated with this laborate	bry data package?					
	1.	Items identified by the letter "R" must be included in the laboratory data	a package submitted in the TRRP-required re	port(s)	. Iter	ns ide	ntified	l by the

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
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A1

Aŗ	open	dix A (cont'd): Laboratory Review Checklist: R	Reportable Data					
Lab	orato	ry Name: TestAmerica-Houston LRC	C Date: 04/15/13					
Pro	ject N	Tame: Exide Recycling Center, Frisco TX Labo	oratory Job Number: 600-71389					
Rev	viewe	r Name: TWR Prep	Batch Number(s): 600-103804- I	СР				
#1	A^2	Description		Yes	No	NA ³	NR^4	ER# ⁵
«1	OI	Initial calibration (ICAL)		105	110			Dit.
51		Ware response factors and/or relative response factors for each analy	ute within OC limits?			v		
		Were percent RSDs or correlation coefficient criteria met?	yte within QC mints:			X		
		Was the number of standards recommended in the method used for a	all analytes?	v		Λ		
		Were all points generated between the lowest and highest standard u	used to calculate the curve?	1		x		
		Are ICAL data available for all instruments used?	ised to calculate the curve?	x		Λ		
		Has the initial calibration curve been verified using an appropriate se	econd source standard?	X				
S 2	OI	Initial and continuing calibration verification (ICCV and CCV)	and continuing calibration	11				
	01	Was the CCV analyzed at the method-required frequency?	and continuing canoration	x				
		Were percent differences for each analyte within the method-require	ed OC 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				
\$3	0	Was the absolute value of the analyte concentration in the morganic	CCB < MDE!	Λ				
55		Was the appropriate compound for the method used for tuning?				v		
		Ware ion abundance data within the method required OC limits?				X		
S 4	0	Internal standards (IS):				Λ		
57	0	Were IS area counts and retention times within the method required	OC limits?			v		
\$5	OI	Pay data (NELAC section 5.5.10)	QC minus:			Λ		
55	01	Ware the resu data (for example, abromatograms, spectral data) result	wad by an analyst?	v				
		Were data associated with manual integrations flagged on the raw da	ate?	Λ		v		
S 6	0	Dual column confirmation	ata:			Λ		
50		Did dual column confirmation results meet the method required $\Omega C'$	9			v		
\$7	0	Tentatively identified compounds (TICs):				Λ		
57	0	If TICs were requested were the mass spectra and TIC data subject t	to appropriate checks?			v		
S 8	T	Interference Check Semple (ICS) results:				Λ		
50	1	Were percent recoveries within method OC limits?		x				
S 9	т	Serial dilutions, post digestion spikes, and method of standard a	dditions	Λ				
57	1	Were percent differences, recoveries, and the linearity within the OC	T limits specified in the method?				v	3
S10	OI	Method detection limit (MDL) studies	e mints specifica în tic metioa:				Λ	5
510	01	Was a MDL study performed for each reported analyte?		x				
		Is the MDL either adjusted or supported by the analysis of DCSs?		X				
S 11	OI	Proficiency test reports:		Λ				
511		Was the laboratory's performance acceptable on the applicable profi	ciency tests or evaluation studies?	x				
S12	OI	Standards documentation	elency tests of evaluation studies.	21				
	01	Are all standards used in the analyses NIST-traceable or obtained fro	om other appropriate sources?	x				
S13	OI	Compound/analyte identification procedures	on other appropriate sources:	Λ				
	01	Are the procedures for compound/analyte identification documented	19	x				
S14	OI	Demonstration of analyst competency (DOC)		21				
511	01	Was DOC conducted consistent with NFLAC Chapter 5?		x				
		Is documentation of the analyst's competency up to date and on file	9	X				
S15	OI	Verification/validation documentation for methods (NFLAC Ch	anter 5)	~				
~10		Are all the methods used to generate the data documented, verified	and validated where applicable?	x			1	
\$16	OT	I above to water dond an average during (SODs).	and validated, where applicable?	Δ				
510	UI	Laboratory Stanuaru operating procedures (SOPS):)	v				
		aboratory sor's current and on the for each method performed.		Λ				
		1 Items identified by the letter "R" should be included in the laboratory of Items identified by the letter "S" should be retained and made available	data package submitted to the TCEQ in e upon request for the appropriate reten	the \overline{T}	RRP. eriod	-requir l.	ed repo	rt(s).

NR = Not Reviewed.

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

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable). NA = Not applicable.

Apper	ndix A (cont'd): Laboratory Review Checklist: E	exception Reports
Laborat	ory Name: TestAmerica-Houston	LRC Date: 04/15/13
Project	Name: Exide Recycling Center, Frisco TX	Laboratory Job Number: 600-71389
Review	er Name: TWR	Prep Batch Number(s): 600-103804- ICP
ER # ¹	DESCRIPTION	
1	The laboratory selected a sample from another group to p	erform as the MS/MSD.
2	The laboratory selected a sample from another group to p	erform as the DUP.
3	The laboratory selected a sample from another group to p	erform as the PDS and SD.

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: Water Method: 300.0, 9056 Preparation: N/A Date Analyzed: 01/29/2013 Date Prepared: 01/29/2013 TALs Batches: N/A Units: mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Fluoride	0.08	0.075	0.354	0.2
Chloride	0.127	0.1	1.02	0.4
Nitrite	0.105	0.05	0.347	0.2
Bromide	0.071	0.2	0.307	0.2
Nitrate	0.032	0.04	0.476	0.2
Orthophosphate	0.117	0.25	0.305	0.2
Sulfate	0.137	0.15	0.256	0.4

Detection Check Standard

Matrix:	Water			
Method:	200.7/6010			
Preparation:	200.7P/3010			
Date Analyzed:	3/29/2013			
Date Prepared:	3/28/2013			
Instrument:	Thermo 6500			
TALs Batches:	102868, 10275	5p		
Units:	mg/L			
Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.0177	0.5
Antimony	0.0063	0.01	0.0105	0.05
Arsenic	0.0033	0.01	0.0077	0.01
Barium	0.0022	0.005	0.0026	0.02
Beryllium	0.00134	0.002	0.0042	0.005
Boron	0.0077	0.02	0.0193	0.2
Cadmium	0.00073	0.001	0.001	0.005
Calcium	0.022	0.05	0.0583	1
Chromium	0.0016	0.002	0.0037	0.01
Cobalt	0.00063	0.001	0.0012	0.01
Copper	0.0014	0.002	0.0012	0.01
Iron	0.087	0.1	0.1011	0.4
Lithium	0.0024	0.005	0.0043	0.2
Lead	0.0029	0.005	0.005	0.01
Selenium	0.0042	0.01	0.0083	0.04
Manganese	0.00084	0.002	0.002	0.01
Molybdenum	0.0027	0.005	0.0048	0.01
Nickel	0.00179	0.005	0.0043	0.01
Silver	0.0012	0.0025	0.0024	0.01
Sodium	0.02	0.05	0.0465	1
Strontium	0.0005	0.001	0.001	0.005
Thallium	0.0078	0.02	0.0184	0.03
Tin	0.0028	0.005	0.0049	0.01
Titanium	0.0011	0.002	0.0023	0.01
Vanadium	0.0017	0.002	0.0048	0.01
Zinc	0.0022	0.005	0.0065	0.01

Job ID: 600-71389-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative 600-71389-1

Comments

No additional comments.

Receipt

The samples were received on 4/11/2013 9:28 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2° C.

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TestAmerica Job ID: 600-71389-1

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-71389-1	MW-21	Water	04/09/13 10:30	04/11/13 09:28
600-71389-2	MW-11	Water	04/09/13 16:35	04/11/13 09:28
600-71389-3	MW-15	Water	04/10/13 08:55	04/11/13 09:28
600-71389-4	B9N	Water	04/10/13 10:00	04/11/13 09:28
600-71389-5	DUP-2	Water	04/10/13 10:00	04/11/13 09:28
600-71389-6	MW-30	Water	04/10/13 10:45	04/11/13 09:28
600-71389-7	MW-13	Water	04/09/13 16:15	04/11/13 09:28
600-71389-8	MW-14	Water	04/09/13 16:55	04/11/13 09:28
600-71389-9	MW-12	Water	04/10/13 14:05	04/11/13 09:28

TestAmerica Houston

Client Sample Results

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-71389-1

Client Sample ID: MW-21 Date Collected: 04/09/13 10:30							Lab Sam	ple ID: 600-7 Matrix	1389-1 c: Water
Date Received: 04/11/13 09:28									
Analyte	Posult	Qualifier		SDI	Unit	п	Prepared	Analyzod	Dil Ear
	0.000500			0.000350			04/12/13 08:42	04/12/13 14:49	1
Lead	0.00290	J U	0.0100	0.00290	mg/L		04/12/13 08:42	04/12/13 14:49	
_ Method: 6010B - Metals (ICP) - Dis	solved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium. Dissolved	0.000500	J	0.00500	0.000350	mg/L		04/12/13 08:42	04/12/13 14:51	
Lead, Dissolved	0.00290	U	0.0100	0.00290	mg/L		04/12/13 08:42	04/12/13 14:51	
- General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2010		50.0	13.7	mg/L			04/11/13 19:49	100
Client Sample ID: MW-11							Lab Sam	ple ID: 600-7	1389-2
Date Collected: 04/09/13 16:35								Matrix	c: Water
Date Received: 04/11/13 09:28									
_ 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		04/12/13 08:42	04/12/13 14:54	1
Lead	0.00290	U	0.0100	0.00290	mg/L		04/12/13 08:42	04/12/13 14:54	1
_ Method: 6010B - Metals (ICP) - Dis	solved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium, Dissolved	0.000350	U	0.00500	0.000350	mg/L		04/12/13 08:42	04/12/13 14:56	1
Lead, Dissolved	0.00290	U	0.0100	0.00290	mg/L		04/12/13 08:42	04/12/13 14:56	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	281		50.0	13.7	mg/L			04/11/13 20:08	100
Client Sample ID: MW-15							Lab Sam	ple ID: 600-7	1389-3
Date Collected: 04/10/13 08:55								Matrix	c: Water
Date Received: 04/11/13 09:28									
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		04/12/13 08:42	04/12/13 14:58	1
Lead	0.00290	U	0.0100	0.00290	mg/L		04/12/13 08:42	04/12/13 14:58	1
- Method: 6010B - Metals (ICP) - Dis	ssolved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium, Dissolved	0.000350	U	0.00500	0.000350	mg/L		04/12/13 08:42	04/12/13 15:01	1
Lead, Dissolved	0.00290	U	0.0100	0.00290	mg/L		04/12/13 08:42	04/12/13 15:01	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	736		50.0	13.7	mg/L			04/11/13 20:26	100

TestAmerica Job ID: 600-71389-1

Client Sample ID: B9N Date Collected: 04/10/13 10:00 Date Received: 04/11/13 09:28

Lab Sample ID: 600-71389-4 Matrix: Water

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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		04/12/13 08:42	04/12/13 15:03	1
Lead	0.00290	U	0.0100	0.00290	mg/L		04/12/13 08:42	04/12/13 15:03	
Method: 6010B - Metals (ICP) - D	issolved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium, Dissolved	0.000350	U	0.00500	0.000350	mg/L		04/12/13 08:42	04/12/13 15:06	
Lead, Dissolved	0.00290	U	0.0100	0.00290	mg/L		04/12/13 08:42	04/12/13 15:06	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	720		50.0	13.7	mg/L			04/11/13 21:20	100
Client Sample ID: DUP-2							Lab Sam	ple ID: 600-7	1389-5
Date Collected: 04/10/13 10:00								Matrix	k: Water
Date Received: 04/11/13 09:28									
									-

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		04/12/13 08:42	04/12/13 15:16	1
Lead	0.00290	U	0.0100	0.00290	mg/L		04/12/13 08:42	04/12/13 15:16	1
- Method: 6010B - Metals (ICP)	- Dissolved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium, Dissolved	0.000350	U	0.00500	0.000350	mg/L		04/12/13 08:42	04/12/13 15:18	1
Lead, Dissolved	0.00290	U	0.0100	0.00290	mg/L		04/12/13 08:42	04/12/13 15:18	1
- General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	726		50.0	13.7	mg/L			04/11/13 21:39	100

Client Sample ID: MW-30

Date Collected: 04/10/13 10:45

Date	Received:	04/11/13	09:28

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		04/12/13 08:42	04/12/13 15:21	1
Lead	0.00310	J	0.0100	0.00290	mg/L		04/12/13 08:42	04/12/13 15:21	1
_ Method: 6010B - Metals (ICP) - Dis	solved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium, Dissolved	0.000350	U	0.00500	0.000350	mg/L		04/12/13 08:42	04/12/13 15:23	1
Lead, Dissolved	0.00290	U	0.0100	0.00290	mg/L		04/12/13 08:42	04/12/13 15:23	1
- General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	711		50.0	13.7	mg/L			04/11/13 21:57	100

TestAmerica Houston

Lab Sample ID: 600-71389-6

Matrix: Water

Client Sample Results

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-71389-1

Client Sample ID: MW-13							Lab Sample ID: 600-71389-7			
Date Collected: 04/09/13 16:15								Matrix	x: Water	
Date Received: 04/11/13 09:28										
General Chemistry										
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
Sulfate	1020		50.0	13.7	mg/L			04/11/13 22:15	100	
Client Sample ID: MW-14							Lab Sample ID: 600-71389-8			
Date Collected: 04/09/13 16:55								Matri	x: Water	
Date Received: 04/11/13 09:28										
General Chemistry										
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
Sulfate	2560		50.0	13.7	mg/L			04/11/13 22:33	100	
Client Sample ID: MW-12							Lab San	nple ID: 600-7	1389-9	
Date Collected: 04/10/13 14:05								Matrix	x: Water	
Date Received: 04/11/13 09:28										
General Chemistry										
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac	
Sulfate	2490		50.0	13.7	mg/L			04/11/13 22:51	100	

TestAmerica Houston

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Qualifiers

Metals		
Qualifier	Qualifier Description	
J	Result is less than the MQL but greater than or equal to the SDL and the concentration is an estimated value.	
U	Analyte was not detected at or above the SDL.	
General Ch	nemistry	
Qualifier	Qualifier Description	
U	Analyte was not detected at or above the SDL.	
Glossarv	,	 8

Abbreviation	These commonly used abbreviations may or may not be present in this report.	0
¤	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)	
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	13
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
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)	
TEO	Toxicity Equivalent Quotient (Dioxin)	

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 600-103804/1-A Matrix: Water Analysis Batch: 103858								Client Sa	Imple ID: Metho Prep Type: 1 Prep Batch	d Blank Fotal/NA : 103804
A b -d	MB	MB						Bernand	A	D!!
	Result	Qualifier		S	DL Unit		- <u> </u>	Prepared	Analyzed	
Cadmium Disselved	0.000350	U	0.00500	0.0003	350 mg/L	-		04/12/13 08:42	04/12/13 14:44	1
	0.000350	0	0.00500	0.0003	350 mg/L	-		04/12/13 08:42	04/12/13 14:44	1
	0.00290	U	0.0100	0.002	290 mg/L	- 		04/12/13 08:42	04/12/13 14:44	1
Lead, Dissolved	0.00290	U	0.0100	0.002	290 mg/L	-		04/12/13 08:42	04/12/13 14:44	1
Lab Sample ID: LCS 600-103804/2-A							CI	ient Sample I	ID: Lab Control	Sample
Matrix: Water									Prep Type:]	Total/NA
Analysis Batch: 103858									Prep Batch	103804
			Spike	LCS L	_cs				%Rec.	
Analyte			Added	Result (Qualifier	Unit		D %Rec	Limits	
Cadmium			0.500	0.4925		mg/L		99	80 - 120	
Cadmium, Dissolved			0.500	0.4925		mg/L		99	80 - 120	
Lead			1.00	0.9793		mg/L		98	80 - 120	
Lead, Dissolved			1.00	0.9793		mg/L		98	80 - 120	
Method: 300.0 - Anions, Ion Ch	romatogr	aphy								
_ Lab Sample ID: MB 600-103807/3								Client Sa	mple ID: Metho	d Blank
Matrix: Water									Prep Type: 1	Total/NA
Analysis Batch: 103807										
	MB	МВ								
Analyte	Result	Qualifier	MQL (Adj)	s	DL Unit		D	Prepared	Analyzed	Dil Fac
Sulfate	0.137	U	0.500	0.1	137 mg/L	-			04/11/13 17:42	1
							~			
Lab Sample ID: LCS 600-103807/4							CI	ient Sample I	D: Lab Control	Sample
Matrix: Water									Prep Type:	otal/NA
Analysis Batch: 103807			0		<u></u>				% D	
			бріке		-65				%кес.	
Analyte			Added	Result (Jualifier	Unit		D %Rec	Limits	
Sultate			20.0	21.26		mg/L		106	90 - 110	

Unadjusted Detection Limits

MQL

0.00500

0.0100

MQL

0.00500

0.0100

MQL

0.500

MDL

MDL

MDL

0.137

0.000350

0.00290

0.000350

0.00290

Units

mg/L

mg/L

Units

mg/L

mg/L

Units

mg/L

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Method: 6010B - Metals (ICP) - Dissolved

Method: 6010B - Metals (ICP)

Analyte

Lead

Analyte

Analyte

Sulfate

Cadmium, Dissolved

General Chemistry

Lead, Dissolved

Cadmium

Method

6010B

6010B

Method

6010B

6010B

Method 300.0

11 12 13 14 15

TestAmerica Houston

QC Association Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Metals

Prep Batch: 103804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-71389-1	MW-21	Total/NA	Water	3010A	
600-71389-1	MW-21	Dissolved	Water	3010A	
600-71389-2	MW-11	Total/NA	Water	3010A	
600-71389-2	MW-11	Dissolved	Water	3010A	
600-71389-3	MW-15	Total/NA	Water	3010A	
600-71389-3	MW-15	Dissolved	Water	3010A	
600-71389-4	B9N	Total/NA	Water	3010A	
600-71389-4	B9N	Dissolved	Water	3010A	
600-71389-5	DUP-2	Total/NA	Water	3010A	
600-71389-5	DUP-2	Dissolved	Water	3010A	
600-71389-6	MW-30	Total/NA	Water	3010A	
600-71389-6	MW-30	Dissolved	Water	3010A	
LCS 600-103804/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-103804/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 103858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-71389-1	MW-21	Total/NA	Water	6010B	103804
600-71389-1	MW-21	Dissolved	Water	6010B	103804
600-71389-2	MW-11	Total/NA	Water	6010B	103804
600-71389-2	MW-11	Dissolved	Water	6010B	103804
600-71389-3	MW-15	Total/NA	Water	6010B	103804
600-71389-3	MW-15	Dissolved	Water	6010B	103804
600-71389-4	B9N	Total/NA	Water	6010B	103804
600-71389-4	B9N	Dissolved	Water	6010B	103804
600-71389-5	DUP-2	Total/NA	Water	6010B	103804
600-71389-5	DUP-2	Dissolved	Water	6010B	103804
600-71389-6	MW-30	Total/NA	Water	6010B	103804
600-71389-6	MW-30	Dissolved	Water	6010B	103804
LCS 600-103804/2-A	Lab Control Sample	Total/NA	Water	6010B	103804
MB 600-103804/1-A	Method Blank	Total/NA	Water	6010B	103804

