HALEY & ALDRICH, INC.
6500 Rockside Road
Suite 200
Cleveland, OH 44131
216.739.0555

MEMORANDUM

16 November 2017
File No. 129862-002

TO: Pam Barnett

FROM: Haley & Aldrich, Inc.
Ban Aragona
Lloyd Ross

SUBJECT: RCRA Generator Closure Documentation
Above Ground Storage Tanks RACER Trust Elyria
1400 Lowell St
Elyria, Ohio

The purpose of this memorandum is to document the generator closure activities completed at the RACER Trust Elyria Site (Site) located at 1400 Lowell Street, Elyria, Ohio. A RCRA Tank System was historically used to manage leachate at the Site. These tanks were installed and operated as short-term storage units (less than 90-days) for collected hazardous waste leachates from the adjacent former landfill, as shown in **Figure 1**.

Based on change in operations, the ASTs are no longer required to manage the leachate from the landfill. Therefore, the tanks and secondary containment were decontaminated to allow for generator closure and removal of the tank system from the Site. The decontamination of the tank system was completed in accordance with performance standards in Ohio Administrative Code (3745-66-11).

This tank system includes two ASTs with a 1,000-gallon capacity. Each tank is constructed of double-walled fiberglass reinforced plastic that is designed for the storage of liquid containing heavy metals contamination. The ASTs are equipped with a secondary containment system that includes a continuously bermed 12-inch, reinforced concrete pad underlain by a polyethylene liner.

Closure Activities

The closure activities included cleaning of tanks, associated piping and secondary containment and collection of samples from the collected solids and cleaning water.

Environmental Management Specialists (EMS) of Cleveland, Ohio performed the AST cleaning. The tanks and associated piping, including approximately 300 feet of influent piping, was jet cleaned and rinsed with high-pressure hot water. Similarly, the concrete of the secondary containment was rinsed,

scrubbed and high-pressure cleaned and rinsed with hot water. Solids and the cleaning and rinse water was containerized for disposal. The interior of the ASTs was triple rinsed with high pressure hot water. Rinsate liquid was removed and containerized for disposal.

Photographs of the closure activities are provided in **Appendix A**.

Sampling

Tank cleaning residuals generated during tank cleaning activities were sampled on May 16, 2017. The tank residuals sample, 0171-051617-1400, was analyzed for toxicity characteristic leaching procedure (TCLP) VOCs, TCLP SVOCs, TCLP Metals, TCLP Mercury total cyanide, and total sulfide in accordance with EPA SW-846 Methods 8260B, 8270C, 6010C, 7470A, 9012B and 9034, respectively. The final rinsate sample, 0171-051617-1330, was analyzed for total metals and total cyanide in accordance with EPA SW-846 Methods 7470A and 9012B, respectively. These data were used for disposal of the material.

On June 18, 2017, a clean rinse of the tank system was completed and a final rinse water and rinsate samples were collected to verify decontamination of the tank systems. Both samples, 0171-061917-1900 and 0171-061917-1915, were analyzed for total metals (ICP) and total mercury in accordance with EPA SW-846 Methods 6010C and 7470A respectively.

The tank residual sample was screened against hazardous waste regulatory levels and the final rinsate samples were screened against maximum contamination levels (MCLs) for drinking water quality. **Tables I, II and III** summarize the analytical data reported for these samples. Laboratory analytical reports are provided in **Appendix B**. Samples collected during the closure activities were either below applicable screening criteria or non-detect.

Based on the final rinsate sample results, the tanks system has been adequately decontaminated and can be decommissioned and disposed of accordingly.

Waste Handling

Approximately 318 gallons of rinsate from tank cleaning activities was collected and transported off Site by Vickery Transportation, Inc. and properly disposed at Vickery Environmental, Inc. located at 3956 State Route 412, Vickery, Ohio 43464. Waste manifests for the rinsate disposed off Site are provided in **Appendix C**. A generator waste profile was created by Chemical Waste Management, Inc. and is provided in **Appendix D**.

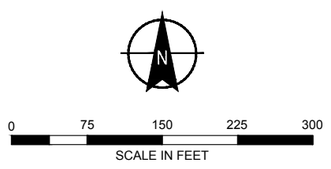
Attachments:
Figure I – AST Location Plan
Table I – Tank Sample Analytical Results
Table II – Rinsate Sample Analytical Results
Table III – Water and Rinsate Sample Analytical Results
Appendix A – Photographs
Appendix B – Analytical Reports
Appendix C – Waste Manifests
Appendix D – Waste Profile

FIGURES

LEGEND

NOTES

1.



HALEY ALDRICH

RACER TRUST ELYRIA
1400 LOWELL STREET
ELYRIA, OH 44035

AST LOCATION PLAN

SCALE: AS SHOWN
SEPTEMBER 2017

FIGURE 1

TABLES

TABLE I
SUMMARY OF ANALYTICAL RESULTS
RACER ELYRIA
ELYRIA, OH

Location	Hazardous Waste	Tanks
Sample Date	Regulatory	05/16/2017
Sample Name	Levels	0171-051617-1400
Inorganic Compounds (mg/kg)		
Cyanide	-	ND (0.1) F2F1
Sulfide	-	ND (8.7) F1
Inorganic Compounds (ug/L)		
Arsenic	5000	ND (75)
Barium	100000	**170 J**
Cadmium	1000	ND (20)
Chromium	5000	ND (50)
Lead	5000	ND (50)
Mercury	200	ND (0.2)
Selenium	1000	ND (100)
Silver	5000	ND (50)
Other		
Density (g/cm3)	-	**2.36**
Burn Rate (mm/sec)	-	ND (2.2)
Specific gravity (none)	-	**2.37**
pH (lab) (SU)	-	**8.5 HF**
Semi-Volatile Organic Compounds (ug/L)		
1,4-Dichlorobenzene	7500	ND (10)
2,4,5-Trichlorophenol	400000	ND (10)
2,4,6-Trichlorophenol	2000	ND (10)
2,4-Dinitrotoluene	130	ND (2)
2-Methylphenol (o-Cresol)	200000	ND (10)
3&4-Methylphenol	-	ND (10)
4-Methylphenol	200000	ND (10)
Hexachlorobenzene	130	ND (1)
Hexachlorobutadiene	500	ND (2)
Hexachloroethane	3000	ND (1) *
Nitrobenzene	2000	ND (1)
Pentachlorophenol	100000	ND (30)
Phenol	-	ND (10)
Pyridine	5000	ND (10)
Volatile Organic Compounds (ug/L)		
1,1-Dichloroethene	700	ND (10)
1,2-Dichloroethane	500	ND (10)
2-Butanone (Methyl Ethyl Ketone)	200000	ND (50)
Benzene	500	ND (10)
Carbon tetrachloride	500	ND (10)
Chlorobenzene	100000	ND (10)
Chloroform (Trichloromethane)	6000	ND (10)
Tetrachloroethene	700	ND (10)
Trichloroethene	500	ND (10)
Vinyl chloride	200	ND (10)

Notes:
1. ND (#): Not detected above reporting limit.
2. Results in **bold** are detected.
3. Lab qualifiers defined as follows:
   *: LCS or LCSD is outside acceptance limits.
   J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
   HF: Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
   F1: MS and/or MSD Recovery is outside acceptance limits.
   F2: MS/MSD RPD exceeds control limits
4. Results in red exceed Hazardous Waste Regulatory Levels.

TABLE II
SUMMARY OF ANALYTICAL RESULTS
RACER ELYRIA
ELYRIA, OH

	Location		Rinsate
	Sample Date		05/16/2017
	Sample Name	MCLs	0171-051617-1330
Inorganic Compounds (ug/L)			
Barium		2000	**37 J**
Calcium		-	**36000**
Chromium		100	**7.6 J**
Cyanide		200	**24**
Iron		-	**1300**
Magnesium		-	**9200**
Manganese		-	**40**
Nickel		-	ND (40)
Potassium		-	**16000**
Sodium		-	**14000**
Other (ug/L)			
Chloride		-	**27000 F1**
Sulfate		-	**56000 F1**

Notes:
1. ND (#): Not detected above reporting limit.
2. Results in **bold** are detected.
3. Lab qualifiers defined as follows:
   *: LCS or LCSD is outside acceptance limits.
   J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
   HF: Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
   F1: MS and/or MSD Recovery is outside acceptance limits.
   F2: MS/MSD RPD exceeds control limits
4. Results in red exceed MCLs.