General Chemistry

Analysis Batch: 103807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-71389-1	MW-21	Total/NA	Water	300.0	
600-71389-2	MW-11	Total/NA	Water	300.0	
600-71389-3	MW-15	Total/NA	Water	300.0	
600-71389-4	B9N	Total/NA	Water	300.0	
600-71389-5	DUP-2	Total/NA	Water	300.0	
600-71389-6	MW-30	Total/NA	Water	300.0	
600-71389-7	MW-13	Total/NA	Water	300.0	
600-71389-8	MW-14	Total/NA	Water	300.0	
600-71389-9	MW-12	Total/NA	Water	300.0	
LCS 600-103807/4	Lab Control Sample	Total/NA	Water	300.0	
MB 600-103807/3	Method Blank	Total/NA	Water	300.0	

Client Samp	le ID: MW-2	1						Lab Sample II	D: 600-71389-1
Date Collected	: 04/09/13 10:	30							Matrix: Water
Date Received	: 04/11/13 09:2	28							
	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3010A			103804	04/12/13 08:42	NER	TAL HOU	
Total/NA	Analysis	6010B		1	103858	04/12/13 14:49	DCL	TAL HOU	
Dissolved	Prep	3010A			103804	04/12/13 08:42	NER	TAL HOU	
Dissolved	Analysis	6010B		1	103858	04/12/13 14:51	DCL	TAL HOU	
Total/NA	Analysis	300.0		100	103807	04/11/13 19:49	DAW	TAL HOU	

Client Sample ID: MW-11 Date Collected: 04/09/13 16:35

Date Received: 04/11/13 09:28

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			103804	04/12/13 08:42	NER	TAL HOU
Total/NA	Analysis	6010B		1	103858	04/12/13 14:54	DCL	TAL HOU
Dissolved	Prep	3010A			103804	04/12/13 08:42	NER	TAL HOU
Dissolved	Analysis	6010B		1	103858	04/12/13 14:56	DCL	TAL HOU
Total/NA	Analysis	300.0		100	103807	04/11/13 20:08	DAW	TAL HOU

Client Sample ID: MW-15

Date Collected: 04/10/13 08:55 Date Received: 04/11/13 09:28

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			103804	04/12/13 08:42	NER	TAL HOU
Total/NA	Analysis	6010B		1	103858	04/12/13 14:58	DCL	TAL HOU
Dissolved	Prep	3010A			103804	04/12/13 08:42	NER	TAL HOU
Dissolved	Analysis	6010B		1	103858	04/12/13 15:01	DCL	TAL HOU
Total/NA	Analysis	300.0		100	103807	04/11/13 20:26	DAW	TAL HOU

Client Sample ID: B9N Date Collected: 04/10/13 10:00 Date Received: 04/11/13 09:28

-	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			103804	04/12/13 08:42	NER	TAL HOU
Total/NA	Analysis	6010B		1	103858	04/12/13 15:03	DCL	TAL HOU
Dissolved	Prep	3010A			103804	04/12/13 08:42	NER	TAL HOU
Dissolved	Analysis	6010B		1	103858	04/12/13 15:06	DCL	TAL HOU
Total/NA	Analysis	300.0		100	103807	04/11/13 21:20	DAW	TAL HOU

Lab Sample ID: 600-71389-3 Matrix: Water

Lab Sample ID: 600-71389-4

Matrix: Water

TestAmerica Houston

				Lab Chr	onicle				
Client: Pastor, E	Behling & Whe	eler LLC Center, Frisco T	Y Projec					TestAmerica Job ID	: 600-71389-1
			XTTOJEC						
Client Sampl	le ID: DUP-2	2						Lab Sample ID: (600-71389-5
Date Collected: Date Received:	: 04/10/13 10:0 : 04/11/13 09:2	20 28							Matrix: Water
_	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3010A			103804	04/12/13 08:42	NER	TAL HOU	
Total/NA	Analysis	6010B		1	103858	04/12/13 15:16	DCL	TAL HOU	
Dissolved	Prep	3010A			103804	04/12/13 08:42	NER	TAL HOU	
Dissolved	Analysis	6010B		1	103858	04/12/13 15:18	DCL	TAL HOU	
Total/NA	Analysis	300.0		100	103807	04/11/13 21:39	DAW	TAL HOU	
Client Sampl	le ID: MW-3	0						Lab Sample ID: (300-71389-6
Date Collected:	: 04/10/13 10:4	45							Matrix: Water
Date Received:	04/11/13 09:2	28							
_	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3010A		4	103804	04/12/13 08:42	NER	TAL HOU	
I otal/NA	Analysis	6010B		1	103858	04/12/13 15:21	DCL	TAL HOU	
Dissolved	Prep	3010A			103804	04/12/13 08:42	NER	TAL HOU	
Dissolved	Analysis	6010B		1	103858	04/12/13 15:23	DCL	TAL HOU	
Total/NA	Analysis	300.0		100	103807	04/11/13 21:57	DAW	TAL HOU	
Client Sampl	le ID: MW-1 : 04/09/13 16:′	3						Lab Sample ID: 6	500-71389-7 Matrix: Water
Date Received:	04/11/13 09:2	28							
	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	300.0		100	103807	04/11/13 22:15	DAW	TAL HOU	
Client Sampl	le ID: MW-1	4						Lab Sample ID: (500-71389-8 Matrix: Water
Date Received:	04/11/13 09:2	28							
_	Batch	Batch		Dilution	Batch	Prepared			
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Analysis	300.0		100	103807	04/11/13 22:33	DAW	TAL HOU	
Client Sampl	le ID: MW-1	2						Lab Sample ID: (600-71389-9
Date Collected:	: 04/10/13 14:0 04/11/13 09:3)5 28							Matrix: Water
	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Type	Method	Run	Factor	Number	or Analvzed	Analyst	Lab	
Total/NA	Analysis	300.0		100	103807	04/11/13 22:51	DAW	TAL HOU	
_	y = -								

Laboratory References:

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

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-71389-1

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	08-04-12 *
Louisiana	NELAP	6	01967	06-30-13
Oklahoma	State Program	6	9503	08-31-13
Texas	NELAP	6	T104704223-10-6-TX	10-31-13
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	GULF	10-31-13

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

TestAmerica Houston

Tym Around Time Required	Possible Hazard Identification	MW-14	mw-30	B9N DVP-2	mw-11 mw-11	Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Project Name and Location (State) Project Name and Location (State) EXIDE-FRISCO FORMER ContractPurchase Order/Quote No. ContractPurchase Order/Quote No.	Address 2201 DONBLE GREEF DR. Onend Contre State DR.	client PBW	Chain of Custody Record	
ays \Box 21 Days \Box Other One \Box	Poison B Unknown Return To Client Disposal Archive For	4-9-13 1405 X	4-9-12 1045 X XXX	4-10-13 1000 × XXX	4-9-13 1632 X XXX XXX	Date Date Date Date Date Date Date Date	Carrier/Waybill Number CANT HRUP Matrix Containers & Party Preservatives Po Party	Telephone Number (Area Code)/Fax Number Scole Sile Contact Sile Contact Sile Contact Lab Contact Sile Contact	Project Manager ERIC PASTOR	Temperature on Receipt TestAr	9 10 11 13 14 15 16
$ \begin{array}{c c} Date \\ H \\ H \\ Date \\ J \\ $	A fee may be assessed if samples are retained Months longer than 1 month)			of Custod		2-009	Special Instructions/ Conditions of Receipt	Lab Number nalysis (Attach list if pre space is needed) of for a space is needed)	Date 4-10-13 Chain of Custody Number	IRONMENTAL TESTING	

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

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4/18/2013

Client: Pastor, Behling & Wheeler LLC

Login Number: 71389 List Number: 1

Creator: Pulumbarit, Josh

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	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.	True	

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Job Number: 600-71389-1

List Source: TestAmerica Houston



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: 600-73081-1

Client Project/Site: Exide Recycling Center, Frisco TX Projec

For:

Pastor, Behling & Wheeler LLC 2201 Double Creek Dr Suite 4004 Round Rock, Texas 78664

Attn: Eric Pastor

Authorized for release by: 6/3/2013 5:36:20 PM Cathy Upton, Data Delivery Analyst (713)690-4444 cathy.upton@testamericainc.com

Designee for

Sachin Kudchadkar, Project Manager II sachin.kudchadkar@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: 600-73081-1 Exide Recycling Center, Frisco TX Project Project Name/Number: This Data Package consists of: This signature page, the laboratory review checklist, and the following Reportable Data: Field Chain-of-Custody Form X R1 X R2 Sample Identification Cross-reference; X 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). X R4 Surrogate Recovery Data including: a) Calculated recovery (%R), and b) The laboratory's surrogate QC limits. X R5 Test Reports/Summary Forms for Blank Samples; Test Reports/Summary Forms for Laboratory Control Samples (LCSs) including: X R6 a) LCS spiking amounts, b) Calculated %R for each analyte, and d) The laboratory's LCS QC limits Test Reports for Matrix Spike/Matrix Spike Duplicates (MS/MSDs) including: X R7 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 Laboratory analytical duplicates (if applicable) recovery and precision, including: X R8

a) the amount of analyte measured in the duplicate,

- b) the calculated RPD, and
- c) the laboratory's QC limits for analytical duplicates.
- **R**9 List of method quantitation limit (MQL) and detectability check sample results for each analyte for each method and matrix;

X 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 Name (printed) Data Delivery Analyst

Official Title (printed)

Signature

Mo

06/03/2013 Date

Aj	pper	ndix A (cont'd): Laboratory Review Checkl	list: Reportable Data					
Lab	oratoi	y Name: TestAmerica-Houston	LRC Date: 05/20/13					
Proj	ect N	ame: Exide Recycling Center, Frisco TX Project	Laboratory Job Number: 600-73081					
Rev	iowor	Name: BDG	Prep Batch Number(s): $600, 106122$ Sul	lfata				
μ1			$\frac{1}{100} \frac{1}{100122} = \frac{1}{2000}$	Vac	No	NIA ³	ND ⁴	ED #5
#	A	Chain of matada (C.O.C)		Tes	NO	NA	INK	EK#
D1	OI	Chain-of-custody (C-O-C)	1 (11)	v				
K1	01	Did samples meet the laboratory's standard conditions of sar	nple acceptability upon receipt?	X		v		
D2	OI	were all departures from standard conditions described in ar	exception report?			Λ		
K2	01	Are all field sample ID numbers cross referenced to the labor	ratory ID numbers?	v				
		Are all laboratory ID numbers cross referenced to the corres	ponding OC data?	A V				
R3	OI	Test reports	ponding QC data:	Λ				
	01	Were all samples prepared and analyzed within holding time		X				
		Other than those results $<$ MOL, were all other raw values by	racketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?		X				
		Were all analyte identifications checked by a peer or supervi	sor?	Х				
		Were sample detection limits reported for all analytes not de	tected?	Х				
		Were all results for soil and sediment samples reported on a	dry weight basis?			Х		
		Were % moisture (or solids) reported for all soil and sediment	nt samples?			Х		
		Were bulk soil/solid samples for volatile analysis extracted v	with methanol per SW846 Method 5035?			Х		
		If required for the project, TICs reported?				Х		
R4	0	Surrogate recovery data						
		Were surrogates added prior to extraction?		_		X		
D.7	01	Were surrogate percent recoveries in all samples within the l	aboratory QC limits?			X		
R5	OI	Test reports/summary forms for blank samples		v				
		Were appropriate type(s) of blanks analyzed?						
		Were method blanks taken through the entire analytical proc	ass including propagation and if					
		applicable cleanup procedures?	ess, including preparation and, in	Λ				
		Were blank concentrations < MOL?		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?	Х				
		Were LCSs analyzed at the required frequency?		Х				
		Were LCS (and LCSD, if applicable) %Rs within the laborate	tory QC limits?	Х				
		Does the detectability check sample data document the labor	ratory's capability to detect the COCs at	Х				
		the MDL used to calculate the SDLs?						
		Was the LCSD RPD within QC limits?				Х		
R 7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) dat						
		Were the project/method specified analytes included in the N	AS and MSD?	X				
		were MS/MSD analyzed at the appropriate frequency?	my OC limits?	X	├──		v	1
		Were MS (and MSD, if applicable) %KS within the faborator	ry QC minus?	-			A V	1
R8	OI	Analytical dunlicate data					Λ	1
110	01	Were appropriate analytical duplicates analyzed for each ma	trix?			x		
		Were analytical duplicates analyzed at the appropriate freque	encv?			X		
		Were RPDs or relative standard deviations within the laborat	tory OC limits?			X		
R9	OI	Method quantitation limits (MOLs):						
	-	Are the MQLs for each method analyte included in the labor	atory data package?	Х				
		Do the MQLs correspond to the concentration of the lowest	non-zero calibration standard?	Х				
		Are unadjusted MQLs and DCSs included in the laboratory of	data package?	Х				
R10	OI	Other problems/anomalies						
1		Are all known problems/anomalies/special conditions noted	in this LRC and ER?	Х				
		Was applicable and available technology used to lower the S	DL to minimize the matrix interference	Х				2
		affects on the sample results?						
1		Is the laboratory NELAC-accredited under the Texas Labora	tory Accreditation Program for the	Х				
1	I	analytes, matrices and methods associated with this labor	atory data package?		Ļ	L	L	<u> </u>
	1.	Items identified by the letter "R" must be included in the laboratory of	lata package submitted in the TRRP-required re	port(s)	. Iter	ns ide	ntified	i by the

letter "S" should be retained and made available upon request for the appropriate retention period.

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 NA = Not applicable;

 4. NR = Not reviewed;
 5. ER# = Exception Re ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

A1

Proje Revi $\frac{\#^1}{51}$	ect N iewer A ²	ame: Exide Recycling Center, Frisco TX Project						
Revi # ¹ 51	iewei	; ; ; ;	Laboratory Job Number: 600-73081					
# ¹ 51	A ²	Name: BDG	Pren Batch Number(s): 600-106122 – S	ulfate				
# 51	A		riep Baten Humber(3). 000 100122 - 5	Voc	No	NA ³	NP ⁴	ED
<u>51</u>				Tes	NO	INA	INK	EK†
22	0I			v			-	-
22		Were response factors and/or relative response factors for each a	analyte within QC limits?	X				_
22		Were percent RSDs or correlation coefficient criteria met?		X				_
12		Was the number of standards recommended in the method used	for all analytes?	X				_
12		Were all points generated between the lowest and highest stands	ard used to calculate the curve?	X				_
12		Are ICAL data available for all instruments used?		X				_
27 I.	<u>.</u>	Has the initial calibration curve been verified using an appropria	ate second source standard?	X				_
<i>74</i>	OI	Initial and continuing calibration verification (ICCV and Co	CV) and continuing calibration					_
		Was the CCV analyzed at the method-required frequency?		Х				
		Were percent differences for each analyte within the method-red	quired QC limits?	Х				_
		Was the ICAL curve verified for each analyte?		Х				
		Was the absolute value of the analyte concentration in the inorg	anic CCB < MDL?	Х				
53	0	Mass spectral tuning:						
		Was the appropriate compound for the method used for tuning?				Х		
		Were ion abundance data within the method-required QC limits	\$?			Х		
34	0	Internal standards (IS):						
		Were IS area counts and retention times within the method-requ	aired QC limits?			Х		
35	OI	Raw data (NELAC section 5.5.10)						
		Were the raw data (for example, chromatograms, spectral data)	reviewed by an analyst?	Х				
		Were data associated with manual integrations flagged on the ra	aw data?			Х		
36	0	Dual column confirmation						
		Did dual column confirmation results meet the method-required	1 QC?			Х		
57	0	Tentatively identified compounds (TICs):						
		If TICs were requested, were the mass spectra and TIC data sub	ject to appropriate checks?			Х		
58	Ι	Interference Check Sample (ICS) results:						
		Were percent recoveries within method QC limits?				Х		
59	I	Serial dilutions, post digestion spikes, and method of standa	rd additions					
		Were percent differences, recoveries, and the linearity within th	e QC limits specified in the method?			Х		
510	OI	Method detection limit (MDL) studies						
		Was a MDL study performed for each reported analyte?		Х				
		Is the MDL either adjusted or supported by the analysis of DCS	s?	Х				
511	OI	Proficiency test reports:						
	-	Was the laboratory's performance acceptable on the applicable t	proficiency tests or evaluation studies?	Х				
512	OI	Standards documentation						
	-	Are all standards used in the analyses NIST-traceable or obtained	ed from other appropriate sources?	Х				-
513	OI	Compound/analyte identification procedures	TT T					
		Are the procedures for compound/analyte identification docume	ented?	X				
514	OI	Demonstration of analyst competency (DOC)						
╡	~1	Was DOC conducted consistent with NELAC Chapter 5?		X				
		Is documentation of the analyst's competency un-to-date and or	n file?	X			1	+
515	OI	Verification/validation documentation for methods (NFLAC	C Chanter 5)					
	<u>.</u>	Are all the methods used to generate the data documented, verif	fied and validated where applicable?	x				
316	OT	I abaratory standard onerating presedures (SODs).	inco, and vandated, where applied be?	~				
,10	01	Are laboratory SOPs current and on file for each method perform	mod?	v				-
		Are rappratory SOF's current and on the for each method perform	incu :	Λ				

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

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).

NA = Not applicable.

NR = Not Reviewed.

2

3

4

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Appendix A (cont'd): Laboratory Review Checklist: Exception Reports						
Laboratory Name: TestAmerica-Houston		LRC Date: 05/20/13				
Project Name: Exide Recycling Center, Frisco TX Project		Laboratory Job Number: 600-73081				
Reviewer Name: BDG		Prep Batch Number(s): 600-106122 – Sulfate				
ER # ¹	DESCRIPTION					
1	The laboratory selected a sample from another group to perform as the MS/MSD.					
2	The Sulfate SDL for sample 600-73081 – 1 was elevated due to the high concentration of this analyte.					

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

A	oper	ndix A (cont'd): Laboratory Review Checklis	t: Reportable Data					
Lab	Laboratory Name: TestAmerica-Houston LRC Date: 05/20/13							
Project Name: Exide Recycling Center, Frisco TX Laboratory Job Number: 600-73081								
Rev	iewer	Name: TWR	Prep Batch Number(s): 600-106133- I	СР				
$\#^1 \land A^2$ Description			Yes	No	NA ³	NR^4	ER# ⁵	
	Л	Chain-of-custody (C-O-C)		105	110	1.1.1		LICH
R1	ОІ	Did samples meet the laboratory's standard conditions of sample accentability upon receipt?		v				
	01	Were all departures from standard conditions described in an exception report?		Λ		x		
R2	OI	Sample and quality control (QC) identification				Λ		
	Are all field sample ID numbers cross-referenced to the laboratory ID number		tory ID numbers?	X		1		
		Are all laboratory ID numbers cross-referenced to the correspo	nding QC data?	X				
R3	OI	Test reports						
		Were all samples prepared and analyzed within holding times?		Х	1	1	1	
	Other than those results < MQL, were all other raw values bracketed by calibration standards?			Х				
	Were calculations checked by a peer or supervisor? Were all analyte identifications checked by a peer or supervisor?			Х				
			r?	Х				
		Were sample detection limits reported for all analytes not detect	eted?	Х				
	Were all results for soil and sediment samples reported on a dry weight basis?					Х		
	Were % moisture (or solids) reported for all soil and sediment samples?		samples?			Х		
		Were bulk soil/solid samples for volatile analysis extracted with methanol per SW846 Method 5035?				Х		
	_	If required for the project, TICs reported?				X		
R4	0	Surrogate recovery data						
		Were surrogates added prior to extraction?				X		
D5	OI	Were surrogate percent recoveries in all samples within the laboratory QC limits?				X		
КЭ	OI	Test reports/summary forms for blank samples						
		Were appropriate type(s) of blanks analyzed?		X				
		Were method blanks taken through the entire analytical process including propagation and if						
		applicable, cleanup procedures?	s, including preparation and, if	Λ				
		Were blank concentrations < MOL?		x				
R6	OI	Laboratory control samples (LCS):						
	01	Were all COCs included in the LCS?		X				
		Was each LCS taken through the entire analytical procedure, in	cluding prep and cleanup steps?	X				
	Were LCSs analyzed at the required frequency?		Stot manual subs	X				
		Were LCS (and LCSD, if applicable) %Rs within the laborator	y OC limits?	Х				
		Does the detectability check sample data document the laborate	bry's capability to detect the COCs at	Х				
		the MDL used to calculate the SDLs?						
W		Was the LCSD RPD within QC limits?				Х		
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data						
		Were the project/method specified analytes included in the MS	and MSD?	Х				
		Were MS/MSD analyzed at the appropriate frequency?		Х				
		Were MS (and MSD, if applicable) %Rs within the laboratory	QC limits?				X	1
20		Were MS/MSD RPDs within laboratory QC limits?					X	1
R8	OI	Analytical duplicate data	2	N/				
		Were appropriate analytical duplicates analyzed for each matrix	X?	X		-		
		Were analytical duplicates analyzed at the appropriate frequence		X			v	2
DO	OT	Were RPDs or relative standard deviations within the laborator	y QC limits?				X	2
КУ	OI	Method quantitation limits (MQLs):	anu data nagleogo?	v				
		Are the MQLs for each method analyte included in the laborate	bry data package?					
		Are upadjusted MOLs and DCSs included in the laboratory dat	n-zero cambranon standard?					
P 10	OI	Are unaujusted MQLs and DCSs included in the laboratory dat	a package :	Λ				
	01	Are all known problems/anomalies/special conditions noted in	this LRC and FR?	x				
1		Was applicable and available technology used to lower the SDI	to minimize the matrix interference	X	\vdash	<u> </u>		
		affects on the sample results?	is manning the matrix interference	Λ		1		
		Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the			1	1	1	
1		analytes, matrices and methods associated with this laboratory data package?			1	1		
1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(port(s)). Iter	ns ide	ntified	l by the

letter "S" should be retained and made available upon request for the appropriate retention period. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 NA = Not applicable;

4. NR = Not reviewed;

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked). 5.

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Aŗ	open	dix A (cont'd): Laboratory Review Checklist: R	eportable Data					
Laboratory Name: TestAmerica-HoustonLRC Date: 05/20/13								
Project Name: Exide Recycling Center, Frisco TX Laboratory Job Number: 600-73081								
Rev	viewe	r Name: TWR Prep	Batch Number(s): 600-106133-1	СР				
# ¹	$\#^1 A^2$ Description			Yes	No	NA ³	NR^4	ER# ⁵
S1	OI	Initial calibration (ICAL)						
	01	Were response factors and/or relative response factors for each analy	te within OC limits?			X		
		Were percent RSDs or correlation coefficient criteria met?	te within ge mints.		-	X		
		Was the number of standards recommended in the method used for all analytes?						
		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?						
S2 OI		Initial and continuing calibration verification (ICCV and CCV) and continuing calibration						
-	0.	Was the CCV analyzed at the method-required frequency?						
		Was the CCV analyzed at the method-required nequency: Were percent differences for each analyte within the method-required OC limits?		X				
		Was the ICAL curve verified for each analyte?						
		Was the absolute value of the analyte concentration in the inorganic CCB $<$ MDI ?						
S 3	0	Mass spectral tuning:		11				
		Was the appropriate compound for the method used for tuning?				x		
		Were ion abundance data within the method-required OC limits?				X		
S4	0	Internal standards (IS):						
~ .		Were IS area counts and retention times within the method-required OC limits?				X		
S 5	OI	Raw data (NELAC section 5.5.10)						
	01	Were the raw data (for example, chromatograms, spectral data) review	wed by an analyst?	x				
		Were data associated with manual integrations flagged on the raw data	ta?	11		x		
S6 O Dual co		Dual column confirmation						
~ ~	Ŭ	Did dual column confirmation results meet the method-required OC?				X		
S7 S8	0	Tentatively identified compounds (TICs):						
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?				X		
	I	Interference Check Sample (ICS) results:						
	-	Were percent recoveries within method OC limits?		Х				
S 9	I	Serial dilutions, post digestion spikes, and method of standard ad	Iditions					
	-	Were percent differences, recoveries, and the linearity within the OC limits specified in the method?					X	3
S10	OI	Method detection limit (MDL) studies						-
		Was a MDL study performed for each reported analyte?		Х				
		Is the MDL either adjusted or supported by the analysis of DCSs?		Х				
S11	OI	Proficiency test reports:						
		Was the laboratory's performance acceptable on the applicable profic	ciency tests or evaluation studies?	Х				
S12	OI	Standards documentation	×					
	1	Are all standards used in the analyses NIST-traceable or obtained fro	om other appropriate sources?	Х				
S13	OI	Compound/analyte identification procedures	•• •					
	1	Are the procedures for compound/analyte identification documented	?	Х				
S14	OI	Demonstration of analyst competency (DOC)						
		Was DOC conducted consistent with NELAC Chapter 5?		Х				
		Is documentation of the analyst's competency up-to-date and on file?	2	Х				
S15	OI	Verification/validation documentation for methods (NELAC Cha	apter 5)					
	1	Are all the methods used to generate the data documented, verified, a	and validated, where applicable?	Х			1	
S16	OI	Laboratory standard operating procedures (SOPs):	**					
	1	Are laboratory SOPs current and on file for each method performed?		Х		1		
L	<u> </u>	1. Items identified by the letter "D" should be included in the laboration of	late peakers submitted to the TCEO	the T	חסס	roani	d ran -	rt (a)
		Items identified by the letter "S" should be retained and made available	e upon request for the appropriate reten	tion n	eriod	-requir	eu repo	11(8).

NR = Not Reviewed.

2 3 4

5

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

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable). NA = Not applicable.
Appendix A (cont'd): Laboratory Review Checklist: Exception Reports					
Laborat	tory Name: TestAmerica-Houston	LRC Date: 05/20/13			
Project Name: Exide Recycling Center, Frisco TX Laboratory Job Number: 600-73081					
Review	er Name: TWR	Prep Batch Number(s): 600-106133- ICP			
ER # ¹	DESCRIPTION				
1	The laboratory selected a sample from another group to perform as the MS/MSD.				
2	The laboratory selected a sample from another group to perform as the DUP.				
3	The laboratory selected a sample from another group	to perform as the PDS and SD.			

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: Water Method: 300.0, 9056 Preparation: N/A Date Analyzed: 01/29/2013 Date Prepared: 01/29/2013 TALs Batches: N/A Units: mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Fluoride	0.08	0.075	0.354	0.2
Chloride	0.127	0.1	1.02	0.4
Nitrite	0.105	0.05	0.347	0.2
Bromide	0.071	0.2	0.307	0.2
Nitrate	0.032	0.04	0.476	0.2
Orthophosphate	0.117	0.25	0.305	0.2
Sulfate	0.137	0.15	0.256	0.4

Detection Check Standard

Matrix:	Water			
Method:	200.7/6010			
Preparation:	200.7P/3010			
Date Analyzed:	3/29/2013			
Date Prepared:	3/28/2013			
Instrument:	Thermo 6500			
TALs Batches:	102868, 10275	5p		
Units:	mg/L			
Analyte	MDL	DCS Spike	Measured Result	MQL
Aluminum	0.006	0.02	0.0177	0.5
Antimony	0.0063	0.01	0.0105	0.05
Arsenic	0.0033	0.01	0.0077	0.01
Barium	0.0022	0.005	0.0026	0.02
Beryllium	0.00134	0.002	0.0042	0.005
Boron	0.0077	0.02	0.0193	0.2
Cadmium	0.00073	0.001	0.001	0.005
Calcium	0.022	0.05	0.0583	1
Chromium	0.0016	0.002	0.0037	0.01
Cobalt	0.00063	0.001	0.0012	0.01
Copper	0.0014	0.002	0.0012	0.01
Iron	0.087	0.1	0.1011	0.4
Lithium	0.0024	0.005	0.0043	0.2
Lead	0.0029	0.005	0.005	0.01
Selenium	0.0042	0.01	0.0083	0.04
Manganese	0.00084	0.002	0.002	0.01
Molybdenum	0.0027	0.005	0.0048	0.01
Nickel	0.00179	0.005	0.0043	0.01
Silver	0.0012	0.0025	0.0024	0.01
Sodium	0.02	0.05	0.0465	1
Strontium	0.0005	0.001	0.001	0.005
Thallium	0.0078	0.02	0.0184	0.03
Tin	0.0028	0.005	0.0049	0.01
Titanium	0.0011	0.002	0.0023	0.01
Vanadium	0.0017	0.002	0.0048	0.01
Zinc	0.0022	0.005	0.0065	0.01

Job ID: 600-73081-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative 600-73081-1

Comments

No additional comments.

Receipt

The sample was received on 5/14/2013 8:31 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4° C.

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

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Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TestAmerica Houston

Sample Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-73081-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-73081-1	MW-31	Water	05/13/13 08:45	05/14/13 08:31

TestAmerica Houston

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-73081-1

Client Sample ID: MW-31

Date Collected: 05/13/13 08:45 Date Received: 05/14/13 08:31

Lab Sample ID: 600-73081-1 Matrix: Water

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		05/15/13 08:48	05/16/13 08:57	1
Lead	0.00290	U	0.0100	0.00290	mg/L		05/15/13 08:48	05/16/13 08:57	1
_ Method: 6010B - Metals (ICP) - D	issolved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium, Dissolved	0.000350	U	0.00500	0.000350	mg/L		05/15/13 08:48	05/16/13 08:59	1
Lead, Dissolved	0.00290	U	0.0100	0.00290	mg/L		05/15/13 08:48	05/16/13 08:59	1
- General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	927		50.0	13.7	mg/L			05/14/13 17:38	100

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

9

Qualifiers

Project/Site	e: Exide Recycling Center, Frisco TX Projec	
Qualifiers	S	
Metals		
Qualifier	Qualifier Description	
U	Analyte was not detected at or above the SDL.	5
General Ch	nemistry	
Qualifier	Qualifier Description	
U	Analyte was not detected at or above the SDL.	

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
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)
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 600-106133/1-A									Client Sa	ample ID: Metho	od Blank
Matrix: Water										Prep Type:	Total/NA
Analysis Batch: 106235										Prep Batch	: 106133
	MB	MB									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit		D	Р	repared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L			05/1	5/13 08:48	05/16/13 08:43	1
Cadmium, Dissolved	0.000350	U	0.00500	0.000350	mg/L			05/1	5/13 08:48	05/16/13 08:43	1
Lead	0.00290	U	0.0100	0.00290	mg/L			05/1	5/13 08:48	05/16/13 08:43	1
Lead, Dissolved	0.00290	U	0.0100	0.00290	mg/L			05/1	5/13 08:48	05/16/13 08:43	1
							C	lient	Sample	ID: Lab Control	Sample
Matrix: Water										Prep Type:	Total/NA
Analysis Batch: 106235										Prep Batch	: 106133
			Spike	LCS LCS	;					%Rec.	
Analyte			Added	Result Qua	lifier	Unit		D	%Rec	Limits	
Cadmium			0.500	0.5052		mg/L			101	80 - 120	
Cadmium, Dissolved			0.500	0.5052		mg/L			101	80 - 120	
Lead			1.00	0.9980		mg/L			100	80 - 120	
Lead, Dissolved			1.00	0.9980		mg/L			100	80 - 120	
Method: 300.0 - Anions, Ion Ch	romatogr	aphy									
									Client Sa	ample ID: Metho	od Blank
Matrix: Water										Prep Type:	Total/NA
Analysis Batch: 106122											
	MB	MB									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit		D	Р	repared	Analyzed	Dil Fac
Sulfate	0.137	U	0.500	0.137	mg/L					05/14/13 12:02	1
							С	lient	Sample	ID: Lab Control	Sample
Matrix: Water										Prep Type:	Total/NA
Analysis Batch: 106122											
			Spike	LCS LCS	;					%Rec.	
Analyte			Added	Result Qua	lifier	Unit		D	%Rec	Limits	
Sulfate			20.0	21.19		mg/L			106	90 - 110	

Unadjusted Detection Limits

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

2 3 4 5 6 7 8 9 10 11 12 13 14 15

Method: 6010B - Metals (ICP)

Analyte	MQL	MDL	Units	Method
Cadmium	0.00500	0.000350	mg/L	6010B
Lead	0.0100	0.00290	mg/L	6010B
Method: 6010B - Metals (ICP) - D	issolved			
Analyte	MQL	MDL	Units	Method
Cadmium, Dissolved	0.00500	0.000350	mg/L	6010B
Lead. Dissolved	0.0100	0.00290	mg/L	6010B
_				
General Chemistry				
General Chemistry	MQL	MDL	Units	Method

QC Association Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Metals

Prep Batch: 106133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-73081-1		Total/NA	Water	3010A	
600-73081-1	MW-31	Dissolved	Water	3010A	
LCS 600-106133/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-106133/1-A	Method Blank	Total/NA	Water	3010A	
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
				Method	Ргер Басст
600 72091 1	MW/ 21	Disselved	Water	6010B	106133
600-73061-1	10100-31	Dissolved	water	00106	100133
LCS 600-106133/2-A	Lab Control Sample	Total/NA	Water	6010B	106133
MB 600-106133/1-A	Method Blank	Total/NA	Water	6010B	106133

General Chemistry

Analysis Batch: 106122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
600-73081-1	MW-31	Total/NA	Water	300.0	
LCS 600-106122/4	Lab Control Sample	Total/NA	Water	300.0	
MB 600-106122/3	Method Blank	Total/NA	Water	300.0	

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Client Sample ID: MW-31 Lab Sample I							ID: 600-73081-1		
Date Collected	I: 05/13/13 08:4	45						-	Matrix: Water
Date Received	: 05/14/13 08:3	31							
	Batch	Batch		Dilution	Batch	Prepared			
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3010A			106133	05/15/13 08:48	NER	TAL HOU	
Total/NA	Analysis	6010B		1	106235	05/16/13 08:57	DCL	TAL HOU	
Dissolved	Prep	3010A			106133	05/15/13 08:48	NER	TAL HOU	
Dissolved	Analysis	6010B		1	106235	05/16/13 08:59	DCL	TAL HOU	
Total/NA	Analysis	300.0		100	106122	05/14/13 17:38	DAW	TAL HOU	

Laboratory References:

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

TestAmerica Houston

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-73081-1

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	08-04-12 *
Louisiana	NELAP	6	01967	06-30-13
Oklahoma	State Program	6	9503	08-31-13
Texas	NELAP	6	T104704223-10-6-TX	10-31-13
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	GULF	10-31-13

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

TestAmerica Houston

1. Heinquished By 2. Reinquished By 3. Reinquished By Comments	Possible Hazard Identification			mw-31	ContractPurchase OrderQuote No.	Round Rocic State	2201 DOUBLE CREECD	Chain of Custody Record
	Poison B Unk		Pan CLCLG	5-13-13 084	y Date Tim	78664	10	76 D
ne -[3-[3] ne ne ne	Other			× X	Alr Aqueous Sed. Soll	te Contact arrieg/Waybill Number	oject Manager ERIC PAS Jephone Number (Area Code SIA-UTI-3	mperature on Receipt rinking Water? Yes□
1. Received By 2. Received By 3. Reddings By	CC Requirements (Spe			× ×	Unpress H2SO4 H1NO3 HCI NaOH ZnAc/ NaOH	Lab Contact	DR VFax Number VSY	
	Archive For		>	XX	CADMINM CAOMINM SVLFATI		TOTAL >1ssolve	ELEADER IN ENVIR
	_ Months longer than 1 me					ysis (Attach list if space is needed)	Date 5-13~13 Lab Number	Nerica
Date 5/13/13 1570 Date 5/14/13 Time Date Date	seesed if samples are retained nrth)	CretoqA	600-73081 Chain of		Special Instructions' Conditions of Receipt		Page of	

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Client: Pastor, Behling & Wheeler LLC

Login Number: 73081 List Number: 1

Creator: Capps, Dana

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.4
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.	True	

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Job Number: 600-73081-1

List Source: TestAmerica Houston

APPENDIX 10.6 2012/2013 LABORATORY DATA PACKAGES AND ATA USABILITY SUMMARIES (DUS)

SURFACE WATER

DATA USABILITY SUMMARY

SITE:	Exide Former Operating Plant Frisco, Texas	
CLIENT:	Pastor, Behling & Wheeler, LLC (PBW) Round Rock, Texas	
EVENT:	Surface Water Sampling – March 2013	
INTENDED USE:	Affected Property Assessment	
LABORATORY:	TestAmerica – Houston, TX TLAP Certification T104704223 Work Order: 600-70439-1	
TESTS/ METHODS:	Total Metals (Cd, Pb)	SW846 3010A/6010B
	Dissolved Metals (Cd, Pb)	SW846 3010A/6010B
	Sulfate (SO4)	EPA 300.0
SAMPLES:	10 surface water samples, 2 MS/MSD pairs (see Table 1 for a complete listing)	

QAA completed a third-party 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).

All samples collected during the event were reviewed. QAA completed the review using the following laboratory and project submittals:

- Laboratory reportable data as defined in TRRP-13;
- Laboratory review checklists (LRCs) 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, QAA used the LRCs to evaluate the following QC parameters:

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

Criteria used for the data usability review are as follows:

Inorganics: 70-130% spike recovery (and not less than 30% or data is rejected) and <u>+</u>MQL difference or 30% RPD (for laboratory 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.