TABLE III
SUMMARY OF ANALYTICAL RESULTS
RACER ELYRIA
ELYRIA, OH

Location		Source Water	Rinsate
Sample Date		6/19/2017	6/19/2017
Sample Name	MCLs	0171-061917-1900	0171-061917-1915
Inorganic Compounds (ug/L)			
Arsenic	10	ND (15)	ND (15)
Barium	2000	ND (200)	ND (200)
Cadmium	5.0	ND(4.0)	ND(4.0)
Chromium	100	ND (10)	ND (10)
Lead	15	ND(10)	ND(10)
Selenium	50	ND (20)	ND (20)
Silver	-	ND (10)	ND (10)
Other (ug/L)			
Mercury	2	ND (0.2)	ND (0.2)

Notes:
1. ND (#): Not detected above reporting limit.
2. Results in **bold** are detected.
3. Lab qualifiers defined as follows:
   *: LCS or LCSD is outside acceptance limits.
   J: Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
   HF: Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
   F1: MS and/or MSD Recovery is outside acceptance limits.
   F2: MS/MSD RPD exceeds control limits
4. Results in red exceed MCLs.

APPENDIX A

Photographs

Photo #1: AST shown inside building

Photo #2: AST Interior

Photo #3: Concrete pad of secondary containment system

Photo #4: EMS removes liquids from AST

Photo #5: EMS Power washing interior of AST

Photo #6: Vickery transporting rinsate off Site

Photo #7: Termination of electrical feed

Photo #8: Influent piping cut and removed

APPENDIX B

Laboratory Analytical Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 240-81262-1
Client Project/Site: Racer - Elyria, Ohio

For:
Haley & Aldrich, Inc.
3840 Packard Road
Suite 100
Ann Arbor, Michigan 48108-2280

Attn: Ban Aragona

Denise Pohl

Authorized for release by:
7/5/2017 3:37:17 PM

Denise Pohl, Project Manager II
(330)966-9789
denise.pohl@testamericainc.com

Table of Contents

Definitions/Glossary

Client: Haley & Aldrich, Inc.
Project/Site: Racer - Elyria, Ohio

TestAmerica Job ID: 240-81262-1

Qualifiers

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Job ID: 240-81262-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Haley & Aldrich, Inc.

Project: Racer - Elyria, Ohio

Report Number: 240-81262-1

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

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

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

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

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

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

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

RECEIPT

The samples were received on 6/20/2017 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 21.8º C.

TOTAL METALS (ICP)

Samples 0171-061917-1900 (240-81262-1) and 0171-061917-1915 (240-81262-2) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 06/22/2017 and analyzed on 06/23/2017.

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

TOTAL MERCURY

Samples 0171-061917-1900 (240-81262-1) and 0171-061917-1915 (240-81262-2) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 06/28/2017.

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

Method Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer - Elyria, Ohio

TestAmerica Job ID: 240-81262-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	TAL EDI
7470A	Mercury (CVAA)	SW846	TAL EDI

Protocol References:

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

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer - Elyria, Ohio

TestAmerica Job ID: 240-81262-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-81262-1	0171-061917-1900	Water	06/19/17 19:00	06/20/17 09:30
240-81262-2	0171-061917-1915	Water	06/19/17 19:15	06/20/17 09:30

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer - Elyria, Ohio

TestAmerica Job ID: 240-81262-1

Client Sample ID: 0171-061917-1900 **Lab Sample ID: 240-81262-1**

No Detections.

Client Sample ID: 0171-061917-1915 **Lab Sample ID: 240-81262-2**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: 0171-061917-1900
Date Collected: 06/19/17 19:00
Date Received: 06/20/17 09:30

Lab Sample ID: 240-81262-1
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	10	U	10	1.8	ug/L		06/22/17 22:30	06/23/17 19:00	1
Arsenic	15	U	15	4.4	ug/L		06/22/17 22:30	06/23/17 19:00	1
Barium	200	U	200	8.6	ug/L		06/22/17 22:30	06/23/17 19:00	1
Cadmium	4.0	U	4.0	1.8	ug/L		06/22/17 22:30	06/23/17 19:00	1
Chromium	10	U	10	3.3	ug/L		06/22/17 22:30	06/23/17 19:00	1
Lead	10	U	10	4.1	ug/L		06/22/17 22:30	06/23/17 19:00	1
Selenium	20	U	20	4.4	ug/L		06/22/17 22:30	06/23/17 19:00	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.17	ug/L		06/28/17 12:55	06/28/17 15:05	1

Client: Haley & Aldrich, Inc.
Project/Site: Racer - Elyria, Ohio

TestAmerica Job ID: 240-81262-1

Client Sample ID: 0171-061917-1915
Date Collected: 06/19/17 19:15
Date Received: 06/20/17 09:30

Lab Sample ID: 240-81262-2
Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	10	U	10	1.8	ug/L		06/22/17 22:30	06/23/17 19:04	1
Arsenic	15	U	15	4.4	ug/L		06/22/17 22:30	06/23/17 19:04	1
Barium	200	U	200	8.6	ug/L		06/22/17 22:30	06/23/17 19:04	1
Cadmium	4.0	U	4.0	1.8	ug/L		06/22/17 22:30	06/23/17 19:04	1
Chromium	10	U	10	3.3	ug/L		06/22/17 22:30	06/23/17 19:04	1
Lead	10	U	10	4.1	ug/L		06/22/17 22:30	06/23/17 19:04	1
Selenium	20	U	20	4.4	ug/L		06/22/17 22:30	06/23/17 19:04	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.17	ug/L		06/28/17 12:55	06/28/17 15:06	1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 460-445287/1-A
Matrix: Water
Analysis Batch: 445450

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 445287

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	10	U	10	1.8	ug/L		06/22/17 22:30	06/23/17 17:03	1
Arsenic	15	U	15	4.4	ug/L		06/22/17 22:30	06/23/17 17:03	1
Barium	200	U	200	8.6	ug/L		06/22/17 22:30	06/23/17 17:03	1
Cadmium	4.0	U	4.0	1.8	ug/L		06/22/17 22:30	06/23/17 17:03	1
Chromium	10	U	10	3.3	ug/L		06/22/17 22:30	06/23/17 17:03	1
Lead	10	U	10	4.1	ug/L		06/22/17 22:30	06/23/17 17:03	1
Selenium	20	U	20	4.4	ug/L		06/22/17 22:30	06/23/17 17:03	1

Lab Sample ID: LCS 460-445287/2-A
Matrix: Water
Analysis Batch: 445450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 445287

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	50.0	46.9		ug/L		94	80 - 120
Arsenic	2000	1940		ug/L		97	80 - 120
Barium	2000	2050		ug/L		103	80 - 120
Cadmium	50.0	50.4		ug/L		101	80 - 120
Chromium	200	203		ug/L		101	80 - 120
Lead	500	518		ug/L		104	80 - 120
Selenium	2000	1950		ug/L		97	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 460-446399/1-A
Matrix: Water
Analysis Batch: 446460

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 446399

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.17	ug/L		06/28/17 12:55	06/28/17 14:38	1

Lab Sample ID: LCS 460-446399/2-A
Matrix: Water
Analysis Batch: 446460

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 446399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	1.00	0.918		ug/L		92	80 - 120

QC Association Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer - Elyria, Ohio

TestAmerica Job ID: 240-81262-1

Metals

Prep Batch: 445287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-81262-1	0171-061917-1900	Total/NA	Water	3010A	
240-81262-2	0171-061917-1915	Total/NA	Water	3010A	
MB 460-445287/1-A	Method Blank	Total/NA	Water	3010A	
LCS 460-445287/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 445450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-81262-1	0171-061917-1900	Total/NA	Water	6010C	445287
240-81262-2	0171-061917-1915	Total/NA	Water	6010C	445287
MB 460-445287/1-A	Method Blank	Total/NA	Water	6010C	445287
LCS 460-445287/2-A	Lab Control Sample	Total/NA	Water	6010C	445287

Prep Batch: 446399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-81262-1	0171-061917-1900	Total/NA	Water	7470A	
240-81262-2	0171-061917-1915	Total/NA	Water	7470A	
MB 460-446399/1-A	Method Blank	Total/NA	Water	7470A	
LCS 460-446399/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 446460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-81262-1	0171-061917-1900	Total/NA	Water	7470A	446399
240-81262-2	0171-061917-1915	Total/NA	Water	7470A	446399
MB 460-446399/1-A	Method Blank	Total/NA	Water	7470A	446399
LCS 460-446399/2-A	Lab Control Sample	Total/NA	Water	7470A	446399

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Racer - Elyria, Ohio

TestAmerica Job ID: 240-81262-1

Client Sample ID: 0171-061917-1900

Lab Sample ID: 240-81262-1

Date Collected: 06/19/17 19:00

Matrix: Water

Date Received: 06/20/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			445287	06/22/17 22:30	GAE	TAL EDI
Total/NA	Analysis	6010C		1	445450	06/23/17 19:00	CDC	TAL EDI
Total/NA	Prep	7470A			446399	06/28/17 12:55	RBS	TAL EDI
Total/NA	Analysis	7470A		1	446460	06/28/17 15:05	RBS	TAL EDI

Client Sample ID: 0171-061917-1915

Lab Sample ID: 240-81262-2

Date Collected: 06/19/17 19:15

Matrix: Water

Date Received: 06/20/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			445287	06/22/17 22:30	GAE	TAL EDI
Total/NA	Analysis	6010C		1	445450	06/23/17 19:04	CDC	TAL EDI
Total/NA	Prep	7470A			446399	06/28/17 12:55	RBS	TAL EDI
Total/NA	Analysis	7470A		1	446460	06/28/17 15:06	RBS	TAL EDI

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer - Elyria, Ohio

TestAmerica Job ID: 240-81262-1

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-18
Connecticut	State Program	1	PH-0590	12-31-17
Florida	NELAP	4	E87225	06-30-18
Illinois	NELAP	5	200004	07-31-17 *
Kansas	NELAP	7	E-10336	01-31-18
Kentucky (UST)	State Program	4	58	02-23-18
Kentucky (WW)	State Program	4	98016	12-31-17
Minnesota	NELAP	5	039-999-348	12-31-17
Minnesota (Petrofund)	State Program	1	3506	07-31-17 *
Nevada	State Program	9	OH-000482008A	07-31-17 *
New Jersey	NELAP	2	OH001	06-30-18
New York	NELAP	2	10975	03-31-18
Ohio VAP	State Program	5	CL0024	09-14-17 *
Oregon	NELAP	10	4062	02-23-18
Pennsylvania	NELAP	3	68-00340	08-31-17 *
Texas	NELAP	6	T104704517-15-5	08-31-17 *
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-17 *
Washington	State Program	10	C971	01-12-18
West Virginia DEP	State Program	3	210	12-31-17
Wisconsin	State Program	5	999518190	08-31-17 *

Laboratory: TestAmerica Edison

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-18
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-17
New Jersey	NELAP	2	12028	06-30-18
New York	NELAP	2	11452	04-01-18
Pennsylvania	NELAP	3	68-00522	02-28-18
Rhode Island	State Program	1	LAO00132	12-30-17
USDA	Federal		NJCA-003-08	06-13-20

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

21.8|21.8

TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Phone (732) 549-3900 Fax (732) 549-3679

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: T. Correll	Lab PM: Pohl, Denise	Carrier Tracking No(s):	COC No: 460-85353-53395.1
Client Contact: Anthony Correll	Phone: 216-407-1168	E-Mail: denise.pohl@testamericainc.com		Page: Page 1 of 1
Company: Haley & Aldrich, Inc.				Job #:

Address: 6500 Rockside Road Suite 200	Due Date Requested: —
City: Cleveland	TAT Requested (days): Std
State, Zip: OH, 44131	
Phone: 734-454-4917(Tel) 734-454-1233(Fax)	PO #: 41753-005
Email: acorreli@haleyaldrich.com	WO #:
Project Name: Racer - Elyria, Ohio	Project #: 46020356
Site:	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	RCRA Metals	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
0171-061917-1900	6/19/17	1900	G	W			X		Source Water
0171-061917-1915	↓	1915	G	W			X		Final Rinsate

240-81262 Chain of Custody

TJC 6/19/17

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
TJ Correll	6/19/17 @ 2030	H+A		6/20/17 930	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

8/2/17

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** _____
Canton Facility

Client Haley & Aldrich Site Name _____ Cooler unpacked by:

Cooler Received on 6/20/17 Opened on 6/20/17

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box ~~Client Cooler~~ Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-8 (CF **-0.4** °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C

IR GUN #36 (CF **+0**°C) Observed Cooler Temp 21.8 °C Corrected Cooler Temp. 21.8 °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1	Yes	No
-Were custody seals on the outside of the cooler(s) signed & dated?	Yes	No NA
-Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	No
3. Shippers' packing slip attached to the cooler(s)?	Yes	No
4. Did custody papers accompany the sample(s)?	Yes	No
5. Were the custody papers relinquished & signed in the appropriate place?	Yes	No
6. Was/were the person(s) who collected the samples clearly identified on the COC?	Yes	No
7. Did all bottles arrive in good condition (Unbroken)?	Yes	No
8. Could all bottle labels be reconciled with the COC?	Yes	No
9. Were correct bottle(s) used for the test(s) indicated?	Yes	No
10. Sufficient quantity received to perform indicated analyses?	Yes	No
11. Are these work share samples?	Yes	No
If yes, Questions 11-15 have been checked at the originating laboratory.		
11. Were sample(s) at the correct pH upon receipt?	Yes	No NA pH Strip Lot# **HC697954**
12. Were VOAs on the COC?	Yes	No
13. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	No
15. Was a LL Hg or Me Hg trip blank present? _____	Yes	No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

17. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____

Ref: SOP NC-SC-0005, Sample Receiving
\\tacorp\corp\QA\QA_Facilities\Canton-QA\Document-Management\Work-Instruction\Word Version Work Instructions\WI-NC-099-052317 Cooler Receipt Form.doc djl

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
EB-AUG-20170607	240-80625-D-1	Plastic 500ml - with Nitric Acid	<2	_____	_____
EB-SPOON-20170607	240-80625-G-2	Plastic 500ml - with Nitric Acid	<2	_____	_____

TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Phone (330) 497-9396 Fax (330) 497-0772

0.5/0.5
1-3/1.3

Chain of Custody Record

MICHIGAN 190

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: D. Miller / T. Asher	Lab PM: Howell, Leslie	Carrier Tracking No(s):	COC No: 240-43577-18975.1
Client Contact: David Miller	Phone: 517-349-9499	E-Mail: leslie.howell@testamericainc.com		Page: Page 1 of 1
Company: Stantec Consulting Corp.				Job #:
Address: 2321 Club Meridian Drive Suite E	Due Date Requested:			
City: Okemos	TAT Requested (days): Standard			
State, Zip: MI, 48864				
Phone: (517) 349-9499	PO #: Purchase Order not required			
Email: david.miller@stantec.com	WO #:			
Project Name: Chevron BDG Company (Former Harshaw Chem	Project #: 24018459			
Site: 213202036	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010B, 6020, 7470A	8260B - (MOD) TCL OLM03.1/4.2 Volatile Analyte L	8270C - (MOD) OLM03.1/4.2 Semivolatile Analyte L	9056A_28D - (MOD) Pick List	8082 - (MOD) PCB 7 Aroclors	6010B, 7470A, 8260B, 8270C	9040B - pH	6010A - Local Method	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D	A	N	N	N	N	N			
PZ-3	6/20/17	11:39	G	Water	N	N	X	X	X	X					7	
1A10-MW0016		13:08	G	Water	N	N	X	X	X	X					7	
1A10-MW0017		14:38	G	Water	N	N	X	X	X	X					7	
1A10-MW0018		16:20	G	Water	N	N	X	X	X	X					7	
1A10-MW0019		18:05	G	Water	N	N	X	X	X	X					7	
DUP-1		—	G	Water	N	N	X	X	X	X					6	
EB-1		15:20	G	Water	N	N	X	X	X	X					7	
TRIP Blank			G	Water	N	N		X							1	

240-81282 Chain of Custody

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

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

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

Special Instructions/QC Requirements: Ohio VAP Program

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	6/21/17 10:15	Stantec	[signature]	6/21/17 1015	TAL
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