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 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 form. 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 1 to this DUS.

USABILITY SUMMARY

 Usability of Unqualified Non-Detects – Non-detects are reported at the sample detection limit (SDL) as required per TRRP. Additionally, according to the LRCs, an MDL study was performed for each analyte and the MDLs were checked for reasonableness. The levels of required performance (LORPs) have been established by PBW as 0.00908 mg/L for Dissolved Cadmium and 0.0688 mg/L for Dissolved Lead. As needed per TRRP, the Unadjusted MQL stated by the laboratory is at or below the LORP for each of these analytes, and thus the analytical methods are appropriate and the results can be used to demonstrate conformance with the criteria.

Usability of Qualified Data – No QC deficiencies were noted and the reviewer did not apply any data quality flags. Thus, all
results are acceptable for the intended use. Results with a laboratory J-flag (i.e., between the SDL and MQL) should be
considered estimates. The actual value for these results is not expected to exceed the sample MQL.

QAA Reviewer:

Taryn G. Scholz (Name) 4/19/13 (Date) QC PARAMETER QC OUTCOME

 Data
 The laboratory data package contains all necessary data (i.e., the laboratory reportable data per

 Completeness
 TRRP-13). No package revisions were required. The EDD required revision to add an identification to distinguish Total Metals results from Dissolved Metals results.

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 record is complete and agrees with that in the field notes and laboratory report and all tests results are reported as requested on the custody record.

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.

Field Procedures Readings for temperature, pH, specific conductivity, and dissolved oxygen were recorded in the field notes. Samples were collected in containers provided by the laboratory, placed on ice, and delivered to the laboratory by overnight courier. All dissolved sample aliquots were field-filtered using a 0.45-micron filter. Only dedicated or disposable equipment was used. No field QC samples (duplicates or blanks) were collected with the investigative samples.

Results Reporting 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/L. 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.

Each of the sulfate samples required dilution due to a high concentration of this analyte. There are no elevated reporting limits for non-detects.

MQLs The LORPs have been established by PBW as 0.00908 mg/L for Dissolved Cadmium and 0.0688 mg/L for Dissolved Lead. The Unadjusted MQLs are at or below the LORPs for these analytes.

MDLs According to the LRCs, 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 (DCSs) as required per TRRP-13. Results for the DCS are included in the laboratory data package.

Laboratory Blanks No analytes are reported above the detection limit in the laboratory blanks, which confirms that no contamination was introduced in the laboratory.

Field QC Blanks No field QC blanks were collected with the samples.

Laboratory Control The laboratory prepared one laboratory control spike (LCS) for each analytical batch and the spike solution contained all of the analytes. The LCS recoveries are within the TRRP recommended limits, which indicates good accuracy for the preparation and analysis technique on a sample free of matrix effects.

Matrix SpikeThe laboratory prepared one Matrix Spike (MS) and Matrix Spike Duplicate (MSD) for each analyticalRecoverybatch and the spike solution contained all of the analytes. Recoveries are reported for MS/MSDprepared using a sample from the site.

DATA USABILITY SUMMARY

Matrix Spike Recovery	MS/MSD pairs were prepared using sample SW-NT-1 for Sulfate and Total Metals and using sample SW-NT-2 for Dissolved Metals. The recoveries are within the TRRP recommended criteria, which indicates good accuracy for the preparation and analysis technique on the given sample matrix.
Surrogate Recovery	Surrogates are not used for methods SW846 6010B or EPA 300.0.
Laboratory Duplicate Precision	The MS/MSD RPDs for all analytes are within the TRRP recommended limits, which indicates good precision for the preparation and analysis technique on the given sample matrix.
Field Duplicate Precision	No field duplicates were collected with the samples.
Instrument Tuning	Instrument tuning is not required for methods SW846 6010B or EPA 300.0.
Instrument Calibration	According to the LRCs, initial and continuing calibration data met method requirements for all reported results, which indicates the instruments were properly calibrated to measure analyte concentrations.
Instrument Performance	According to the LRCs, the serial dilution and ICP interference check samples met method requirements, which indicates that no significant matrix interference exists.
Internal Standards	Internal standards are not used for methods SW846 6010B or EPA 300.0.
Total to Partial Balance	For each metal in every sample, the dissolved metal concentration is at or below the total metal concentration or the difference does not exceed the inherent analytical method error (i.e., \pm 2x MQL difference (if either result is less than 5x MQL) or 30% RPD).

QC PARAMETER QC OUTCOME

TABLE 1 EXIDE FORMER OPERATING PLANT SURFACE WATER SAMPLING – MARCH 2013

SAMPLES ANALYZED

					QC Prep Batch		
	Field ID	Sample	Sample	Sample	Total Metals	Dissolved Metals	Sulfate
	Field ID	Туре	Matrix	Date	(Cd, Pb)	(Cd, Pb)	(SO4)
					3010A/6010B	3010A/6010B	300.0
600-70439-001	SW-NT-1	INV	Water	3/20/13	102443	102443	102534
600-70439-001	SW-NT-1	MS	Water	3/20/13	102443	NA	102534
600-70439-001	SW-NT-1	MSD	Water	3/20/13	102443	NA	102534
600-70439-002	SW-NT-2	INV	Water	3/20/13	102443	102443	102534
600-70439-002	SW-NT-2	MS	Water	3/20/13	NA	102443	NA
600-70439-002	SW-NT-2	MSD	Water	3/20/13	NA	102443	NA
600-70439-003	SW-NT-3	INV	Water	3/20/13	102443	102443	102534
600-70439-004	SW-NT-4	INV	Water	3/20/13	102443	102443	102534
600-70439-005	SW-NT-5	INV	Water	3/21/13	102443	102443	102534
600-70439-006	SW-NT-6	INV	Water	3/21/13	102443	102443	102534
600-70439-007	SW-NT-7	INV	Water	3/21/13	102443	102443	102534
600-70439-008	SW-NT-8	INV	Water	3/21/13	102443	102443	102534
600-70439-009	SW-NT-9	INV	Water	3/21/13	102443	102443	102534
600-70439-010	SW-NT-10	INV	Water	3/21/13	102443	102443	102534

INV - Investigative

MS – Matrix Spike

MSD – Matrix Spike Duplicate

NA – Not Analyzed

ATTACHMENT 1

APPLICABLE PAGES OF THE LABORATORY ACCREDITATION CERTIFICATE



Texas Commission on Environmental Quality



NELAP - Recognized Laboratory Fields of Accreditation

	Certificate:	T104704223-12-9
TestAmerica Laboratories, Inc Houston	Expiration Date:	10/31/2013
6310 Rothway Drive Houston, TX 77040-5056	Issue Date:	11/1/2012

These fields of accreditation supercede all previous fields. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current accreditation status for particular methods and analyses.

Matrix: Non-Potable Water			
Sodium	ТХ	1155	10013806
Strontium	ТХ	1160	10013806
Thallium	ТХ	1165	10013806
Tin	ТХ	1175	10013806
Titanium	ТХ	1180	10013806
Vanadium	ТХ	1185	10013806
Zinc	ТХ	1190	10013806
Method EPA 245.1			
Analyte	AB	Analyte ID	Method ID
Mercury	ТХ	1095	10036609
Method EPA 300.0			
Analyte	AB	Analyte ID	Method ID
Bromide	ТХ	1540	10053006
Chloride	ТХ	1575	10053006
Fluoride	ТХ	1730	10053006
Nitrate as N	ТХ	1810	10053006
Nitrate-nitrite	ТХ	1820	10053006
Nitrite as N	ТХ	1840	10053006
Sulfate	ТХ	2000	10053006
Method EPA 305.1			
Analyte	AB	Analyte ID	Method ID
Acidity, as CaCO3	ТХ	1500	10054203
Method EPA 310.1			
Analyte	AB	Analyte ID	Method ID
Alkalinity as CaCO3	ТХ	1505	10054805
Method EPA 330.4			
Analyte	AB	Analyte ID	Method ID
Total residual chlorine	IX	1940	10059208
Method EPA 335.1			
Analyte	AB	Analyte ID	Method ID
Amenable cyanide	IX	1510	10060001



Texas Commission on Environmental Quality

NELAP - Recognized Laboratory Fields of Accreditation



TestAmerica Laboratories, Inc. - Houston

Certificate: Expiration Date: Issue Date: T104704223-12-9 10/31/2013 11/1/2012

6310 Rothway Drive Houston, TX 77040-5056

These fields of accreditation supercede all previous fields. The Texas Commission on Environmental Quality urges customers to verify the laboratory's current accreditation status for particular methods and analyses.

Matrix: Non-Potable Water			
Method EPA 415.1 Analyte Total Organic Carbon (TOC)	AB TX	Analyte ID 2040	Method ID 10078407
Method FPA 420.2			
Analyte	AB	Analyte ID	Method ID
Total phenolics	ТХ	1905	10079808
Method EPA 420.4			
Analyte	AB	Analyte ID	Method ID
Total phenolics	ТХ	1905	10080203
Method EPA 425.1			
Analyte	AB	Analyte ID	Method ID
Surfactants - MBAS	ТХ	2025	10080601
Method EPA 6010			
Analyte	AB	Analyte ID	Method ID
Aluminum	ТХ	1000	10155609
Antimony	ТХ	1005	10155609
Arsenic	ТХ	1010	10155609
Barium	ТХ	1015	10155609
Beryllium	ТХ	1020	10155609
Boron	ТХ	1025	10155609
Cadmium	ТХ	1030	10155609
Calcium	ТХ	1035	10155609
Chromium	ТХ	1040	10155609
Cobalt	ТХ	1050	10155609
Copper	ТХ	1055	10155609
Iron	ТХ	1070	10155609
Lead	ТХ	1075	10155609
Magnesium	ТХ	1085	10155609
Manganese	ТХ	1090	10155609
Molybdenum	ТХ	1100	10155609
Nickel	ТХ	1105	10155609



Texas Commission on Environmental Quality



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Matrix: Non-Potable Water			
Potassium	ΤX	1125	10155609
Selenium	ТХ	1140	10155609
Silica as SiO2	ТХ	1990	10155609
Silver	ТХ	1150	10155609
Sodium	ТХ	1155	10155609
Strontium	ТХ	1160	10155609
Thallium	ТХ	1165	10155609
Tin	ТХ	1175	10155609
Titanium	ТХ	1180	10155609
Vanadium	ТХ	1185	10155609
Zinc	ТХ	1190	10155609
Method EPA 602			
Analyte	AB	Analyte ID	Method ID
Benzene	ТΧ	4375	10102202
Ethylbenzene	ТХ	4765	10102202
m+p-xylene	ТХ	5240	10102202
o-Xylene	ТХ	5250	10102202
Toluene	ТХ	5140	10102202
Xylene (total)	ТХ	5260	10102202
Method EPA 608			
Analyte	AB	Analyte ID	Method ID
4,4'-DDD	ТХ	7355	10103603
4,4'-DDE	ТХ	7360	10103603
4,4'-DDT	ТΧ	7365	10103603
Aldrin	ТΧ	7025	10103603
alpha-BHC (alpha-Hexachlorocyclohexane)	ТХ	7110	10103603
alpha-Chlordane	ТХ	7240	10103603
Aroclor-1016 (PCB-1016)	ТХ	8880	10103603
Aroclor-1221 (PCB-1221)	ТХ	8885	10103603
Aroclor-1232 (PCB-1232)	ТХ	8890	10103603
Aroclor-1242 (PCB-1242)	ТХ	8895	10103603



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: 600-70439-1

Client Project/Site: Exide Recycling Center, Frisco TX Projec

For:

Pastor, Behling & Wheeler LLC 2201 Double Creek Dr Suite 4004 Round Rock, Texas 78664

Attn: Eric Pastor

Authorized for release by: 3/28/2013 4:13:00 PM Cathy Upton Data Delivery Analyst cathy.upton@testamericainc.com

Designee for

Sachin Kudchadkar Project Manager II sachin.kudchadkar@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

600-70439-1

Job Number:

Project Name/Number:

Exide Recycling Center, Frisco TX Project

This Data Package consists of:

X

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

- X R1 Field Chain-of-Custody Form
- X R2 Sample Identification Cross-reference;
- X 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).
- X R4 Surrogate Recovery Data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- X R5 Test Reports/Summary Forms for Blank Samples;
- X 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
- X 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.
- List of method quantitation limit (MQL) and detectability check sample results for each analyte for each method and X R9 matrix;
- X 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 Name (printed) Data Delivery Analyst

Official Title (printed)

Signature

03/28/2013 Date

A	pper	ndix A (cont'd): Laboratory Review Checkl	ist: Reportable Data					
Lab	orator	y Name: TestAmerica-Houston	LRC Date: 03/28/13					
Proi	ect N	ame: Exide Recycling Center, Frisco TX Project	Laboratory Job Number: 600-70439					
Rov	iowor	Name: BDG	Prep Batch Number(s): 600 102534 Su	fato				
#1			1 rep Baten (fulliber(s): 000-102554 – 50	Vac	No	NIA ³	ND ⁴	ED #5
#	A	Chain of matada (C.O.C)		res	NO	NA	INK	EK#
D1	OI	Chain-of-custody (C-O-C)	1 (11)	V				
KI	01	Did samples meet the laboratory's standard conditions of sar	nple acceptability upon receipt?	X		v		
DJ	OI	Were all departures from standard conditions described in an exception report?				Λ		ļ
K2	01	Sample and quality control (QC) identification						
		Are all laboratory ID numbers cross referenced to the corres	all leboratory ID numbers cross-referenced to the approximatory ID numbers?					
R3	OI	Test reports	ponding QC data:	Λ				
	01	Were all samples prepared and analyzed within holding time	\$?	x				
		Other than those results $<$ MOL, were all other raw values by	racketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?		X				<u> </u>
		Were all analyte identifications checked by a peer or supervi	sor?	Х				
		Were sample detection limits reported for all analytes not de	tected?	Х				
		Were all results for soil and sediment samples reported on a	dry weight basis?			Х		
		Were % moisture (or solids) reported for all soil and sedimer	nt samples?			Х		
		Were bulk soil/solid samples for volatile analysis extracted w	with methanol per SW846 Method 5035?			Х		
		If required for the project, TICs reported?				Х		
R4	0	Surrogate recovery data						
		Were surrogates added prior to extraction?				Χ		
		Were surrogate percent recoveries in all samples within the l	aboratory QC limits?			Х		
R5	OI	Test reports/summary forms for blank samples						
		Were appropriate type(s) of blanks analyzed?		Х				ļ
		Were blanks analyzed at the appropriate frequency?		Х				
	Were method blanks taken through the entire analytical process, including preparation and, if							1
		applicable, cleanup procedures?		37				
D	OI	Were blank concentrations < MQL?		X				<u> </u>
ко	OI	Laboratory control samples (LCS):		v				
		Were all COCs included in the LCS?	including man and cleanup stone?	X				
		Ware LCS taken through the required frequency?	, including prep and cleanup steps?					
		Were LCSs analyzed at the required frequency?	tory OC limits?					
		Does the detectability check sample data document the labor	atory's capability to detect the COCs at	X				
		the MDL used to calculate the SDL s?	atory s capability to detect the COCs at	~				1
		Was the LCSD RPD within OC limits?				X		
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) dat	a					
		Were the project/method specified analytes included in the N	AS and MSD?	Х		1	1	
		Were MS/MSD analyzed at the appropriate frequency?		Х				
		Were MS (and MSD, if applicable) %Rs within the laborator	ry QC limits?	Х				
		Were MS/MSD RPDs within laboratory QC limits?	-	Х				
R8	OI	Analytical duplicate data						
		Were appropriate analytical duplicates analyzed for each ma	trix?			Х		
		Were analytical duplicates analyzed at the appropriate freque	ency?			Χ		
		Were RPDs or relative standard deviations within the laborat	tory QC limits?			Х		
R9	OI	Method quantitation limits (MQLs):						
		Are the MQLs for each method analyte included in the labor	atory data package?	Х				
1		Do the MQLs correspond to the concentration of the lowest	non-zero calibration standard?	Х				
-		Are unadjusted MQLs and DCSs included in the laboratory of	lata package?	X				L
R10	OI	Other problems/anomalies						ļ
		Are all known problems/anomalies/special conditions noted	in this LRC and ER?	X				
		Was applicable and available technology used to lower the S	DL to minimize the matrix interference	X				1
1		affects on the sample results?	tom A conditation Durants 6 d	17				
		analytes, matrices and methods associated with this labor	atory data package?	X				ĺ
I	1	Items identified by the letter "R" must be included in the laboratory d	atory data package: lata package submitted in the TRRP-required re	nort(e)	Iter	l ns ide	ntifie/	l hy the

letter "S" should be retained and made available upon request for the appropriate retention period.

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 NA = Not applicable;

 4. NR = Not reviewed;
 5. ER# = Exception Re ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

A1

Ar	pen	dix A (cont'd): Laboratory Review Checklis	t: Reportable Data					
Lab	orato	ry Name: TestAmerica-Houston	LRC Date: 03/28/13					
Pro	ject N	ame: Exide Recycling Center, Frisco TX Project	Laboratory Job Number: 600-70439					
Rev	iewe	Name: BDG	Prep Batch Number(s): 600-102534 – S	ulfate	e			
#1	A^2	Description		Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial calibration (ICAL)		105	110			211.
51		Were response factors and/or relative response factors for each	analyte within OC limits?	x				
		Were percent RSDs or correlation coefficient criteria met?	anaryte within QC mints:	X				
		Was the number of standards recommended in the method used	d for all analytes?	X				
		Were all points generated between the lowest and highest stand	dard used to calculate the curve?	X				
		Are ICAL data available for all instruments used?	dard used to calculate the curve.	X				
		Has the initial calibration curve been verified using an appropr	iate second source standard?	X				
S 2	OI	Initial and continuing calibration verification (ICCV and C	CCV) and continuing calibration					
~-	Was the CCV analyzed at the method, required frequency?							
		Were percent differences for each analyte within the method-re	equired OC limits?	X				
		Was the ICAL curve verified for each analyte?		X				
		Was the absolute value of the analyte concentration in the inorganic CCB \leq MDI ?						
S 3	0	Mass spectral tuning:						
	0	Was the appropriate compound for the method used for tuning	?			X		
		Were ion abundance data within the method-required OC limits?				X		
S4	0	Internal standards (IS):						
~ -	0	Were IS area counts and retention times within the method-req	mired OC limits?			X		
S 5	OI	Raw data (NELAC section 5.5.10)						
	01	Were the raw data (for example, chromatograms, spectral data)) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the r	raw data?			X		
S6	0	Dual column confirmation						
	0	Did dual column confirmation results meet the method-require	d OC?			X		
S 7	0	Tentatively identified compounds (TICs):	- <u>(</u> -					
	-	If TICs were requested, were the mass spectra and TIC data su	biect to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results:	-J					
		Were percent recoveries within method QC limits?				Х	1	
S9	Ι	Serial dilutions, post digestion spikes, and method of standa	ard additions					
		Were percent differences, recoveries, and the linearity within the	he QC limits specified in the method?			Х		
S10	OI	Method detection limit (MDL) studies						
		Was a MDL study performed for each reported analyte?		Х	1			
		Is the MDL either adjusted or supported by the analysis of DC	Ss?	Х				
S11	OI	Proficiency test reports:						
		Was the laboratory's performance acceptable on the applicable	proficiency tests or evaluation studies?	Х				
S12	OI	Standards documentation						
		Are all standards used in the analyses NIST-traceable or obtain	ned from other appropriate sources?	Х				
S13	OI	Compound/analyte identification procedures						
		Are the procedures for compound/analyte identification docum	nented?	Х				
S14	OI	Demonstration of analyst competency (DOC)						
		Was DOC conducted consistent with NELAC Chapter 5?						
		Is documentation of the analyst's competency up-to-date and o	on file?	Х				
S15	OI	Verification/validation documentation for methods (NELA	C Chapter 5)					
		Are all the methods used to generate the data documented, veri	ified, and validated, where applicable?	Χ				
S16	OI	Laboratory standard operating procedures (SOPs):						
		Are laboratory SOPs current and on file for each method performance	rmed?	Х				
	l							

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. 1

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).