7/5/2017

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 81282**
Canton Facility

Client SANTEC Site Name — Cooler unpacked by: RP

Cooler Received on 6-21-17 Opened on 6-21-17

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time Storage Location

TestAmerica Cooler # Foam Box Client Cooler Box Other

Packing material used: Bubble Wrap Foam Plastic Bag None Other

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **-0.4** °C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
   IR GUN #36 (CF **+0**°C) Observed Cooler Temp._____°C Corrected Cooler Temp._____°C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No 6-21-17 RP
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 11-15 have been checked at the originating laboratory.
11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC697954**
12. Were VOAs on the COC? Yes No
13. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ Yes No
15. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

~~Did not Receive FB.~~ Found 6/21/17 BM

17. SAMPLE CONDITION

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

18. SAMPLE PRESERVATION

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

TestAmerica Multiple Cooler Receipt Form/Narrative **Login # : 81282**
Canton Facility

Cooler #	IR Gun #	Observed Temp °C	Corrected Temp °C	Coolant
CLIENT	36	0.5	0.5	Ice
	1	1.3	1.3	1

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
PZ-3	240-81282-E-1	Plastic 500ml - with Nitric Acid	<2	_____	_____
1A10-MW0016	240-81282-E-2	Plastic 500ml - with Nitric Acid	<2	_____	_____
1A10-MW0017	240-81282-E-3	Plastic 500ml - with Nitric Acid	<2	_____	_____
1A10-MW0018	240-81282-E-4	Plastic 500ml - with Nitric Acid	<2	_____	_____
1A10-MW0019	240-81282-E-5	Plastic 500ml - with Nitric Acid	<2	_____	_____
DUP-1	240-81282-E-6	Plastic 500ml - with Nitric Acid	<2	_____	_____
EB-1	240-81282-E-7	Plastic 500ml - with Nitric Acid	<2	_____	_____

TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Phone (330) 497-9396 Fax (330) 497-0772

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

7/5/2017

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Pohl, Denise	Carrier Tracking No(s):	COC No: 240-72560.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: denise.pohl@testamericainc.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 240-81262-1
Address: 777 New Durham Road, ,	Due Date Requested: 6/30/2017			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: Racer - Elyria, Ohio	Project #: 46020356			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010C/3010A (MOD) RCRA 8 Analyte List	7470A/7470A_Prep Mercury	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
0171-061917-1900 (240-81262-1)	6/19/17	19:00 Eastern		Water			X	X	1	
0171-061917-1915 (240-81262-2)	6/19/17	19:15 Eastern		Water			X	X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		6217 1730	240	via FedEx	6/22/17 1055	TAL CAN
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 10 05	Cooler Temperature(s) °C and Other Remarks: 3.8°C IR8

Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 240-81262-1

Login Number: 81262
List Number: 2
Creator: Armbruster, Chris

List Source: TestAmerica Edison
List Creation: 06/22/17 01:22 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
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	3.8°C IR8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

TestAmerica Job ID: 460-133539-1
Client Project/Site: Racer - Elyria, Ohio

For:
Haley & Aldrich, Inc.
3840 Packard Road
Suite 100
Ann Arbor, Michigan 48108-2280

Attn: Ban Aragona

Denise Pohl

Authorized for release by:
6/1/2017 8:57:38 AM

Denise Pohl, Project Manager II
(330)966-9789
denise.pohl@testamericainc.com

Table of Contents

Definitions/Glossary

Client: Haley & Aldrich, Inc.
Project/Site: Racer - Elyria, Ohio

TestAmerica Job ID: 460-133539-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.
F2	MS/MSD RPD exceeds control limits
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Job ID: 460-133539-1

Laboratory: TestAmerica Edison

Narrative

CASE NARRATIVE

Client: Haley & Aldrich, Inc.

Project: Racer - Elyria, Ohio

Report Number: 460-133539-1

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

The D854 Specific Gravity analysis was performed at the TestAmerica Knoxville Laboratory.

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

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

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

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

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

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

RECEIPT

The samples were received on 5/17/2017 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.5º C.

TCLP VOLATILE ORGANIC COMPOUNDS (GCMS)

Sample 0171-051617-1400 (460-133539-2) was analyzed for TCLP volatile organic compounds (GCMS) in accordance with EPA SW-846 Methods 1311/8260B. The sample was leached on 05/18/2017 and analyzed on 05/25/2017.

Sample 0171-051617-1400 (460-133539-2)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method(s) 8260B: The continuing calibration verification (CCV) associated with batch 439597 recovered above the upper control limit for Vinyl chloride. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

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

TCLP SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Job ID: 460-133539-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

Sample 0171-051617-1400 (460-133539-2) was analyzed for TCLP semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Methods 1311/8270C. The sample was leached on 05/18/2017, prepared on 05/19/2017 and analyzed on 05/26/2017.

Surrogates are added during the extraction process prior to dilution. When the sample is diluted, surrogate recoveries are diluted out and no corrective action is required.

Hexachloroethane failed the recovery criteria high for LCS 460-438125/2-A. Hexachloroethane failed the recovery criteria high for LCSD 460-438125/3-A. Refer to the QC report for details.

Method(s) 8270C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 460-438125 and analytical batch 460-438659 recovered outside control limits for the following analyte: Hexachloroethane. This analyte was biased high in the LCS/LCSD and was not detected in the associated samples; therefore, the data have been reported.

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

TCLP METALS (ICP)

Sample 0171-051617-1400 (460-133539-2) was analyzed for TCLP metals (ICP) in accordance with EPA SW-846 Methods 1311/6010C. The sample was leached on 05/18/2017, prepared on 05/19/2017 and analyzed on 05/20/2017 and 05/23/2017.

Lead was detected in method blank LB 460-438149/1-B at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

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

TOTAL METALS (ICP)

Sample 0171-051617-1330 (460-133539-1) was analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The sample was prepared and analyzed on 05/31/2017.

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

TCLP MERCURY

Sample 0171-051617-1400 (460-133539-2) was analyzed for TCLP mercury in accordance with EPA SW-846 Methods 1311/7470A. The sample was leached on 05/18/2017, and prepared and analyzed on 05/23/2017.

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

FLASHPOINT

Sample 0171-051617-1400 (460-133539-2) was analyzed for flashpoint in accordance with EPA SW-846 Method 1030. The sample was analyzed on 05/30/2017.

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

TOTAL CYANIDE

Sample 0171-051617-1400 (460-133539-2) was analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The sample was prepared and analyzed on 05/30/2017.

Cyanide, Total failed the recovery criteria low for the MS of sample 0171-051617-1400MS (460-133539-2) in batch 460-440110. Cyanide, Total failed the recovery criteria low for the MSD of sample 0171-051617-1400MSD (460-133539-2) in batch 460-440110. Cyanide, Total exceeded the RPD limit.

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

TOTAL CYANIDE

Sample 0171-051617-1330 (460-133539-1) was analyzed for total cyanide in accordance with EPA SW-846 Method 9012B. The sample

Job ID: 460-133539-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

was prepared and analyzed on 05/30/2017.

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

TOTAL SULFIDE
Sample 0171-051617-1400 (460-133539-2) was analyzed for total sulfide in accordance with EPA SW-846 Method 9034. The sample was prepared and analyzed on 05/21/2017.

Sulfide failed the recovery criteria low for the MS/MSD of sample 0171-051617-1400MS/MSD (460-133539-2) in batch 460-438817.

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

PH
Sample 0171-051617-1400 (460-133539-2) was analyzed for pH in accordance with EPA SW-846 Method 9045D. The sample was analyzed on 05/30/2017.

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

ANIONS, ION CHROMATOGRAPHY
Sample 0171-051617-1330 (460-133539-1) was analyzed for Anions, Ion Chromatography in accordance with SW-846 Method 9056A_OrgFM. The sample was analyzed on 05/28/2017.

Chloride and Sulfate failed the recovery criteria high for the MS/MSD of sample 0171-051617-1330MS/MSD (460-133539-1) in batch 460-439827.

Sample 0171-051617-1330 (460-133539-1)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Method(s) 9056A: The following samples were diluted to bring the concentration of target analytes within the calibration range: 0171-051617-1330 (460-133539-1), (460-133539-A-1 DU), (460-133539-A-1 MS) and (460-133539-A-1 MSD) at 10.0, 10.0, 10.0 and 10.0. Elevated reporting limits (RLs) are provided.

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

SPECIFIC GRAVITY
Sample 0171-051617-1400 (460-133539-2) was analyzed for specific gravity in accordance with ASTM Method D854. The sample was analyzed on 05/20/2017.

Density: The density (or specific gravity) of the samples was determined using SOP number KNOX-WC-0015, based on ASTM Methods D1475 (replaced D1963) and D854. A Hubbard-Carmick type pycnometer is tared on a four-place analytical balance. The pycnometer filled with water is weighed to calibrate the volume at the desired temperature. The pycnometer filled with sample is weighed to determine the weight of the sample at the calibrated volume. The standard temperature for this procedure is 25ºC. The density and specific gravity of the material are calculated using the following equations:

d(SAMP) = [C(T) - A] / V(T)

Where:
d(SAMP) = Density of the liquid sample at temperature T, g/cm3
C(T) = Weight of pycnometer filled with sample at temperature T, g
A = Weight of pycnometer, g
V(T) = Volume of pycnometer at temperature T, cm3

d(SAMP) = [C(T) - A] / [V(T) - [(D(T) - C(T)) / dH2O(T)]]

Where:

Job ID: 460-133539-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

d(SAMP) = Density of the solid sample at temperature T, g/cm3
D(T) = Weight of pycnometer filled with water and an aliquot of the sample at temperature T, g
C(T) = Weight of pycnometer partially filled with an aliquot of the sample at temperature T, g
A = Weight of pycnometer, g
dH2O(T) = Density of pure water at temperature T, g/cm3
V(T) = Volume of pycnometer at temperature T, cm3

S(T) = d(SAMP) / dH2O(T)

Where:
S(T) = Specific gravity of the sample at temperature T, unitless
d(SAMP) = Density of the sample at temperature T, g/cm3
dH2O(T) = Density of pure water at temperature T, g/cm3
T = Temperature of analysis

Conversion factors:
1 lb/gal = 0.1198 g/cm3
1 Kg/cu. m = 0.001 g/cm3

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

Detection Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer - Elyria, Ohio

TestAmerica Job ID: 460-133539-1

Client Sample ID: 0171-051617-1330 — Lab Sample ID: 460-133539-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride - DL	27	F1	1.2	0.31	mg/L	10		9056A	Total/NA
Sulfate - DL	56	F1	6.0	1.3	mg/L	10		9056A	Total/NA
Barium	37	J	200	8.6	ug/L	1		6010C	Total/NA
Calcium	36000		5000	350	ug/L	1		6010C	Total/NA
Chromium	7.6	J	10	3.3	ug/L	1		6010C	Total/NA
Iron	1300		150	92	ug/L	1		6010C	Total/NA
Magnesium	9200		5000	310	ug/L	1		6010C	Total/NA
Manganese	40		15	3.1	ug/L	1		6010C	Total/NA
Potassium	16000		5000	170	ug/L	1		6010C	Total/NA
Sodium	14000		5000	410	ug/L	1		6010C	Total/NA
Cyanide, Total	0.024		0.010	0.0020	mg/L	1		9012B	Total/NA

Client Sample ID: 0171-051617-1400 — Lab Sample ID: 460-133539-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	170	J	1000	43	ug/L	5		6010C	TCLP
pH	8.5	HF			SU	1		9045D	Total/NA
Corrosivity	8.5	HF			SU	1		9045D	Total/NA
Density	2.36		0.0100	0.0100	g/cm3	1		D854	Total/NA
Specific Gravity	2.37		0.0100	0.0100	NONE	1		D854	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: 0171-051617-1330

Lab Sample ID: 460-133539-1

Date Collected: 05/16/17 13:30

Matrix: Water

Date Received: 05/17/17 09:30

Method: 9056A - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**27**	**F1**	1.2	0.31	mg/L			05/28/17 00:23	10
Sulfate	**56**	**F1**	6.0	1.3	mg/L			05/28/17 00:23	10

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	**37**	**J**	200	8.6	ug/L		05/31/17 08:26	05/31/17 14:00	1
Calcium	**36000**		5000	350	ug/L		05/31/17 08:26	05/31/17 14:00	1
Chromium	**7.6**	**J**	10	3.3	ug/L		05/31/17 08:26	05/31/17 14:00	1
Iron	**1300**		150	92	ug/L		05/31/17 08:26	05/31/17 14:00	1
Magnesium	**9200**		5000	310	ug/L		05/31/17 08:26	05/31/17 14:00	1
Manganese	**40**		15	3.1	ug/L		05/31/17 08:26	05/31/17 14:00	1
Nickel	40	U	40	9.0	ug/L		05/31/17 08:26	05/31/17 14:00	1
Potassium	**16000**		5000	170	ug/L		05/31/17 08:26	05/31/17 14:00	1
Sodium	**14000**		5000	410	ug/L		05/31/17 08:26	05/31/17 14:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.024**		0.010	0.0020	mg/L		05/30/17 07:00	05/30/17 12:32	1

Client Sample ID: 0171-051617-1400

Lab Sample ID: 460-133539-2

Date Collected: 05/16/17 14:00

Matrix: Solid

Date Received: 05/17/17 09:30

Method: 8260B - TCLP Volatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.010	U	0.010	0.0019	mg/L			05/25/17 07:31	10
2-Butanone	0.050	U	0.050	0.022	mg/L			05/25/17 07:31	10
Carbon tetrachloride	0.010	U	0.010	0.0033	mg/L			05/25/17 07:31	10
Chlorobenzene	0.010	U	0.010	0.0024	mg/L			05/25/17 07:31	10
Chloroform	0.010	U	0.010	0.0022	mg/L			05/25/17 07:31	10
1,2-Dichloroethane	0.010	U	0.010	0.0025	mg/L			05/25/17 07:31	10
1,1-Dichloroethene	0.010	U	0.010	0.0034	mg/L			05/25/17 07:31	10
Tetrachloroethene	0.010	U	0.010	0.0036	mg/L			05/25/17 07:31	10
Trichloroethene	0.010	U	0.010	0.0022	mg/L			05/25/17 07:31	10
Vinyl chloride	0.010	U	0.010	0.0020	mg/L			05/25/17 07:31	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Bromofluorobenzene	*93*		*77 - 124*		*05/25/17 07:31*	*10*
Dibromofluoromethane (Surr)	*107*		*72 - 131*		*05/25/17 07:31*	*10*
1,2-Dichloroethane-d4 (Surr)	*117*		*74 - 132*		*05/25/17 07:31*	*10*
Toluene-d8 (Surr)	*96*		*80 - 120*		*05/25/17 07:31*	*10*

Method: 8270C - TCLP Semivolatiles - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3 & 4 Methylphenol	0.010	U	0.010	0.00088	mg/L		05/19/17 10:34	05/26/17 13:28	1
Phenol	0.010	U	0.010	0.00041	mg/L		05/19/17 10:34	05/26/17 13:28	1
Pyridine	0.010	U	0.010	0.00094	mg/L		05/19/17 10:34	05/26/17 13:28	1
1,4-Dichlorobenzene	0.010	U	0.010	0.00066	mg/L		05/19/17 10:34	05/26/17 13:28	1
2-Methylphenol	0.010	U	0.010	0.0013	mg/L		05/19/17 10:34	05/26/17 13:28	1
Hexachloroethane	0.0010	U *	0.0010	0.000090	mg/L		05/19/17 10:34	05/26/17 13:28	1

Client Sample ID: 0171-051617-1400
Date Collected: 05/16/17 14:00
Date Received: 05/17/17 09:30