1	
4	
5	
8	
9	
13	

Appendix A (cont'd): Laboratory Review Checklist: Exception Reports								
Laborat	tory Name: TestAmerica-Houston	LRC Date: 03/28/13						
Project Name: Exide Recycling Center, Frisco TX Project Laboratory Job Number: 600-70439								
Review	ver Name: BDG	Prep Batch Number(s): 600-102534 – Sulfate						
ER # ¹	DESCRIPTION							
1	1 The Sulfate SDLs for samples $600-70439 - 1, 2, 3, 4, 5, 6, 7, 8, 9$ and 10 were elevated due to the high concentrations							
	of this analyte.							
	·							

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

A	pper	dix A (cont'd): Laboratory Review Checklis	t: Reportable Data					
Lab	orator	y Name: TestAmerica-Houston	LRC Date: 03/27/13					
Proj	ect N	ame: Exide Recycling Center, Frisco TX	Laboratory Job Number: 600-70439					
Rev	iewer	Name: TWR	Prep Batch Number(s): 600-102341 IC	<u>.</u> P				
#1		Description		Ves	No	NA ³	NR ⁴	FR# ⁵
π	А	Chain-of-custody (C-O-C)		103	110	1111		LIC
R1	OI	Did samples meet the laboratory's standard conditions of samp	la accontability upon receipt?	v				
, ni	01	Were all departures from standard conditions described in an exception report?				v		
R2	OI	Sample and quality control (OC) identification				Λ		
	01	Are all field sample ID numbers cross-referenced to the laboratory ID numbers?						
		Are all laboratory ID numbers cross-referenced to the correspondence	nding OC data?	X				
R3	OI	Test reports						
	-	Were all samples prepared and analyzed within holding times?		X	1	1		
		Other than those results < MQL, were all other raw values brac	keted by calibration standards?	Х				
		Were calculations checked by a peer or supervisor?	•	Х				
		Were all analyte identifications checked by a peer or supervisor	r?	Х				
		Were sample detection limits reported for all analytes not detec	ted?	Х				
		Were all results for soil and sediment samples reported on a dry	weight basis?			Х		
		Were % moisture (or solids) reported for all soil and sediment s	samples?			Х		
		Were bulk soil/solid samples for volatile analysis extracted with	h methanol per SW846 Method 5035?			Х		
	_	If required for the project, TICs reported?		_		X		
R4	0	Surrogate recovery data						
		Were surrogates added prior to extraction?				X		
D5	OI	Were surrogate percent recoveries in all samples within the lab	oratory QC limits?			X		
КЭ	OI	Test reports/summary forms for blank samples		v				
		Were heavier appropriate type(s) of blanks analyzed?			-	-		
		Were method blanks taken through the entire analytical process	including preparation and if	X				
		applicable, cleanup procedures?	, menuting preparation and, n	~				
		Were blank concentrations < MOL?		X				
R6	OI	Laboratory control samples (LCS):						
		Were all COCs included in the LCS?		Х	1	1		
		Was each LCS taken through the entire analytical procedure, in	cluding prep and cleanup steps?	Х				
		Were LCSs analyzed at the required frequency?		Х				
		Were LCS (and LCSD, if applicable) %Rs within the laborator	y QC limits?	Х				
		Does the detectability check sample data document the laborate	ory's capability to detect the COCs at	Х				
		the MDL used to calculate the SDLs?		_				
		Was the LCSD RPD within QC limits?				X		
K 7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data	11(0D)	37				
		Were the project/method specified analytes included in the MS	and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	OC limits?		-	-		
		Were MS/MSD RPDs within laboratory OC limits?		A V				
R8	OI	Analytical dunlicate data		Λ				
110	01	Were appropriate analytical duplicates analyzed for each matrix	x?	x		1		
		Were analytical duplicates analyzed at the appropriate frequence	xy?	X				
		Were RPDs or relative standard deviations within the laborator	v OC limits?	X				
R9	OI	Method quantitation limits (MOLs):						
		Are the MQLs for each method analyte included in the laborate	ory data package?	Х				
		Do the MQLs correspond to the concentration of the lowest nor	n-zero calibration standard?	Х				
		Are unadjusted MQLs and DCSs included in the laboratory data	a package?	Х				
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 SDI	to minimize the matrix interference	Х				
		affects on the sample results?			-	<u> </u>		<u> </u>
		Is the laboratory NELAC-accredited under the Texas Laborator	ry Accreditation Program for the	Х		1		
I	anarytes, maurees and methods associated with this faboratory data package submitted in the TDDD required report(s). Items identified by						hv the	

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 NA = Not applicable;

4. NR = Not reviewed;

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked). 5.

Page 7 of 31

٨٣	nor	div A (cont'd). I aboratory Davian Charlist. D	anortable Data					
Lab	orato	ry Name: TestAmerica-Houston	Date: 03/27/13					
Pro	iect N	Jame: Exide Recycling Center, Erisco TX Labo	ratory Job Number: 600-70439					
1 IQ								
Rev	iewei	r Name: TWR Prep	Batch Number(s): 600-102341 IC	Л		2		
#1	A^2	Description		Yes	No	NA ³	NR ⁴	ER# ³
S1	OI	Initial calibration (ICAL)						
		Were response factors and/or relative response factors for each analyt	e within QC limits?			Х		
		Were percent RSDs or correlation coefficient criteria met?				Х		
		Was the number of standards recommended in the method used for al	l analytes?	Х				
		Were all points generated between the lowest and highest standard us	ed to calculate the curve?			Х		
		Are ICAL data available for all instruments used?		Х				
		Has the initial calibration curve been verified using an appropriate see	cond source standard?	Х				
S2	OI	Initial and continuing calibration verification (ICCV and CCV) a	nd continuing calibration					
		Was the CCV analyzed at the method-required frequency?		Х				
		Were percent differences for each analyte within the method-required	QC limits?	Х				
		Was the ICAL curve verified for each analyte?		Х				
		Was the absolute value of the analyte concentration in the inorganic C	CCB < MDL?	Х				
S 3	0	Mass spectral tuning:						
		Was the appropriate compound for the method used for tuning?	ed for tuning?					
		Were ion abundance data within the method-required QC limits?				Х		
S4	0	Internal standards (IS):						
		Were IS area counts and retention times within the method-required (QC limits?			Х		
S 5	OI	Raw data (NELAC section 5.5.10)						
		Were the raw data (for example, chromatograms, spectral data) review	ved by an analyst?	Х				
		Were data associated with manual integrations flagged on the raw data?				Х		
S6	0	Dual column confirmation						
		Did dual column confirmation results meet the method-required QC?				Х		
S7	0	Tentatively identified compounds (TICs):						
		If TICs were requested, were the mass spectra and TIC data subject to	appropriate checks?			Х		
S8	Ι	Interference Check Sample (ICS) results:						
		Were percent recoveries within method QC limits?		Х				
S9	Ι	Serial dilutions, post digestion spikes, and method of standard ad	ditions					
		Were percent differences, recoveries, and the linearity within the QC	limits specified in the method?	Х				
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?		Χ				
S11	OI	Proficiency test reports:						
~		Was the laboratory's performance acceptable on the applicable profici	iency tests or evaluation studies?	X				
S12	OI	Standards documentation						
~		Are all standards used in the analyses NIST-traceable or obtained from	m other appropriate sources?	X				
\$13	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 Cha	pter 5)					
		Are all the methods used to generate the data documented, verified, and	nd validated, where applicable?	X				
S16	OI	Laboratory standard operating procedures (SOPs):						
		Are laboratory SOPs current and on file for each method performed?		Х				
L		1 Items identified by the letter "R" should be included in the laboratory da	ata package submitted to the TCEQ in	the T	RRP	-require	ed repo	rt(s).

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.

O = organic analyses; I = inorganic analyses (and general chemistry, when applicable). NA = Not applicable.2

3

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).

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Appendix A (cont'd): Laboratory Review Checklist: Exception Reports					
Laboratory Name: TestAmerica-Houston LRC Date: 03/27/13					
Project Name: Exide Recycling Center, Frisco TX	Laboratory Job Number: 600-70439				
Reviewer Name: TWR	Prep Batch Number(s): 600-102341 ICP				
ER# ¹ DESCRIPTION					

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: Water Method: 300.0, 9056 Preparation: N/A Date Analyzed: 12/17/2012 Date Prepared: 12/17/2012 TALs Batches: N/A Units: mg/L

Analyte	MDL	DCS Spike	Measured Result	MQL
Fluoride	0.799	0.1	0.094	0.2
Chloride	0.126	0.2	0.259	0.4
Nitrite	0.105	0.2	0.302	0.2
Bromide	0.07	0.1	0.855	0.2
Nitrate	0.032	0.1	0.125	0.2
Orthophosphate	0.117	0.3	0.285	0.2
Sulfate	0.137	0.4	0.354	0.4
Detection Check Standard

Matrix:	Water								
Method:	200.7/6010								
Preparation:	200.7P/3010								
Date Analyzed:	12/3/2012								
Date Prepared:	11/28/2012	11/28/2012							
Instrument:	Thermo 6500	Thermo 6500							
TALs Batches:	94513, 94244(p	orep)							
Units:	mg/L								
Analyte	MDL	DCS Spike	Measured Result	MQL					
Aluminum	0.006	0.02	0.0197	0.5					
Antimony	0.0063	0.01	0.0106	0.05					
Arsenic	0.0033	0.01	0.0071	0.01					
Barium	0.0022	0.005	0.0052	0.02					
Beryllium	0.00134	0.002	0.0039	0.005					
Boron	0.0077	0.02	0.0228	0.2					
Cadmium	0.00073	0.001	0.001	0.005					
Calcium	0.022	0.05	0.0916	1					
Chromium	0.0016	0.002	0.0035	0.01					
Cobalt	0.00063	0.001	0.0008	0.01					
Copper	0.0014	0.002	0.0005	0.01					
Iron	0.087	0.1	0.0965	0.4					
Lithium	0.0024	0.005	0.0066	0.2					
Lead	0.0029	0.005	0.0053	0.01					
Selenium	0.0042	0.01	0.0105	0.04					
Manganese	0.00084	0.002	0.0019	0.01					
Molybdenum	0.0027	0.005	0.0057	0.01					
Nickel	0.00179	0.005	0.0048	0.01					
Silver	0.0012	0.0025	0.0026	0.01					
Sodium	0.02	0.05	0.381	1					
Strontium	0.0005	0.001	0.0015	0.005					
Thallium	0.0078	0.02	0.0203	0.03					
Tin	0.0028	0.005	0.0053	0.01					
Titanium	0.0011	0.002	0.002	0.01					
Vanadium	0.0017	0.002	0.0041	0.01					
Zinc	0.0022	0.005	0.0058	0.01					

Job ID: 600-70439-1

Laboratory: TestAmerica Houston

Narrative

Job Narrative 600-70439-1

Comments

No additional comments.

Receipt

The samples were received on 3/22/2013 8:38 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.0° C and 3.7° C.

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL HOU
300.0	Anions, Ion Chromatography	MCAWW	TAL HOU

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-70439-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
600-70439-1	SW-NT-1	Water	03/20/13 17:00	03/22/13 08:38
600-70439-2	SW-NT-2	Water	03/20/13 17:15	03/22/13 08:38
600-70439-3	SW-NT-3	Water	03/20/13 17:25	03/22/13 08:38
600-70439-4	SW-NT-4	Water	03/20/13 17:50	03/22/13 08:38
600-70439-5	SW-NT-5	Water	03/21/13 11:00	03/22/13 08:38
600-70439-6	SW-NT-6	Water	03/21/13 11:10	03/22/13 08:38
600-70439-7	SW-NT-7	Water	03/21/13 11:15	03/22/13 08:38
600-70439-8	SW-NT-8	Water	03/21/13 11:20	03/22/13 08:38
600-70439-9	SW-NT-9	Water	03/21/13 11:25	03/22/13 08:38
600-70439-10	SW-NT-10	Water	03/21/13 11:30	03/22/13 08:38

Client Sample Results

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec TestAmerica Job ID: 600-70439-1