Lab Sample ID: 460-133539-2
Matrix: Solid

Method: 8270C - TCLP Semivolatiles - TCLP (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methylphenol	0.010	U	0.010	0.00087	mg/L		05/19/17 10:34	05/26/17 13:28	1
Nitrobenzene	0.0010	U	0.0010	0.00049	mg/L		05/19/17 10:34	05/26/17 13:28	1
Hexachlorobutadiene	0.0020	U	0.0020	0.00076	mg/L		05/19/17 10:34	05/26/17 13:28	1
2,4,6-Trichlorophenol	0.010	U	0.010	0.00053	mg/L		05/19/17 10:34	05/26/17 13:28	1
2,4,5-Trichlorophenol	0.010	U	0.010	0.00049	mg/L		05/19/17 10:34	05/26/17 13:28	1
2,4-Dinitrotoluene	0.0020	U	0.0020	0.0010	mg/L		05/19/17 10:34	05/26/17 13:28	1
Hexachlorobenzene	0.0010	U	0.0010	0.00047	mg/L		05/19/17 10:34	05/26/17 13:28	1
Pentachlorophenol	0.030	U	0.030	0.0022	mg/L		05/19/17 10:34	05/26/17 13:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*100*		*51 - 108*	*05/19/17 10:34*	*05/26/17 13:28*	*1*
Phenol-d5	*23*		*14 - 39*	*05/19/17 10:34*	*05/26/17 13:28*	*1*
Terphenyl-d14	*90*		*40 - 148*	*05/19/17 10:34*	*05/26/17 13:28*	*1*
2,4,6-Tribromophenol	*96*		*26 - 139*	*05/19/17 10:34*	*05/26/17 13:28*	*1*
2-Fluorophenol	*38*		*25 - 58*	*05/19/17 10:34*	*05/26/17 13:28*	*1*
2-Fluorobiphenyl	*98*		*45 - 107*	*05/19/17 10:34*	*05/26/17 13:28*	*1*

Method: 6010C - TCLP Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	50	U	50	9.0	ug/L		05/19/17 22:40	05/20/17 21:15	5
Arsenic	75	U	75	22	ug/L		05/19/17 22:40	05/20/17 21:15	5
Barium	**170**	**J**	1000	43	ug/L		05/19/17 22:40	05/20/17 21:15	5
Cadmium	20	U	20	9.2	ug/L		05/19/17 22:40	05/20/17 21:15	5
Chromium	50	U	50	17	ug/L		05/19/17 22:40	05/23/17 11:06	5
Lead	50	U	50	20	ug/L		05/19/17 22:40	05/20/17 21:15	5
Selenium	100	U	100	22	ug/L		05/19/17 22:40	05/20/17 21:15	5

Method: 7470A - TCLP Mercury - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.17	ug/L		05/23/17 11:34	05/23/17 15:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Burn Rate	2.20	U	2.20	2.20	mm/sec			05/30/17 15:46	1
Cyanide, Total	0.10	U F2 F1	0.10	0.027	mg/Kg		05/30/17 07:00	05/30/17 12:12	1
Sulfide	8.7	U F1	8.7	3.4	mg/Kg		05/21/17 11:00	05/21/17 16:00	1
pH	**8.5**	**HF**			SU			05/30/17 13:51	1
Corrosivity	**8.5**	**HF**			SU			05/30/17 13:51	1

Method: D854 - Specific Gravity

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Density	**2.36**		0.0100	0.0100	g/cm3			05/20/17 00:00	1
Specific Gravity	**2.37**		0.0100	0.0100	NONE			05/20/17 00:00	1

Surrogate Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer - Elyria, Ohio

TestAmerica Job ID: 460-133539-1

Method: 8260B - TCLP Volatiles

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(77-124)	(72-131)	(74-132)	(80-120)
LCS 460-439167/3	Lab Control Sample	97	102	112	100
LCS 460-439597/4	Lab Control Sample	96	94	103	95
LCSD 460-439167/4	Lab Control Sample Dup	96	99	107	97
LCSD 460-439597/5	Lab Control Sample Dup	97	94	100	98
MB 460-439167/6	Method Blank	92	102	109	95
MB 460-439597/8	Method Blank	91	93	104	98

Surrogate Legend

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

Method: 8260B - TCLP Volatiles

Matrix: Solid — **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(77-124)	(72-131)	(74-132)	(80-120)
460-133539-2	0171-051617-1400	93	107	117	96
LB 460-437906/1-A	Method Blank	93	99	107	98

Surrogate Legend

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

Method: 8270C - TCLP Semivolatiles

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

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	PHL	TPH	TBP	2FP	FBP
Lab Sample ID	Client Sample ID	(51-108)	(14-39)	(40-148)	(26-139)	(25-58)	(45-107)
LCS 460-438125/2-A	Lab Control Sample	92	25	94	118	43	97
LCSD 460-438125/3-A	Lab Control Sample Dup	84	29	105	111	46	89
MB 460-438125/1-A	Method Blank	96	26	89	113	42	92

Surrogate Legend

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

Surrogate Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer - Elyria, Ohio

TestAmerica Job ID: 460-133539-1

Method: 8270C - TCLP Semivolatiles

Matrix: Solid **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)							
		NBZ	PHL	TPH	TBP	2FP	FBP		
Lab Sample ID	Client Sample ID	(51-108)	(14-39)	(40-148)	(26-139)	(25-58)	(45-107)		
460-133539-2	0171-051617-1400	100	23	90	96	38	98		
LB 460-437940/1-B	Method Blank	101	29	98	109	48	98		

Surrogate Legend

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

Method: 8260B - TCLP Volatiles

Lab Sample ID: MB 460-439167/6
Matrix: Solid
Analysis Batch: 439167

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0010	U	0.0010	0.00019	mg/L			05/24/17 22:45	1
2-Butanone	0.0050	U	0.0050	0.0022	mg/L			05/24/17 22:45	1
Carbon tetrachloride	0.0010	U	0.0010	0.00033	mg/L			05/24/17 22:45	1
Chlorobenzene	0.0010	U	0.0010	0.00024	mg/L			05/24/17 22:45	1
Chloroform	0.0010	U	0.0010	0.00022	mg/L			05/24/17 22:45	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00025	mg/L			05/24/17 22:45	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00034	mg/L			05/24/17 22:45	1
Tetrachloroethene	0.0010	U	0.0010	0.00036	mg/L			05/24/17 22:45	1
Trichloroethene	0.0010	U	0.0010	0.00022	mg/L			05/24/17 22:45	1
Vinyl chloride	0.0010	U	0.0010	0.00020	mg/L			05/24/17 22:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Bromofluorobenzene	*92*		*77 - 124*		*05/24/17 22:45*	*1*
Dibromofluoromethane (Surr)	*102*		*72 - 131*		*05/24/17 22:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*74 - 132*		*05/24/17 22:45*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*05/24/17 22:45*	*1*

Lab Sample ID: LCS 460-439167/3
Matrix: Solid
Analysis Batch: 439167

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0200	0.0230		mg/L		115	77 - 121
2-Butanone	0.100	0.0955		mg/L		95	64 - 120
Carbon tetrachloride	0.0200	0.0219		mg/L		110	70 - 132
Chlorobenzene	0.0200	0.0201		mg/L		100	80 - 120
Chloroform	0.0200	0.0228		mg/L		114	80 - 120
1,2-Dichloroethane	0.0200	0.0224		mg/L		112	76 - 121
1,1-Dichloroethene	0.0200	0.0228		mg/L		114	74 - 123
Tetrachloroethene	0.0200	0.0209		mg/L		104	78 - 122
Trichloroethene	0.0200	0.0191		mg/L		96	77 - 120
Vinyl chloride	0.0200	0.0225		mg/L		112	62 - 138

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Bromofluorobenzene	*97*		*77 - 124*
Dibromofluoromethane (Surr)	*102*		*72 - 131*
1,2-Dichloroethane-d4 (Surr)	*112*		*74 - 132*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCSD 460-439167/4
Matrix: Solid
Analysis Batch: 439167

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	0.0200	0.0215		mg/L		108	77 - 121	7	30
2-Butanone	0.100	0.101		mg/L		101	64 - 120	5	30
Carbon tetrachloride	0.0200	0.0218		mg/L		109	70 - 132	1	30

Method: 8260B - TCLP Volatiles (Continued)

Lab Sample ID: LCSD 460-439167/4
Matrix: Solid
Analysis Batch: 439167

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene			0.0200	0.0197		mg/L		98	80 - 120	2	30
Chloroform			0.0200	0.0220		mg/L		110	80 - 120	3	30
1,2-Dichloroethane			0.0200	0.0224		mg/L		112	76 - 121	0	30
1,1-Dichloroethene			0.0200	0.0215		mg/L		107	74 - 123	6	30
Tetrachloroethene			0.0200	0.0194		mg/L		97	78 - 122	7	30
Trichloroethene			0.0200	0.0186		mg/L		93	77 - 120	3	30
Vinyl chloride			0.0200	0.0202		mg/L		101	62 - 138	11	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Bromofluorobenzene	*96*		*77 - 124*
Dibromofluoromethane (Surr)	*99*		*72 - 131*
1,2-Dichloroethane-d4 (Surr)	*107*		*74 - 132*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: MB 460-439597/8
Matrix: Solid
Analysis Batch: 439597