Data Collectel: 0322/13 17:00 Matrix: Matri: Matrix: Matri: <th>Client Sample ID: SW-NT-1</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th>Lab Sam</th> <th>ple ID: 600-7</th> <th>0439-1</th>	Client Sample ID: SW-NT-1							Lab Sam	ple ID: 600-7	0439-1
Date Received: 03/22/13 08:38 Molt (Adp) SDL Unit D Prepared 03/22/13 14:28 Analyzed 03/22/13 16:34 General Chemistry Analyte Result Qualifier MOL (Adj) SDL Unit D Prepared Analyzed 03/22/13 16:34 D Client Sample ID: SW-NT-2 Date Collected: 03/20/13 17:15 Molt (Adj) SDL Unit D Prepared 03/22/13 14:28 Analyzed 03/22/13 14:28 G/22/13 14:28	Date Collected: 03/20/13 17:00								Matrix	x: Water
Method: 6010B - Metals (ICP) Result Qualifier MOL (Adj) SDL Unit D Prepared Anayzed D Cadmium 0.000350 U 0.00055 0 0.00055 0 0.00250 0 0.022513 12.21 0.022513 12.25 Deteclevel: 0.022513 12.25 Deteclevel: 0.022513 12.25 Deteclevel: 0.022513 12.25 Deteclevel: 0.022513 12.24 0.022513 12.24	Date Received: 03/22/13 08:38									
Method: 6010B - Metals (ICP) Result Qualifier MQL (Adj) SOL Unit D Prepared Analyzed C Casimum 0.000300 0.0002300 0.000300 0.000300										
Analyse Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed E Laad 0.00280 0.00280 0.000280 0.000280 0.002800 0.002800 0.00280	Method: 6010B - Metals (ICP)									
Castinum 0.003350 U 0.00250 mgl. 0.022213 14:28 0.022113 14:28 <td>Analyte</td> <td>Result</td> <td>Qualifier</td> <td>MQL (Adj)</td> <td>SDL</td> <td>Unit</td> <td> D</td> <td>Prepared</td> <td>Analyzed</td> <td>Dil Fac</td>	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead 0.0220 U 0.0100 0.00290 mg/L 0.022213 14:28 0.022213 18:54 Image: Content in the image: Conten the	Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/22/13 14:28	03/25/13 11:23	1
Method: 6010B - Metals (ICP) - Dissolved Result Qualifier MOL (Adj) SDL Unit D Prepared Analyzed C Cadmium 0.00250 0 0.00050 mgt. 0.002201314228 0.002201314228 0.002201314228 0.002201312211 0.002201312211 0.002201312211 0.002201312211 0.002201312211 0.002201312211 0.002201312211 0.002201312211 0.002201312211 0.002201312211 0.002201318:54 0.002201318:55 0.002201318:54	Lead	0.00290	U	0.0100	0.00290	mg/L		03/22/13 14:28	03/25/13 11:23	1
Anayte Result Qualifier MOL (Adj) SDL Unit D Propared Analyzed Gastral Cadmium 0.000350 0 0.000350 0.000350 0.00200 0.002131 14:28 0.0322113 14:28	Method: 6010B - Metals (ICP) - Dis	solved								
Cadmium 0.000350 U 0.00050 0.000300 mgL 0.0222113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 18:54 D Client Sample ID: SW-NT-2 Date Collected: 0.320/13 08:38 Method: 6010B - Metals (ICP) Analyce Malyce 0.000300 0.000300 mgL 0.3022113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 14:28 0.0322113 12:24 0.0322113 14:28 0.0322113 12:24 0.0322113 14:28 0.0322113 12:24 0.0322113 14:28 0.0322113 12:24 0.0322113 12:24 0.0322113 14:28 0.0322113 14:28 0.0322113 12:24 0.0322113 12:24 0.0322113 12:24 0.0322113 12:24 0.0322113 12:24 0.0322113 12:24	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead 0.00290 U 0.0100 0.00290 mg/L 0.0322/13 14:28 0.0322/13 14:28 0.0322/13 12:21 General Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed D Gineral Chemistry Analyte 122 5.00 1.37 mg/L D Prepared Analyzed D Client Sample ID: SW-NT-2 Date Collected: 03/20/13 17:15 Lab Sample ID: 600-704 Matrix: V Cadmium 0.000300 U 0.000300 U 0.000300 Mg/L 0.002213 14:28 0.002213 12:24 0.002213 12:24 0.002213 12:24 0.002213 12:24 0.002213 12:24 0.002213 12:24 0.002	Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/22/13 14:28	03/25/13 12:21	1
General Chemistry Analyze Suffate Result 122 Qualifier 122 MQL (Adj) 5.00 SDL 1.37 Unit mg/L D Prepared O325/13 18.54 Analyzed O325/13 18.54 D Client Sample ID: SW-NT-2 Date Collected: 03/20/13 08:38 Lab Sample ID: 600-704 Matrix: V Method: 6010B - Metals (ICP) Analyze Cadmum Result 0.0003050 Outlid D Prepared 03/22/13 14:28 Analyzed 03/22/13 11:38 D Method: 6010B - Metals (ICP) - Dissolved Analyze Result 0.0003050 Outlid D Prepared 03/22/13 14:28 Analyzed 03/22/13 14:28 D Method: 6010B - Metals (ICP) - Dissolved Analyze Result 0.0003050 Qualifier 0.000300 MQL (Adj) 0.000300 D Unit 0.000290 D Prepared 03/22/13 14:28 Analyzed 03/22/13 14:28 D General Chemistry Analyze Result 63:1 Qualifier 5:00 MQL (Adj) 0.000300 SDL 0.000300 Unit 0.000290 D Prepared 03/22/13 14:28 Analyzed 03/22/13 14:28 D Client Sample ID: SW-NT-3 Date Collected: 03/22/13 08:38 Qualifier 0.000300 MQL (Adj) 0.000300 SDL 0.000300 Unit 0.000300 D Prepared 03/22/13 14:28 Analyzed 03/22/13 14:28 Q	Lead	0.00290	U	0.0100	0.00290	mg/L		03/22/13 14:28	03/25/13 12:21	1
General Chemistry Analyte Result Qualifier MOL (Adj) SDL Unit D Prepared Analyzed C Suffate 122 5.00 1.37 mg/L D Prepared Analyzed C Client Sample ID: SW-NT-2 Date Collected: 03/20/13 17:15 Lab Sample ID: 600-704 Matrix: V Cadmium 0.000350 U 0.000350 mg/L D Prepared Analyzed 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 12:24 03/22/13 14:28 03/22/13 12:24										
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Surate 122 5.00 1.37 mgL 0.023/3 18:34 Client Sample ID: SW-NT-2 Date Collect: 03/20/13 17:15 Lab Sample ID: 600-704 Matrix: V Date Received: 03/22/13 08:38 Method: 6010B - Metals (ICP) Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 11:38 Method: 6010B - Metals (ICP) - Dissolved Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed 03/22/13 14:28 03/22/13 12:24 Cadmium 0.000350 U 0.00050 0.000350 mgL 03/22/13 14:28 03/22/13 12:24 Cadmium 0.000350 U 0.00050 0.000350 mgL 03/22/13 14:28 03/22/13 12:24 Cadmium 0.000290 U 0.0100 0.00280 mgL 03/22/13 14:28 03/22/13 12:24 Genoral Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed 03/22/13 14:28	Analyte	Result	Qualifier	- <u>MQL (Adj)</u>	SDL	Unit	D	Prepared	Analyzed	
Client Sample ID: SW-NT-2 Lab Sample ID: 600-704 Date Collected: 03/20/13 17:15 Matrix: V Date Received: 03/22/13 08:38 Method: 6010B - Metals (ICP) Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed 03/25/13 11:38 03/25/13 12:24 03/25/13 12:24 03/25/13 12:24 03/25/13 12:24 03/25/13 12:24 03/25/13 12:24 03/25/13 12:24 03/25/13 12:24 03/25/13 12:24 03/25/13 12:24 03/25/13 12:24 03/25/13 12:24 03/25/13 12:24 03/25/13 12:24 03/25/13 12:24 03/25/13 11:42 03/25/13 11:42 03/25/13 11:42 03/25/13 11:42 03/25/13 11:42 03/25/13 11:42 03/25/13 11:42 03/25/13 11:42 03/25/13 11:42 03/25/13 11:42 03/25/13 11:42 03/25/13 11:42 03/25/13 11	Sulfate	122		5.00	1.37	mg/L			03/25/13 18:54	10
Date Collected: 03/20/13 17:15 Matrix: V Date Received: 03/22/13 08:38 Matrix: V Method: 6010B - Metals (ICP) Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed 03/22/13 14:28	Client Sample ID: SW-NT-2							Lab Sam	ple ID: 600-7	0439-2
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Method: 6010B - Metals (ICP) Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed O3/22/13 14/28 O3/22/13 11/42 O3/22/13 14/28	Date Received: 03/22/13 08:38									
Method: 6010B - Metals (ICP) Analyte Result 0.000350 Qualifier U MQL (Adj) 0.000350 SDL 0.000350 Unit mgL D 0.00200 Prepared 0.022/13 14:28 Analyzed 0.0322/13 14:28 C 0322/13 14:28 Analyzed 0.0322/13 14:28 C 0322/13 18:49 C C 0322/13 18:49 C C 0322/13 18:49 C C 0322/13 18:49 C C 0322/13 18:49 C C 0322/13 18:49 C C 0322/13 18:48 C C C C C C C C C C C C C C C C C C C										
Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed C Cadmium 0.000350 U 0.00050 0.000350 mg/L 03/25/13 11:38 03/25/13 11:38 Lead 0.00290 U 0.0100 0.00290 mg/L 03/25/13 11:38 03/25/13 11:38 Method: 6010B - Metals (ICP) - Dissolved Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed D Cadmium 0.000350 U 0.000500 0.000350 mg/L 03/25/13 12:24 03/25/13 12:48 03/25/13 12:24 03/25/13	Method: 6010B - Metals (ICP)									
Cadmium 0.000350 U 0.00050 0.000350 mg/L 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/25/13 12:24 Cadmium 0.000350 U 0.0100 0.000350 mg/L 03/25/13 12:24 03/25/13 12:24 General Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed D Sulfate 63.1 5.00 1.37 mg/L D Prepared Analyzed D Matrix: V Date Collected: 03/22/13 17:25 Matrix: V 03/22/13 11:42 03/22/13 11:42 03/22/13 <	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead 0.00290 U 0.0100 0.00290 mg/L 03/22/13 14:28 03/25/13 11:38 Method: 6010B - Metals (ICP) - Dissolved Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed G 03/25/13 12:24 C General Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed O3/25/13 12:24 D General Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed O3/25/13 12:24 General Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed O3/25/13 19:49 Client Sample ID: SW-NT-3 Date Collected: 03/20/13 17:25 Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed O3/25/13 11:42 Gadmium 0.000350 U 0.000350 Unit D Prepared Analyzed O3/25/13 11:42 Method: 6010B - Metals (ICP) - Dissolve	Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/22/13 14:28	03/25/13 11:38	1
Method: 6010B - Metals (ICP) - Dissolved Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed D Cadmium 0.000350 U 0.000350 0.000350 0.000350 0.00290 0.000350 0.00290 0.025713 19:49 0.025713 19:49 0.025713 19:49 0.025713 19:49 0.025713 19:49 0.025713 19:49 0.025713 19:49 0.025713 19:49 0.025713 19:49 0.025713 19:49 0.025713 19:49 0.025713 19:49 0.025713 19:49 0.025713 19:49 0.025713 19:49 0.025713 19:49 0.025713 19:49 0.025713 19:49 0.025713 11:42 0.025713 11:42 0.025713 11:42 0.025713 11:42 0.025713 11:42 0.025713 11:42 <td>Lead</td> <td>0.00290</td> <td>U</td> <td>0.0100</td> <td>0.00290</td> <td>mg/L</td> <td></td> <td>03/22/13 14:28</td> <td>03/25/13 11:38</td> <td>1</td>	Lead	0.00290	U	0.0100	0.00290	mg/L		03/22/13 14:28	03/25/13 11:38	1
Method: 6010B - Metals (ICP) - Dissolved Result Qualifier MQL (Adj) SDL Unit D Prepared 03/25/13 12:24 Analyzed 03/25/13 12:24 Cadmium 0.000350 0 0.000290 0 0.000290 mg/L 03/22/13 14:28 03/25/13 12:24 03/25/13 12:24 General Chemistry Analyze Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed 03/25/13 12:24 General Chemistry Analyte 63.1 Qualifier MQL (Adj) SDL Unit D Prepared Analyzed D Sulfate 63.1 Qualifier MQL (Adj) SDL Unit D Prepared Analyzed D Date Received: 03/20/13 17:25 Date Received: 03/22/13 08:38 Method: 6010B - Metals (ICP) Analyzed Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Qualifier	Γ									
Analyte Cadmium Result 0.000350 Qualifier U MQL (Adj) 0.00500 SDL 0.000350 Unit 0.00290 D Prepared 0.000350 Analyzed 0.3/22/13 14:28 Analyzed 0.3/22/13 14:28 Analyzed 0.3/22/13 14:28 Analyzed 0.3/22/13 14:28 Analyzed 0.3/22/13 14:28 Analyzed 0.3/22/13 14:28 Prepared 0.3/22/13 14:28 Analyzed 0.3/22/13 14:28 Character 0.3/22/13 14:2	Method: 6010B - Metals (ICP) - Dis	solved					_			
Cadmium 0.000360 0 0.000360 0.000360 0.000360 0.000360 0.000360 0.000360 0.000360 0.000360 0.000360 0.000360 0.000360 0.000360 0.000360 0.000360 0.000360 0.000360 0.000290 mg/L 0.03/22/13 14:28 0.03/25/13 12:24 General Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed C Client Sample ID: SW-NT-3 Lab Sample ID: 600-704 Sample ID: 600-704 Matrix: V Matrix: V Date Collected: 03/20/13 17:25 Matrix: V Matrix: V Matrix: V Matrix: V Date Received: 03/22/13 08:38 Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed Matrix: V Lead 0.000350 U 0.000350 0.000350 0.000350 0.00290 0.02290 03/22/13 14:28 03/25/13 11:42 03/25/13 11:42 03/25/13 11:42 03/25/13 11:42 03/25/13 11:42 03/25/13 11:42 03/25/13 11:42 03/25/13 11:42	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Clead 0.00290 0 0.00100 0.00290 mg/L 0.3/22/13 14:28 0.3/25/13 12:24 General Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed C Client Sample ID: SW-NT-3 Date Collected: 03/22/13 17:25 63.1 5.00 1.37 mg/L D Prepared Analyzed C Method: 6010B - Metals (ICP) Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed C Lead 0.000350 U 0.000500 0.000350 mg/L D Prepared Analyzed C Lead 0.000350 U 0.000500 0.000350 mg/L 03/22/13 14:28 03/25/13 11:42 03/22/13 14:28 03/25/13 11:42 Method: 6010B - Metals (ICP) - Dissolved Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed 03/22/13 14:28 03/22/13 12:48 03/22/13 12:48 03/22/13 12:48 03/22/13 12:48 <t< td=""><td>Cadmium</td><td>0.000350</td><td>0</td><td>0.00500</td><td>0.000350</td><td>mg/L</td><td></td><td>03/22/13 14:28</td><td>03/25/13 12:24</td><td>1</td></t<>	Cadmium	0.000350	0	0.00500	0.000350	mg/L		03/22/13 14:28	03/25/13 12:24	1
General Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed D Sulfate 63.1 63.1 5.00 1.37 mg/L D Prepared Analyzed D Client Sample ID: SW-NT-3 Date Collected: 03/20/13 17:25 Date Received: 03/22/13 08:38 Lab Sample ID: 600-704 Matrix: V Method: 6010B - Metals (ICP) Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed D Cadmium 0.000350 U 0.00100 0.00290 mg/L 03/22/13 14:28 03/25/13 11:42	Lead	0.00290	U	0.0100	0.00290	mg/L		03/22/13 14:28	03/25/13 12:24	1
AnalyteResultQualifierMQL (Adj)SDLUnitDPreparedAnalyzedCSulfate63.163.15.001.37mg/LDPreparedAnalyzedDClient Sample ID: SW-NT-3Lab Sample ID: 600-704:Date Collected: 03/20/13 17:25Matrix: VDate Received: 03/22/13 08:38Method: 6010B - Metals (ICP)AnalyteResultQualifierMQL (Adj)SDLUnitDPreparedAnalyzedDCadmium0.000350U0.0005000.000350mg/L03/22/13 14:2803/25/13 11:42DLead0.00290U0.01000.00290mg/L03/22/13 14:2803/25/13 11:42DMethod: 6010B - Metals (ICP) - DissolvedAnalyteResultQualifierMQL (Adj)SDLUnitDPreparedAnalyzedDMethod: 6010B - Metals (ICP) - DissolvedAnalyteResultQualifierMQL (Adj)SDLUnitDPreparedAnalyzedDLead0.000350U0.0005000.000350mg/L03/22/13 14:2803/25/13 12:4803/22/13 12:48DLead0.00290U0.01000.00290mg/L03/22/13 14:2803/22/13 12:48DLead0.00290U0.01000.00290mg/LDPreparedAnalyzedDCadmium0.00290U0.01000.00290mg/L03/22/13 14:2803/22/13 12:4803/22/13 12:48Lead <td>General Chemistry</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	General Chemistry									
Image Image <th< td=""><td>Analyte</td><td>Result</td><td>Qualifier</td><td>MQL (Adi)</td><td>SDL</td><td>Unit</td><td>D</td><td>Prepared</td><td>Analyzed</td><td>Dil Fac</td></th<>	Analyte	Result	Qualifier	MQL (Adi)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Client Sample ID: SW-NT-3 Lab Sample ID: 600-704 Date Collected: 03/20/13 17:25 Matrix: V Date Received: 03/22/13 08:38 Method: 6010B - Metals (ICP) Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed D Cadmium 0.000350 U 0.000350 0.000350 0.00290 03/22/13 14:28 03/25/13 11:42 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 0	Sulfate	63.1			1.37	ma/L			03/25/13 19:49	10
Client Sample ID: SW-NT-3 Date Collected: 03/20/13 17:25 Date Received: 03/22/13 08:38 Lab Sample ID: 600-704 Matrix: V Method: 6010B - Metals (ICP) Analyte Result Qualifier MQL (Adj) U SDL 0.00500 Unit D Prepared 03/22/13 14:28 Analyzed 03/25/13 11:42 C Lead 0.00290 U 0.0100 0.00290 mg/L 03/22/13 14:28 03/25/13 11:42 03/25/13 12:48 03/25/13 12:4										
Date Collected: 03/20/13 17:25 Matrix: V Date Received: 03/22/13 08:38 Method: 6010B - Metals (ICP) Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed I Cadmium 0.000350 U 0.00500 0.000350 mg/L D Prepared Analyzed I Lead 0.00290 U 0.0100 0.00290 mg/L 03/22/13 14:28 03/25/13 11:42 Method: 6010B - Metals (ICP) - Dissolved Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed III Method: 6010B - Metals (ICP) - Dissolved Analyzed III IIII D Prepared Analyzed III Lead 0.000350 U 0.00500 0.0003050 mg/L 0.002/21/13 14:28 03/25/13 12:48 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Client Sample ID: SW-NT-3							Lab Sam	ple ID: 600-7	0439-3
Mathematical control of the second control of	Date Collected: 03/20/13 17:25								Matrix	x: Water
Method: 6010B - Metals (ICP) Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed I Cadmium 0.000350 U 0.000500 0.000350 mg/L 03/22/13 14:28 03/25/13 11:42 03/25/13 12:48 03/	Date Received: 03/22/13 08:38									
Method: 6010B - Metals (ICP) Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed I Cadmium 0.000350 U 0.000350 0 0.000350 mg/L 0 03/22/13 14:28 03/25/13 11:42 03/25/13 12:48 <	 									
Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed C Cadmium 0.000350 U 0.000350 0 0.000350 mg/L 03/22/13 14:28 03/25/13 11:42 03/25/13 11:42 Lead 0.00290 U 0.0100 0.00290 mg/L 03/22/13 14:28 03/25/13 11:42 03/25/13 11:42 Method: 6010B - Metals (ICP) - Dissolved Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed D Cadmium 0.000350 U 0.00500 0.000350 mg/L 0 03/22/13 14:28 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/22/13 14:28 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 03/	Method: 6010B - Metals (ICP)									
Cadmium 0.000350 U 0.000500 0.000350 mg/L 03/22/13 14:28 03/25/13 11:42 Lead 0.00290 U 0.0100 0.00290 mg/L 03/22/13 14:28 03/25/13 11:42 Method: 6010B - Metals (ICP) - Dissolved MQL (Adj) SDL Unit D Prepared Analyzed I Cadmium 0.000350 U 0.00500 0.000350 mg/L 03/22/13 14:28 03/25/13 12:48 Lead 0.000350 U 0.00500 0.000350 mg/L 03/22/13 14:28 03/25/13 12:48 Lead 0.000350 U 0.00500 0.000350 mg/L 03/22/13 14:28 03/25/13 12:48 Lead 0.000350 U 0.00500 0.000290 mg/L 03/22/13 14:28 03/25/13 12:48 General Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed I	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead 0.00290 U 0.0100 0.00290 mg/L 03/22/13 14:28 03/25/13 11:42 Method: 6010B - Metals (ICP) - Dissolved Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed I Cadmium 0.000350 U 0.000500 0.000350 mg/L 03/22/13 14:28 03/25/13 12:48 03/25/13 12:48 03/25/13 12:48 Lead 0.00290 U 0.0100 0.00290 mg/L 03/22/13 14:28 03/25/13 12:48 03/25/13 12:48 General Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed I	Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/22/13 14:28	03/25/13 11:42	1
Method: 6010B - Metals (ICP) - Dissolved Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed D Cadmium 0.000350 U 0.000500 0.000350 mg/L 03/22/13 14:28 03/25/13 12:48 03/25/13 12	Lead	0.00290	U	0.0100	0.00290	mg/L		03/22/13 14:28	03/25/13 11:42	1
Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed I Cadmium 0.000350 U 0.000350 0.000350 0.000350 0.00290 0.000350 0.00290 0.000350 0.00290	Method: 6010B - Metals (ICP) - Dis	solved								
Cadmium 0.000350 U 0.000350 mg/L 03/22/13 14:28 03/25/13 12:48 Lead 0.00290 U 0.0100 0.00290 mg/L 03/22/13 14:28 03/25/13 12:48 General Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed D	Analyte	Result	Qualifier	MQL (Adi)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead 0.00290 U 0.0100 0.00290 mg/L 03/22/13 14:28 03/25/13 12:48 General Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed D	Cadmium	0,000350	U	0,00500	0.000350	ma/L		03/22/13 14:28	03/25/13 12:48	1
General Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed D	Lead	0.00290	U	0.0100	0.00290	mg/L		03/22/13 14:28	03/25/13 12:48	1
General Chemistry Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed D						5 -				
Analyte Result Qualifier MQL (Adj) SDL Unit D Prepared Analyzed D	General Chemistry									
	Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate 123 5.00 1.37 mg/L 03/25/13 20:07	Sulfate	123		5.00	1.37	mg/L			03/25/13 20:07	10

0.000350 U

0.00290 U

0.000350 U 0.00290 U

TestAmerica Job ID: 600-70439-1

Client Sample ID: SW-NT-4 Date Collected: 03/20/13 17:50

Date Received: 03/22/13 08:38

Method: 6010B - Metals (ICP)

Method: 6010B - Metals (ICP) - Dissolved

Analyte

Analyte

Lead

Analyte

Sulfate

Cadmium

General Chemistry

Client Sample ID: SW-NT-5 Date Collected: 03/21/13 11:00 Date Received: 03/22/13 08:38

Lead

Cadmium

						Lab Sam	ple ID: 600-7 Matrix	0439-4 k: Water
Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
00350	U	0.00500	0.000350	mg/L		03/22/13 14:28	03/25/13 11:46	1
.00290	U	0.0100	0.00290	mg/L		03/22/13 14:28	03/25/13 11:46	1
Pocult	Qualifier	MOL (Adi)	901	Unit	п	Propared	Applyzod	Dil Eac
00350			0.000350	ma/l		03/22/13 14:28	03/25/13 12:51	1
.00290	U	0.0100	0.00290	mg/L		03/22/13 14:28	03/25/13 12:51	1
			0.01	Unit	п	Prepared	Analvzed	Dil Fac
Result	Qualifier	MQL (Adj)	SDL	Unit				

 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		03/22/13 14:28	03/25/13 11:50	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/22/13 14:28	03/25/13 11:50	1
- Method: 6010B - Metals (ICP) -	Dissolved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/22/13 14:28	03/25/13 12:55	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/22/13 14:28	03/25/13 12:55	1
- General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	119		5.00	1.37	mg/L			03/25/13 20:44	10

Client Sample ID: SW-NT-6

Date Received: 03/22/13 08:38

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		03/22/13 14:28	03/25/13 12:01	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/22/13 14:28	03/25/13 12:01	1
- Method: 6010B - Metals (ICP)	- Dissolved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/22/13 14:28	03/25/13 12:59	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/22/13 14:28	03/25/13 12:59	1
- General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	121		5.00	1.37	mg/L			03/25/13 21:02	10

TestAmerica Houston

Lab Sample ID: 600-70439-6

Matrix: Water

13

Date Collected: 03/21/13 11:10

TestAmerica Job ID: 600-70439-1

•							Lab Sam	ple ID: 600-7	0439-7
Date Collected: 03/21/13 11:15								Matrix	c: Water
Date Received: 03/22/13 08:38									
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		03/22/13 14:28	03/25/13 12:05	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/22/13 14:28	03/25/13 12:05	1
Method: 6010B - Metals (ICP) - Dis	solved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/22/13 14:28	03/25/13 13:03	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/22/13 14:28	03/25/13 13:03	1
General Chemistry									
	Pocult	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result							03/25/13 21:57	10
Analyte Sulfate	118		5.00	1.37	mg/L		Lah Sam		0420.0
Analyte Sulfate Client Sample ID: SW-NT-8 Date Collected: 03/21/13 11:20 Date Received: 03/22/13 08:38	118		5.00	1.37	mg/L		Lab Sam	ple ID: 600-7 Matrix	0439-8 c: Water
Analyte Sulfate Client Sample ID: SW-NT-8 Date Collected: 03/21/13 11:20 Date Received: 03/22/13 08:38	118		5.00	1.37	mg/L		Lab Sam	ple ID: 600-7 Matrix	0439-8 c: Water
Analyte Sulfate Client Sample ID: SW-NT-8 Date Collected: 03/21/13 11:20 Date Received: 03/22/13 08:38 Method: 6010B - Metals (ICP)		Qualifier	5.00	1.37	mg/L		Lab Sam	ple ID: 600-7 Matrix	0439-8 c: Water
Analyte Sulfate Client Sample ID: SW-NT-8 Date Collected: 03/21/13 11:20 Date Received: 03/22/13 08:38 Method: 6010B - Metals (ICP) Analyte Cadmium		Qualifier	5.00	1.37	Unit	D	Prepared	Analyzed	0439-8 <: Water
Analyte Sulfate Client Sample ID: SW-NT-8 Date Collected: 03/21/13 11:20 Date Received: 03/22/13 08:38 Method: 6010B - Metals (ICP) Analyte Cadmium Lead		Qualifier U	5.00 MQL (Adj) 0.00500 0.0100	1.37 SDL 0.000350 0.00290	mg/L Unit mg/L mg/l	D	Lab Sam	Analyzed 03/25/13 21.57 Matrix 03/25/13 12:09 03/25/13 12:09	0439-8 <: Water Dil Fac
Analyte Sulfate Client Sample ID: SW-NT-8 Date Collected: 03/21/13 11:20 Date Received: 03/22/13 08:38 Method: 6010B - Metals (ICP) Analyte Cadmium Lead	Result 0.000350 0.00290	Qualifier U U	5.00 - <u>MQL (Adj)</u> 0.00500 0.0100	1.37 SDL 0.000350 0.00290	mg/L Unit mg/L mg/L	<u>D</u>	Prepared 03/22/13 14:28 03/22/13 14:28	Analyzed 03/25/13 21:37 Matrix 03/25/13 12:09 03/25/13 12:09	0439-8 c: Water Dil Fac
Analyte Sulfate Client Sample ID: SW-NT-8 Date Collected: 03/21/13 11:20 Date Received: 03/22/13 08:38 Method: 6010B - Metals (ICP) Analyte Cadmium Lead Method: 6010B - Metals (ICP) - Dis	Result 118 Result 0.000350 0.00290 ssolved	Qualifier U U	5.00 MQL (Adj) 0.00500 0.0100	1.37 SDL 0.000350 0.00290	Unit mg/L mg/L mg/L	<u>D</u>	Lab Sam Prepared 03/22/13 14:28 03/22/13 14:28	Analyzed 03/25/13 12:09 03/25/13 12:09	0439-8 c: Water
Analyte Sulfate Client Sample ID: SW-NT-8 Date Collected: 03/21/13 11:20 Date Received: 03/22/13 08:38 Method: 6010B - Metals (ICP) Analyte Cadmium Lead Method: 6010B - Metals (ICP) - Dis Analyte	Result 0.000350 0.00290 csolved Result	Qualifier U U Qualifier	5.00 MQL (Adj) 0.00500 0.0100 MQL (Adj)	1.37 SDL 0.000350 0.00290 SDL	mg/L Unit mg/L mg/L Unit	<u>D</u>	Prepared 03/22/13 14:28 03/22/13 14:28 Prepared	Analyzed 03/25/13 21.37 Matrix 03/25/13 12:09 03/25/13 12:09 Analyzed	0439-8 c: Water Dil Fac
Analyte Sulfate Client Sample ID: SW-NT-8 Date Collected: 03/21/13 11:20 Date Received: 03/22/13 08:38 Method: 6010B - Metals (ICP) Analyte Cadmium Lead Method: 6010B - Metals (ICP) - Dis Analyte Cadmium	Result 118 0.000350 0.00290 ssolved Result 0.000350	Qualifier U U Qualifier U	5.00 MQL (Adj) 0.00500 0.0100 MQL (Adj) 0.00500	1.37 SDL 0.000350 0.00290 SDL 0.000350	mg/L Unit mg/L mg/L Unit mg/L	D	Prepared 03/22/13 14:28 03/22/13 14:28 Prepared 03/22/13 14:28	Analyzed 03/25/13 21.37 Matrix 03/25/13 12:09 03/25/13 12:09 Analyzed 03/25/13 13:07	0439-8 c: Water
Analyte Sulfate Client Sample ID: SW-NT-8 Date Collected: 03/21/13 11:20 Date Received: 03/22/13 08:38 Method: 6010B - Metals (ICP) Analyte Cadmium Lead Method: 6010B - Metals (ICP) - Dis Analyte Cadmium Lead	Result 118 0.000350 0.00290 ssolved Result 0.000350 0.000350	Qualifier U U U U U	5.00 MQL (Adj) 0.00500 0.0100 MQL (Adj) 0.00500 0.0100	1.37 SDL 0.000350 0.00290 SDL 0.000350 0.00290	Unit mg/L mg/L mg/L mg/L mg/L	D	Prepared 03/22/13 14:28 03/22/13 14:28 Prepared 03/22/13 14:28 03/22/13 14:28	Analyzed 03/25/13 21:37 Matrix 03/25/13 12:09 03/25/13 12:09 Analyzed 03/25/13 13:07 03/25/13 13:07	0439-8 c: Water 1 1 Dil Fac 1 1 1 1
Analyte Sulfate Client Sample ID: SW-NT-8 Date Collected: 03/21/13 11:20 Date Received: 03/22/13 08:38 Method: 6010B - Metals (ICP) Analyte Cadmium Lead Method: 6010B - Metals (ICP) - Dis Analyte Cadmium Lead General Chemistry	Result 0.000350 0.00290 ssolved Result 0.000350 0.000350 0.000350 0.000350 0.000350	Qualifier U U Qualifier U U	5.00 MQL (Adj) 0.00500 0.0100 MQL (Adj) 0.00500 0.0100	1.37 SDL 0.000350 0.00290 SDL 0.000350 0.00290	mg/L mg/L mg/L Mnit mg/L mg/L	D	Prepared 03/22/13 14:28 03/22/13 14:28 Prepared 03/22/13 14:28 03/22/13 14:28	Analyzed 03/25/13 12:09 03/25/13 12:09 03/25/13 12:09 03/25/13 12:09 03/25/13 12:09 03/25/13 12:09 03/25/13 13:07 03/25/13 13:07	0439-8 c: Water 1 1 Dil Fac 1 1 1 1
Analyte Sulfate Client Sample ID: SW-NT-8 Date Collected: 03/21/13 11:20 Date Received: 03/22/13 08:38 Method: 6010B - Metals (ICP) Analyte Cadmium Lead Method: 6010B - Metals (ICP) - Dis Analyte Cadmium Lead General Chemistry Analyte	Result 0.000350 0.00290 ssolved Result 0.000350 0.000350 0.000350 0.00290	Qualifier U U Qualifier U U Qualifier	5.00 MQL (Adj) 0.00500 0.0100 MQL (Adj) 0.0100 MQL (Adj)	1.37 SDL 0.000350 0.00290 SDL 0.000350 0.00290 SDL	mg/L Unit mg/L mg/L mg/L mg/L Unit Unit	D	Prepared 03/22/13 14:28 03/22/13 14:28 Prepared 03/22/13 14:28 03/22/13 14:28 Prepared 03/22/13 14:28 Prepared 03/22/13 14:28 Prepared	Analyzed 03/25/13 12:09 03/25/13 12:09 03/25/13 12:09 03/25/13 12:09 03/25/13 12:09 03/25/13 12:09 03/25/13 12:09 Analyzed 03/25/13 03/25/13 13:07 03/25/13 13:07 Analyzed 03/25/13	0439-8 c: Water Dil Fac 1 Dil Fac 1 Dil Fac
Analyte Sulfate Client Sample ID: SW-NT-8 Date Collected: 03/21/13 11:20 Date Received: 03/22/13 08:38 Method: 6010B - Metals (ICP) Analyte Cadmium Lead Method: 6010B - Metals (ICP) - Dis Analyte Cadmium Lead General Chemistry Analyte Sulfate	Result 0.000350 0.00290 ssolved Result 0.000350 0.00290 ssolved Result 0.00290 ssolved Result 0.00290 119	Qualifier U U Qualifier U U Qualifier	5.00 MQL (Adj) 0.00500 0.0100 MQL (Adj) 0.00500 0.0100 MQL (Adj) 5.00	1.37 SDL 0.000350 0.00290 SDL 0.000350 0.00290 SDL 1.37	mg/L mg/L mg/L mg/L mg/L Unit mg/L Unit	D	Prepared 03/22/13 14:28 03/22/13 14:28 Prepared 03/22/13 14:28 03/22/13 14:28 Prepared 03/22/13 14:28 Prepared 03/22/13 14:28 Prepared	Analyzed 03/25/13 12:09 03/25/13 12:09 03/25/13 12:09 Analyzed 03/25/13 03/25/13 13:07 03/25/13 13:07 03/25/13 13:07 03/25/13 13:07 03/25/13 13:07 03/25/13 13:07	0439-8 x: Water Dil Fac 1 Dil Fac 1 1 Dil Fac 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Sulfate Client Sample ID: SW-NT-8 Date Collected: 03/21/13 11:20 Date Received: 03/22/13 08:38 Method: 6010B - Metals (ICP) Analyte Cadmium Lead Method: 6010B - Metals (ICP) - Dis Analyte Cadmium Lead General Chemistry Analyte Sulfate Client Sample ID: SW-NT-9	Result 0.000350 0.00290 ssolved Result 0.00290 ssolved Result 0.00290 state Result 0.00290	Qualifier U U U Qualifier U Qualifier	5.00 MQL (Adj) 0.00500 0.0100 MQL (Adj) 0.00500 0.0100 MQL (Adj) 5.00	1.37 SDL 0.000350 0.00290 SDL 0.00290 SDL 1.37	mg/L Unit mg/L mg/L mg/L Mg/L Unit mg/L	D	Prepared 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 03/22/13 14:28 Day 03/22/13 14:28 Day Day Lab Sam	Analyzed 03/25/13 12:09 03/25/13 12:09 03/25/13 12:09 Analyzed 03/25/13 13:07 03/25/13 13:07 03/25/13 13:07 03/25/13 22:15 ple ID: 600-7	0439-8 k: Water Dil Fac 1 Dil Fac 10 Dil Fac 10 0439-9

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/22/13 14:28	03/25/13 12:13	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/22/13 14:28	03/25/13 12:13	1
_ Method: 6010B - Metals (ICP) - Dis	solved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000440	J	0.00500	0.000350	mg/L		03/22/13 14:28	03/25/13 13:11	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/22/13 14:28	03/25/13 13:11	1
– General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	119		5.00	1.37	mg/L			03/25/13 22:33	10

10

TestAmerica Job ID: 600-70439-1

Lab Sample ID: 600-70439-10

Date Collected: 03/21/13 11:30 Date Received: 03/22/13 08:38

Client Sample ID: SW-NT-10

Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/22/13 14:28	03/25/13 12:17	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/22/13 14:28	03/25/13 12:17	1
Method: 6010B - Metals (ICP) - Dissolved								
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	0.000350	U	0.00500	0.000350	mg/L		03/22/13 14:28	03/25/13 13:14	1
Lead	0.00290	U	0.0100	0.00290	mg/L		03/22/13 14:28	03/25/13 13:14	1
General Chemistry									
Analyte	Result	Qualifier	MQL (Adj)	SDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfato	118		5.00	1 37	ma/l			03/25/13 22:51	10

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

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Qualifiers

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.	Q .
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	3
%R	Percent Recovery	
CNF	Contains no Free Liquid	
DER	Duplicate error ratio (normalized absolute difference)	
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	13
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
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)

Matrix: Water

Analysis Batch: 102443

Lab Sample ID: MB 600-102341/1-A

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 102341

		MB MB											
Analyte	R	esult Qualif	ier MQL (Adj)	SDL Unit		D	Р	repared	Analyz	zed	Dil Fac	
Cadmium	0.00	0350 U	0.00500	0.00	0350 mg/L			03/2	2/13 14:28	03/25/13	11:15	1	
Lead	0.0	0290 U	0.0100	0.0	0290 mg/L			03/2	2/13 14:28	03/25/13	11:15	1	
Lab Sample ID: LCS 600-102341/	2-A						С	lient	t Sample	ID: Lab C	ontrol S	ample	
Matrix: Water										Prep 1	Type: To	tal/NA	8
Analysis Batch: 102443										Prep	Batch: 1	02341	
			Spike	LCS	LCS					%Rec.			9
Analyte			Added	Result	Qualifier	Unit		D	%Rec	Limits			
Cadmium			0.500	0.5167		mg/L		_	103	80 - 120			10
Lead			1.00	1.015		mg/L			102	80 - 120			
Lab Sample ID: 600-70439-1 MS									Clie	ent Samol	e ID: SV	V-NT-1	
Matrix: Water										Prep 1	Type: To	tal/NA	
Analysis Batch: 102443										Prep	Batch: 1	02341	
· ····· , ··· · ·······················	Sample	Sample	Spike	MS	MS					%Rec.			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit		D	%Rec	Limits			13
Cadmium	0.000350	U	0.500	0.5164		mg/L		-	103	75 - 125			
Lead	0.00290	U	1.00	1.024		mg/L			102	75 ₋ 125			
- Lab Sample ID: 600-70439-1 MSD	I.								Clie	ent Samol	e ID: SV	V-NT-1	
Matrix: Water										Pren 1	Type: To	tal/NA	
Analysis Batch: 102443										Pren	Batch: 1	02341	
	Sample	Sample	Spike	MSD	MSD					%Rec.		RPD	10
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit		D	%Rec	Limits	RPD	Limit	
Cadmium	0.000350	U	0.500	0.5110		mg/L		-	102	75 - 125	1	20	
Lead	0.00290	U	1.00	1.014		mg/L			101	75 - 125	1	20	
Lab Sample ID: 600-70439-1 DU									Clie	ent Sampl	e ID: SV	V-NT-1	
Matrix: Water										Prep 1	vpe: To	tal/NA	
Analysis Batch: 102443										Prep	Batch: 1	02341	
	Sample	Sample		DU	DU							RPD	
Analyte	Result	Qualifier		Result	Qualifier	Unit		D			RPD	Limit	
Cadmium	0.000350	U		0.000350	U	mg/L					NC	20	
Lead	0.00290	U		0.00290	U	mg/L					NC	20	
Lab Sample ID: 600-70439-2 MS									Clie	ent Sampl	e ID: SV	V-NT-2	
Matrix: Water										Prep Ty	pe: Diss	solved	
Analysis Batch: 102443										Prep	Batch: 1	02341	
-	Sample	Sample	Spike	MS	MS					%Rec.			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit		D	%Rec	Limits			
Cadmium	0.000350	U	0.500	0.5091		mg/L		-	102	75 _ 125			
Cadmium	0.000350	U	0.500	0.5091		mg/L			102	75 - 125			
Lead	0.00290	U	1.00	1.001		mg/L			100	75 - 125			
Lead	0.00290	U	1.00	1.001		mg/L			100	75 - 125			

Spike

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

Sample Sample

Lab Sample ID: 600-70439-2 MSD

Matrix: Water

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Analysis Batch: 102443

%Rec.