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.0010	U	0.0010	0.00019	mg/L			05/19/17 10:47	1
2-Butanone	0.0050	U	0.0050	0.0022	mg/L			05/19/17 10:47	1
Carbon tetrachloride	0.0010	U	0.0010	0.00033	mg/L			05/19/17 10:47	1
Chlorobenzene	0.0010	U	0.0010	0.00024	mg/L			05/19/17 10:47	1
Chloroform	0.0010	U	0.0010	0.00022	mg/L			05/19/17 10:47	1
1,2-Dichloroethane	0.0010	U	0.0010	0.00025	mg/L			05/19/17 10:47	1
1,1-Dichloroethene	0.0010	U	0.0010	0.00034	mg/L			05/19/17 10:47	1
Tetrachloroethene	0.0010	U	0.0010	0.00036	mg/L			05/19/17 10:47	1
Trichloroethene	0.0010	U	0.0010	0.00022	mg/L			05/19/17 10:47	1
Vinyl chloride	0.0010	U	0.0010	0.00020	mg/L			05/19/17 10:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Bromofluorobenzene	*91*		*77 - 124*		*05/19/17 10:47*	*1*
Dibromofluoromethane (Surr)	*93*		*72 - 131*		*05/19/17 10:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*		*05/19/17 10:47*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/19/17 10:47*	*1*

Lab Sample ID: LCS 460-439597/4
Matrix: Solid
Analysis Batch: 439597

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene			0.0200	0.0210		mg/L		105	77 - 121
2-Butanone			0.100	0.0807		mg/L		81	64 - 120
Carbon tetrachloride			0.0200	0.0215		mg/L		108	70 - 132
Chlorobenzene			0.0200	0.0200		mg/L		100	80 - 120
Chloroform			0.0200	0.0211		mg/L		106	80 - 120
1,2-Dichloroethane			0.0200	0.0218		mg/L		109	76 - 121
1,1-Dichloroethene			0.0200	0.0205		mg/L		103	74 - 123

Method: 8260B - TCLP Volatiles (Continued)

Lab Sample ID: LCS 460-439597/4
Matrix: Solid
Analysis Batch: 439597

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Tetrachloroethene			0.0200	0.0192		mg/L		96	78 - 122		
Trichloroethene			0.0200	0.0174		mg/L		87	77 - 120		
Vinyl chloride			0.0200	0.0241		mg/L		120	62 - 138		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Bromofluorobenzene	*96*		*77 - 124*
Dibromofluoromethane (Surr)	*94*		*72 - 131*
1,2-Dichloroethane-d4 (Surr)	*103*		*74 - 132*
Toluene-d8 (Surr)	*95*		*80 - 120*

Lab Sample ID: LCSD 460-439597/5
Matrix: Solid
Analysis Batch: 439597

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene			0.0200	0.0215		mg/L		108	77 - 121	2	30
2-Butanone			0.100	0.0834		mg/L		83	64 - 120	3	30
Carbon tetrachloride			0.0200	0.0206		mg/L		103	70 - 132	5	30
Chlorobenzene			0.0200	0.0197		mg/L		99	80 - 120	2	30
Chloroform			0.0200	0.0207		mg/L		103	80 - 120	2	30
1,2-Dichloroethane			0.0200	0.0212		mg/L		106	76 - 121	2	30
1,1-Dichloroethene			0.0200	0.0198		mg/L		99	74 - 123	4	30
Tetrachloroethene			0.0200	0.0201		mg/L		101	78 - 122	5	30
Trichloroethene			0.0200	0.0182		mg/L		91	77 - 120	4	30
Vinyl chloride			0.0200	0.0252		mg/L		126	62 - 138	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Bromofluorobenzene	*97*		*77 - 124*
Dibromofluoromethane (Surr)	*94*		*72 - 131*
1,2-Dichloroethane-d4 (Surr)	*100*		*74 - 132*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: LB 460-437906/1-A
Matrix: Solid
Analysis Batch: 439597

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.010	U	0.010	0.0019	mg/L			05/19/17 11:40	10
2-Butanone	0.050	U	0.050	0.022	mg/L			05/19/17 11:40	10
Carbon tetrachloride	0.010	U	0.010	0.0033	mg/L			05/19/17 11:40	10
Chlorobenzene	0.010	U	0.010	0.0024	mg/L			05/19/17 11:40	10
Chloroform	0.010	U	0.010	0.0022	mg/L			05/19/17 11:40	10
1,2-Dichloroethane	0.010	U	0.010	0.0025	mg/L			05/19/17 11:40	10
1,1-Dichloroethene	0.010	U	0.010	0.0034	mg/L			05/19/17 11:40	10
Tetrachloroethene	0.010	U	0.010	0.0036	mg/L			05/19/17 11:40	10
Trichloroethene	0.010	U	0.010	0.0022	mg/L			05/19/17 11:40	10
Vinyl chloride	0.010	U	0.010	0.0020	mg/L			05/19/17 11:40	10

Method: 8260B - TCLP Volatiles (Continued)

Lab Sample ID: LB 460-437906/1-A
Matrix: Solid
Analysis Batch: 439597

Client Sample ID: Method Blank
Prep Type: TCLP

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Bromofluorobenzene	*93*		*77 - 124*		*05/19/17 11:40*	*10*
Dibromofluoromethane (Surr)	*99*		*72 - 131*		*05/19/17 11:40*	*10*
1,2-Dichloroethane-d4 (Surr)	*107*		*74 - 132*		*05/19/17 11:40*	*10*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/19/17 11:40*	*10*

Method: 8270C - TCLP Semivolatiles

Lab Sample ID: MB 460-438125/1-A
Matrix: Solid
Analysis Batch: 438659

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 438125

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3 & 4 Methylphenol	0.010	U	0.010	0.00088	mg/L		05/19/17 10:34	05/23/17 10:33	1
Phenol	0.010	U	0.010	0.00041	mg/L		05/19/17 10:34	05/23/17 10:33	1
Pyridine	0.010	U	0.010	0.00094	mg/L		05/19/17 10:34	05/23/17 10:33	1
1,4-Dichlorobenzene	0.010	U	0.010	0.00066	mg/L		05/19/17 10:34	05/23/17 10:33	1
2-Methylphenol	0.010	U	0.010	0.0013	mg/L		05/19/17 10:34	05/23/17 10:33	1
Hexachloroethane	0.0010	U	0.0010	0.000090	mg/L		05/19/17 10:34	05/23/17 10:33	1
4-Methylphenol	0.010	U	0.010	0.00087	mg/L		05/19/17 10:34	05/23/17 10:33	1
Nitrobenzene	0.0010	U	0.0010	0.00049	mg/L		05/19/17 10:34	05/23/17 10:33	1
Hexachlorobutadiene	0.0020	U	0.0020	0.00076	mg/L		05/19/17 10:34	05/23/17 10:33	1
2,4,6-Trichlorophenol	0.010	U	0.010	0.00053	mg/L		05/19/17 10:34	05/23/17 10:33	1
2,4,5-Trichlorophenol	0.010	U	0.010	0.00049	mg/L		05/19/17 10:34	05/23/17 10:33	1
2,4-Dinitrotoluene	0.0020	U	0.0020	0.0010	mg/L		05/19/17 10:34	05/23/17 10:33	1
Hexachlorobenzene	0.0010	U	0.0010	0.00047	mg/L		05/19/17 10:34	05/23/17 10:33	1
Pentachlorophenol	0.030	U	0.030	0.0022	mg/L		05/19/17 10:34	05/23/17 10:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	*96*		*51 - 108*	*05/19/17 10:34*	*05/23/17 10:33*	*1*
Phenol-d5	*26*		*14 - 39*	*05/19/17 10:34*	*05/23/17 10:33*	*1*
Terphenyl-d14	*89*		*40 - 148*	*05/19/17 10:34*	*05/23/17 10:33*	*1*
2,4,6-Tribromophenol	*113*		*26 - 139*	*05/19/17 10:34*	*05/23/17 10:33*	*1*
2-Fluorophenol	*42*		*25 - 58*	*05/19/17 10:34*	*05/23/17 10:33*	*1*
2-Fluorobiphenyl	*92*		*45 - 107*	*05/19/17 10:34*	*05/23/17 10:33*	*1*