Client Sample ID: SW-NT-2 **Prep Type: Dissolved** Prep Batch: 102341 RPD

Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Cadmium	0.000350	U	0.500	0.5220		mg/L		104	75 _ 125	3	20
Cadmium	0.000350	U	0.500	0.5220		mg/L		104	75 ₋ 125	3	20
Lead	0.00290	U	1.00	1.026		mg/L		103	75 _ 125	2	20
Lead	0.00290	U	1.00	1.026		mg/L		103	75 ₋ 125	2	20
Lab Sample ID: 600-70439-2 DU								CI	ient Sampl	e ID: SV	/-NT-2
Matrix: Water									Prep Ty	pe: Diss	olved
Analysis Batch: 102443									Prep I	Batch: 1	02341
-	Sample	Sample		DU	DU						RPD
Analyte	Result	Qualifier		Result	Qualifier	Unit	D			RPD	Limit
Cadmium	0.000350	U		0.000350	U	mg/L				NC	20
Cadmium	0.000350	U		0.000350	U	mg/L				NC	20
Lead	0.00290	U		0.00290	U	mg/L				NC	20
Lead	0.00290	U		0.00290	U	mg/L				NC	20

MSD MSD

Lab Sample ID: MB 600-102534/3										Client S	ample ID: Me	thod	Blank
Matrix: Water											Prep Typ	e: To	tal/NA
Analysis Batch: 102534													
		MB MB											
Analyte	R	esult Qualifier	MQL (Adj)		SDL	Unit		D	P	repared	Analyzed		Dil Fac
Sulfate	C	0.137 U	0.500	().137	mg/L					03/25/13 18:1	18	1
Lab Sample ID: LCS 600-102534/4								Cli	ent	Sample	ID: Lab Cont	rol S	ample
Matrix: Water											Prep Typ	e: To	tal/NA
Analysis Batch: 102534													
			Spike	LCS	LCS						%Rec.		
Analyte			Added	Result	Quali	fier	Unit		D	%Rec	Limits		
Sulfate			20.0	20.15			mg/L		_	101	90 - 110		
- Lab Sample ID: 600-70439-1 MS										CI	ient Sample II	D: SM	/-NT-1
Matrix: Water											Prep Typ	e: To	tal/NA
Analysis Batch: 102534													
	Sample	Sample	Spike	MS	MS						%Rec.		
Analyte	Result	Qualifier	Added	Result	Quali	fier	Unit		D	%Rec	Limits		
Sulfate	122		100	207.4			mg/L		_	85	80 - 120		
Lab Sample ID: 600-70439-1 MSD										CI	ient Sample II	D: SN	/-NT-1
Matrix: Water											Prep Typ	e: To	tal/NA
Analysis Batch: 102534													
-	Sample	Sample	Spike	MSD	MSD						%Rec.		RPD
Analyte	Result	Qualifier	Added	Result	Quali	fier	Unit		D	%Rec	Limits	RPD	Limit
Sulfate	122		100	205.0			ma/l		_		80 120	1	20

10 20

Unadjusted Detection Limits

MQL

0.00500

0.0100

MQL

0.00500

0.0100

MQL

0.500

MDL

MDL

MDL

0.137

0.000350

0.00290

0.000350

0.00290

Units

mg/L

mg/L

Units

mg/L

mg/L

Units

mg/L

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Method: 6010B - Metals (ICP) - Dissolved

Method: 6010B - Metals (ICP)

Analyte

Lead

Analyte

Lead

Analyte

Sulfate

Cadmium

General Chemistry

Cadmium

Method

6010B

6010B

Method

6010B

6010B

Method 300.0

11 12 13 14 15

QC Association Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Metals

Prep Batch: 102341

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
600-70439-1	SW-NT-1	Total/NA	Water	3010A	
600-70439-1	SW-NT-1	Dissolved	Water	3010A	
600-70439-1 DU	SW-NT-1	Total/NA	Water	3010A	
600-70439-1 MS	SW-NT-1	Total/NA	Water	3010A	
600-70439-1 MSD	SW-NT-1	Total/NA	Water	3010A	
600-70439-2	SW-NT-2	Total/NA	Water	3010A	
600-70439-2	SW-NT-2	Dissolved	Water	3010A	
600-70439-2 DU	SW-NT-2	Dissolved	Water	3010A	
600-70439-2 MS	SW-NT-2	Dissolved	Water	3010A	
600-70439-2 MSD	SW-NT-2	Dissolved	Water	3010A	
600-70439-3	SW-NT-3	Total/NA	Water	3010A	
600-70439-3	SW-NT-3	Dissolved	Water	3010A	
600-70439-4	SW-NT-4	Total/NA	Water	3010A	
600-70439-4	SW-NT-4	Dissolved	Water	3010A	
600-70439-5	SW-NT-5	Total/NA	Water	3010A	
600-70439-5	SW-NT-5	Dissolved	Water	3010A	
600-70439-6	SW-NT-6	Total/NA	Water	3010A	
600-70439-6	SW-NT-6	Dissolved	Water	3010A	
600-70439-7	SW-NT-7	Total/NA	Water	3010A	
600-70439-7	SW-NT-7	Dissolved	Water	3010A	
600-70439-8	SW-NT-8	Total/NA	Water	3010A	
600-70439-8	SW-NT-8	Dissolved	Water	3010A	
600-70439-9	SW-NT-9	Total/NA	Water	3010A	
600-70439-9	SW-NT-9	Dissolved	Water	3010A	
600-70439-10	SW-NT-10	Total/NA	Water	3010A	
600-70439-10	SW-NT-10	Dissolved	Water	3010A	
LCS 600-102341/2-A	Lab Control Sample	Total/NA	Water	3010A	
MB 600-102341/1-A	Method Blank	Total/NA	Water	3010A	

Analysis Batch: 102443

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
600-70439-1	SW-NT-1	Total/NA	Water	6010B	102341
600-70439-1	SW-NT-1	Dissolved	Water	6010B	102341
600-70439-1 DU	SW-NT-1	Total/NA	Water	6010B	102341
600-70439-1 MS	SW-NT-1	Total/NA	Water	6010B	102341
600-70439-1 MSD	SW-NT-1	Total/NA	Water	6010B	102341
600-70439-2	SW-NT-2	Total/NA	Water	6010B	102341
600-70439-2	SW-NT-2	Dissolved	Water	6010B	102341
600-70439-2 DU	SW-NT-2	Dissolved	Water	6010B	102341
600-70439-2 MS	SW-NT-2	Dissolved	Water	6010B	102341
600-70439-2 MSD	SW-NT-2	Dissolved	Water	6010B	102341
600-70439-3	SW-NT-3	Total/NA	Water	6010B	102341
600-70439-3	SW-NT-3	Dissolved	Water	6010B	102341
600-70439-4	SW-NT-4	Total/NA	Water	6010B	102341
600-70439-4	SW-NT-4	Dissolved	Water	6010B	102341
600-70439-5	SW-NT-5	Total/NA	Water	6010B	102341
600-70439-5	SW-NT-5	Dissolved	Water	6010B	102341
600-70439-6	SW-NT-6	Total/NA	Water	6010B	102341
600-70439-6	SW-NT-6	Dissolved	Water	6010B	102341
600-70439-7	SW-NT-7	Total/NA	Water	6010B	102341
600-70439-7	SW-NT-7	Dissolved	Water	6010B	102341

QC Association Summary

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Metals (Continued)

Analysis Batch: 102443 (Continued)

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
600-70439-8	SW-NT-8	Total/NA	Water	6010B	102341
600-70439-8	SW-NT-8	Dissolved	Water	6010B	102341
600-70439-9	SW-NT-9	Total/NA	Water	6010B	102341
600-70439-9	SW-NT-9	Dissolved	Water	6010B	102341
600-70439-10	SW-NT-10	Total/NA	Water	6010B	102341
600-70439-10	SW-NT-10	Dissolved	Water	6010B	102341
LCS 600-102341/2-A	Lab Control Sample	Total/NA	Water	6010B	102341
MB 600-102341/1-A	Method Blank	Total/NA	Water	6010B	102341

General Chemistry

Analysis Batch: 102534

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
600-70439-1	SW-NT-1	Total/NA	Water	300.0	[11
600-70439-1 MS	SW-NT-1	Total/NA	Water	300.0	
600-70439-1 MSD	SW-NT-1	Total/NA	Water	300.0	12
600-70439-2	SW-NT-2	Total/NA	Water	300.0	
600-70439-3	SW-NT-3	Total/NA	Water	300.0	13
600-70439-4	SW-NT-4	Total/NA	Water	300.0	
600-70439-5	SW-NT-5	Total/NA	Water	300.0	
600-70439-6	SW-NT-6	Total/NA	Water	300.0	
600-70439-7	SW-NT-7	Total/NA	Water	300.0	
600-70439-8	SW-NT-8	Total/NA	Water	300.0	
600-70439-9	SW-NT-9	Total/NA	Water	300.0	
600-70439-10	SW-NT-10	Total/NA	Water	300.0	
LCS 600-102534/4	Lab Control Sample	Total/NA	Water	300.0	
MB 600-102534/3	Method Blank	Total/NA	Water	300.0	

Lab Sample ID: 600-70439-2

Lab Sample ID: 600-70439-3

Lab Sample ID: 600-70439-4

Matrix: Water

Matrix: Water

Matrix: Water

5 13

Client Samp	le ID: SW-N		Lab Sample I	D: 600-70439-1					
Date Collected	: 03/20/13 17:0	00							Matrix: Water
Date Received	: 03/22/13 08:3	38							
	Batch	Batch		Dilution	Batch	Prepared			
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab	
Total/NA	Prep	3010A			102341	03/22/13 14:28	NER	TAL HOU	
Total/NA	Analysis	6010B		1	102443	03/25/13 11:23	DCL	TAL HOU	
Dissolved	Prep	3010A			102341	03/22/13 14:28	NER	TAL HOU	
Dissolved	Analysis	6010B		1	102443	03/25/13 12:21	DCL	TAL HOU	
Total/NA	Analysis	300.0		10	102534	03/25/13 18:54	DAW	TAL HOU	

Client Sample ID: SW-NT-2

Date Collected: 03/20/13 17:15 Date Received: 03/22/13 08:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			102341	03/22/13 14:28	NER	TAL HOU
Total/NA	Analysis	6010B		1	102443	03/25/13 11:38	DCL	TAL HOU
Dissolved	Prep	3010A			102341	03/22/13 14:28	NER	TAL HOU
Dissolved	Analysis	6010B		1	102443	03/25/13 12:24	DCL	TAL HOU
Total/NA	Analysis	300.0		10	102534	03/25/13 19:49	DAW	TAL HOU

Client Sample ID: SW-NT-3

Date Collected: 03/20/13 17:25 Date Received: 03/22/13 08:38

-	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			102341	03/22/13 14:28	NER	TAL HOU
Total/NA	Analysis	6010B		1	102443	03/25/13 11:42	DCL	TAL HOU
Dissolved	Prep	3010A			102341	03/22/13 14:28	NER	TAL HOU
Dissolved	Analysis	6010B		1	102443	03/25/13 12:48	DCL	TAL HOU
Total/NA	Analysis	300.0		10	102534	03/25/13 20:07	DAW	TAL HOU

Client Sample ID: SW-NT-4

Date Collected: 03/20/13 17:50 Date Received: 03/22/13 08:38

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			102341	03/22/13 14:28	NER	TAL HOU
Total/NA	Analysis	6010B		1	102443	03/25/13 11:46	DCL	TAL HOU
Dissolved	Prep	3010A			102341	03/22/13 14:28	NER	TAL HOU
Dissolved	Analysis	6010B		1	102443	03/25/13 12:51	DCL	TAL HOU
Total/NA	Analysis	300.0		10	102534	03/25/13 20:26	DAW	TAL HOU

Batch

Number

102341

102443

102341

102443

102534

Prepared

or Analyzed

03/22/13 14:28

03/25/13 11:50

03/22/13 14:28

03/25/13 12:55

03/25/13 20:44 DAW

Analyst

NER

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NER

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Lab

TAL HOU

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Dilution

Factor

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Run

Batch

Туре

Prep

Prep

Analysis

Analysis

Analysis

Batch

3010A

6010B

3010A

6010B

300.0

Method

Lab Sample ID: 600-70439-5

2 3 4 5 6 7 8

13

Lab Sample ID: 600-70439-6 Matrix: Water

Lab Sample ID: 600-70439-7

Lab Sample ID: 600-70439-8

Matrix. Water

Matrix: Water

Matrix: Water

Client Sample ID: SW-NT-6
Date Collected: 03/21/13 11:10
Date Received: 03/22/13 08:38

Client Sample ID: SW-NT-5

Date Collected: 03/21/13 11:00

Date Received: 03/22/13 08:38

Prep Type

Total/NA

Total/NA

Dissolved

Dissolved

Total/NA

	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			102341	03/22/13 14:28	NER	TAL HOU
Total/NA	Analysis	6010B		1	102443	03/25/13 12:01	DCL	TAL HOU
Dissolved	Prep	3010A			102341	03/22/13 14:28	NER	TAL HOU
Dissolved	Analysis	6010B		1	102443	03/25/13 12:59	DCL	TAL HOU
Total/NA	Analysis	300.0		10	102534	03/25/13 21:02	DAW	TAL HOU

Client Sample ID: SW-NT-7 Date Collected: 03/21/13 11:15

Date Received: 03/22/13 08:38

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			102341	03/22/13 14:28	NER	TAL HOU
Total/NA	Analysis	6010B		1	102443	03/25/13 12:05	DCL	TAL HOU
Dissolved	Prep	3010A			102341	03/22/13 14:28	NER	TAL HOU
Dissolved	Analysis	6010B		1	102443	03/25/13 13:03	DCL	TAL HOU
Total/NA	Analysis	300.0		10	102534	03/25/13 21:57	DAW	TAL HOU

Client Sample ID: SW-NT-8

Date Collected: 03/21/13 11:20 Date Received: 03/22/13 08:38

Batch

Batch

Batch	Prepared	 	

Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			102341	03/22/13 14:28	NER	TAL HOU
Total/NA	Analysis	6010B		1	102443	03/25/13 12:09	DCL	TAL HOU
Dissolved	Prep	3010A			102341	03/22/13 14:28	NER	TAL HOU
Dissolved	Analysis	6010B		1	102443	03/25/13 13:07	DCL	TAL HOU
Total/NA	Analysis	300.0		10	102534	03/25/13 22:15	DAW	TAL HOU

Dilution

Batch

Number

102341

102443

102341

102443

102534

Dilution

Factor

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Run

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

Batch

Туре

Prep

Prep

Analysis

Analysis

Analysis

Batch

Method

3010A

6010B

3010A

6010B

300.0

		Lab Sample ID: 600-70439-9	
		Matrix: Water	
Prepared			5
or Analyzed	Analyst	Lab	J
03/22/13 14:28	NER	TAL HOU	
03/25/13 12:13	DCL	TAL HOU	
03/22/13 14:28	NER	TAL HOU	
03/25/13 13:11	DCL	TAL HOU	
03/25/13 22:33	DAW	TAL HOU	8
	L	ab Sample ID: 600-70439-10	9

Client Sample ID: SW-NT-10 Date Collected: 03/21/13 11:30 Date Received: 03/22/13 08:38

Client Sample ID: SW-NT-9 Date Collected: 03/21/13 11:25 Date Received: 03/22/13 08:38

Prep Type

Total/NA

Total/NA

Dissolved

Dissolved

Total/NA

-	Batch	Batch		Dilution	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			102341	03/22/13 14:28	NER	TAL HOU
Total/NA	Analysis	6010B		1	102443	03/25/13 12:17	DCL	TAL HOU
Dissolved	Prep	3010A			102341	03/22/13 14:28	NER	TAL HOU
Dissolved	Analysis	6010B		1	102443	03/25/13 13:14	DCL	TAL HOU
Total/NA	Analysis	300.0		10	102534	03/25/13 22:51	DAW	TAL HOU

Laboratory References:

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

13 14

Matrix: Water

Client: Pastor, Behling & Wheeler LLC Project/Site: Exide Recycling Center, Frisco TX Projec

TestAmerica Job ID: 600-70439-1

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	08-04-12
Louisiana	NELAP	6	01967	06-30-13
Oklahoma	State Program	6	9503	08-31-13
Texas	NELAP	6	T104704223-10-6-TX	10-31-13
USDA	Federal		P330-08-00217	04-01-14
Utah	NELAP	8	GULF	10-31-13

	11 12 14 15 16		
Chain of	Temperature on Receipt Tess	tAmerica	
Custody Record	Drinking Water? Yes□ No□ THE LEAD	DER IN ENVIRONMENTAL TESTING	
Client 2BW	Project Manager W.W. VZinne	2753	363
ZZOI Double Creek Dr., Ste 4004	Telephone Number (Area Code)/Fax Number (672) (7) - 3434	Lab Number Page	a 2
City I R . W State Zip Code	Sile Contact	Analysis (Attach list if more space is needed)	
Project Name and Location (State)	Carrier/Waybill Number	2	vial Instruction
Contract/Purchase Order/Quote No.	Matrix Containers & Preservatives	Cond	ditions of Rece
Sample I.D. No. and Description (Containers for each sample may be combined on one line) Date	AII Aqueous Sed Soll Unpres. H2SO4 HINO3 HCI NaOH ZnAc/ NaOH	D:50 Su	
SW-NT- 3/20/13	X 200 X 00 E		
ι. · · ·			
SW-NT-2 3/20/13/	715 X 2 X		
r, I,		9 CP	
SW-NT-3 3/0131	X 225		
K .			
SW-NT-4 3/20/13	1750 X 2 X		
JW-NT-5 321/13 1	X 50 X		
N N	×		
Sw-NT-6 3/21/13 (
60 20			
Possible Hazard Identification Non-Hazard Flammable Skin Initiant Poison B	Unknown	(A fee may be assessed if samples bive For Months longer than 1 month)	s are retained
Turn Around Time Required	Other		
1. Relinquished By	3/21/13 Time 1. Received By	June 721 12	, 15 JC
2. Relinglished By Ulland	Sull 13 M30 2 Received By	pate 1	,Time
3. Relinquished By	Date 1 Time 3. Received By	Date D3/22/1	13 Time 0838
Comments	4 the Conneles DNW Einter Cont		
DISTRIBUTION: WHILE - Heturned to Client with Heport; CANAHY - Stays with	n the Sample; PINK - Field Copy		

3/28/2013

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Chain of	Temperature on Receipt TestAn	nerica
Custoay Hecora	Drinking Water? Yes No	RONMENTAL TESTING
Cilent PBW	Project Manager W: N V Einum	Date /2//13 Chain of Clustooty Number 2/2//13 225365
2201 Truble (rood br. Ste 4004	Telephone Number (Area Code)/Fax Number	Lab Number Page Z of Z
R . J R K Isate Zip Code	Site Contact An	alysis (Attach list if e space is needed)
Project Name and Location (State) Exile Former Operating Plus	Carrier/Wayoill Number	Special Instructions/
Contract/Purchase Order/Quote No.	Matrix Preservatives	Conditions of Receipt
Sample I.D. No. and Description (Containers for each sample may be combined on one line)	AII Aqueous Sod. Sod. Soli HISSO4 HINO3 HCI NaOH TS+S S-S	
SW-NT-7 3/21/13 1		
SW-NT-8- 3/4/13 1	No X Col	
SW-NT-9 3/21/13 1		
SW-NT-10 3/2113		
16 79		
Possible Hazard Identification Non-Hazard Flammable Skin Initiant Poison B	Sample Disposal Sample Disposal Unknown Return To Client Disposal By Lab Archive For	(A fee may be assessed if samples are retained Months longer than 1 month)
Tum Around Time Required X 24 Hours 48 Hours 7 Days 14 Days 21 Days	Other	
1. Relinguisted By	3/21/13 Time 1. Required By	$\frac{Date}{3/2} \frac{13}{13} \frac{1}{5} \frac{1}{$
2. Heimpungher By CONU	2/21/13/10AD 2: HECENVED BY	Date
3. Heinquished By	Jaie Ime 3. Hocored by	\$\$\$0 [2/22/60]
DISTRIBUTION: WHITE - Returned to Cilent with Report; CANARY - Stays with	h the Sample: PINK - Field Copy	

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15 16 Client: Pastor, Behling & Wheeler LLC

Login Number: 70439 List Number: 1

Creator: Pulumbarit, Josh

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.7 2.0
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.	True	

Job Number: 600-70439-1

List Source: TestAmerica Houston