Lab Sample ID: LCS 460-438125/2-A
Matrix: Solid
Analysis Batch: 438659

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 438125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	0.0800	0.0266		mg/L		33	16 - 43
Pyridine	0.160	0.0787		mg/L		49	16 - 70
1,4-Dichlorobenzene	0.0800	0.0730		mg/L		91	42 - 94
2-Methylphenol	0.0800	0.0470		mg/L		59	43 - 80
Hexachloroethane	0.0800	0.0760	*	mg/L		95	39 - 92
4-Methylphenol	0.0800	0.0430		mg/L		54	34 - 78
Nitrobenzene	0.0800	0.0707		mg/L		88	56 - 106

Method: 8270C - TCLP Semivolatiles (Continued)

Lab Sample ID: LCS 460-438125/2-A
Matrix: Solid
Analysis Batch: 438659

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 438125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexachlorobutadiene	0.0800	0.0770		mg/L		96	34 - 99
2,4,6-Trichlorophenol	0.0800	0.0770		mg/L		96	62 - 120
2,4,5-Trichlorophenol	0.0800	0.0753		mg/L		94	59 - 117
2,4-Dinitrotoluene	0.0800	0.0985		mg/L		123	70 - 123
Hexachlorobenzene	0.0800	0.0817		mg/L		102	63 - 125
Pentachlorophenol	0.160	0.150		mg/L		94	54 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5	*92*		*51 - 108*
Phenol-d5	*25*		*14 - 39*
Terphenyl-d14	*94*		*40 - 148*
2,4,6-Tribromophenol	*118*		*26 - 139*
2-Fluorophenol	*43*		*25 - 58*
2-Fluorobiphenyl	*97*		*45 - 107*

Lab Sample ID: LCSD 460-438125/3-A
Matrix: Solid
Analysis Batch: 438659

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 438125

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	0.0800	0.0290		mg/L		36	16 - 43	9	30
Pyridine	0.160	0.0814		mg/L		51	16 - 70	3	30
1,4-Dichlorobenzene	0.0800	0.0722		mg/L		90	42 - 94	1	30
2-Methylphenol	0.0800	0.0498		mg/L		62	43 - 80	6	30
Hexachloroethane	0.0800	0.0778	*	mg/L		97	39 - 92	2	30
4-Methylphenol	0.0800	0.0485		mg/L		61	34 - 78	12	30
Nitrobenzene	0.0800	0.0630		mg/L		79	56 - 106	12	30
Hexachlorobutadiene	0.0800	0.0718		mg/L		90	34 - 99	7	30
2,4,6-Trichlorophenol	0.0800	0.0713		mg/L		89	62 - 120	8	30
2,4,5-Trichlorophenol	0.0800	0.0730		mg/L		91	59 - 117	3	30
2,4-Dinitrotoluene	0.0800	0.0899		mg/L		112	70 - 123	9	30
Hexachlorobenzene	0.0800	0.0809		mg/L		101	63 - 125	1	30
Pentachlorophenol	0.160	0.151		mg/L		94	54 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Nitrobenzene-d5	*84*		*51 - 108*
Phenol-d5	*29*		*14 - 39*
Terphenyl-d14	*105*		*40 - 148*
2,4,6-Tribromophenol	*111*		*26 - 139*
2-Fluorophenol	*46*		*25 - 58*
2-Fluorobiphenyl	*89*		*45 - 107*

Lab Sample ID: LB 460-437940/1-B
Matrix: Solid
Analysis Batch: 438659

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 438125

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3 & 4 Methylphenol	0.010	U	0.010	0.00088	mg/L		05/19/17 10:34	05/23/17 11:39	1

Method: 8270C - TCLP Semivolatiles (Continued)

Lab Sample ID: LB 460-437940/1-B
Matrix: Solid
Analysis Batch: 438659

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 438125

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	0.010	U	0.010	0.00041	mg/L		05/19/17 10:34	05/23/17 11:39	1
Pyridine	0.010	U	0.010	0.00094	mg/L		05/19/17 10:34	05/23/17 11:39	1
1,4-Dichlorobenzene	0.010	U	0.010	0.00066	mg/L		05/19/17 10:34	05/23/17 11:39	1
2-Methylphenol	0.010	U	0.010	0.0013	mg/L		05/19/17 10:34	05/23/17 11:39	1
Hexachloroethane	0.0010	U	0.0010	0.000090	mg/L		05/19/17 10:34	05/23/17 11:39	1
4-Methylphenol	0.010	U	0.010	0.00087	mg/L		05/19/17 10:34	05/23/17 11:39	1
Nitrobenzene	0.0010	U	0.0010	0.00049	mg/L		05/19/17 10:34	05/23/17 11:39	1
Hexachlorobutadiene	0.0020	U	0.0020	0.00076	mg/L		05/19/17 10:34	05/23/17 11:39	1
2,4,6-Trichlorophenol	0.010	U	0.010	0.00053	mg/L		05/19/17 10:34	05/23/17 11:39	1
2,4,5-Trichlorophenol	0.010	U	0.010	0.00049	mg/L		05/19/17 10:34	05/23/17 11:39	1
2,4-Dinitrotoluene	0.0020	U	0.0020	0.0010	mg/L		05/19/17 10:34	05/23/17 11:39	1
Hexachlorobenzene	0.0010	U	0.0010	0.00047	mg/L		05/19/17 10:34	05/23/17 11:39	1
Pentachlorophenol	0.030	U	0.030	0.0022	mg/L		05/19/17 10:34	05/23/17 11:39	1

Surrogate	*LB %Recovery*	*LB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5	*101*		*51 - 108*	*05/19/17 10:34*	*05/23/17 11:39*	*1*
Phenol-d5	*29*		*14 - 39*	*05/19/17 10:34*	*05/23/17 11:39*	*1*
Terphenyl-d14	*98*		*40 - 148*	*05/19/17 10:34*	*05/23/17 11:39*	*1*
2,4,6-Tribromophenol	*109*		*26 - 139*	*05/19/17 10:34*	*05/23/17 11:39*	*1*
2-Fluorophenol	*48*		*25 - 58*	*05/19/17 10:34*	*05/23/17 11:39*	*1*
2-Fluorobiphenyl	*98*		*45 - 107*	*05/19/17 10:34*	*05/23/17 11:39*	*1*

Method: 9056A - Anions, Ion Chromatography

Lab Sample ID: MB 460-439827/3
Matrix: Water
Analysis Batch: 439827

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.12	U	0.12	0.031	mg/L			05/27/17 13:01	1
Sulfate	0.60	U	0.60	0.13	mg/L			05/27/17 13:01	1

Lab Sample ID: LCS 460-439827/5
Matrix: Water
Analysis Batch: 439827

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.50	1.48		mg/L		98	90 - 110
Sulfate	7.50	6.92		mg/L		92	90 - 110

Lab Sample ID: LCSD 460-439827/6
Matrix: Water
Analysis Batch: 439827

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.50	1.40		mg/L		94	90 - 110	5	15
Sulfate	7.50	6.77		mg/L		90	90 - 110	2	15

Method: 9056A - Anions, Ion Chromatography - DL

Lab Sample ID: 460-133539-1 MS
Matrix: Water
Analysis Batch: 439827

Client Sample ID: 0171-051617-1330
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL	27	F1	15.0	45.6	F1	mg/L		122	90 - 110
Sulfate - DL	56	F1	75.0	141	F1	mg/L		113	90 - 110

Lab Sample ID: 460-133539-1 MSD
Matrix: Water
Analysis Batch: 439827

Client Sample ID: 0171-051617-1330
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride - DL	27	F1	15.0	45.8	F1	mg/L		123	90 - 110	0	15
Sulfate - DL	56	F1	75.0	145	F1	mg/L		118	90 - 110	2	15

Lab Sample ID: 460-133539-1 DU
Matrix: Water
Analysis Batch: 439827

Client Sample ID: 0171-051617-1330
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL	27	F1	26.3		mg/L		4	15
Sulfate - DL	56	F1	55.7		mg/L		1	15

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 460-440312/1-A
Matrix: Water
Analysis Batch: 440371

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 440312

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	5000	U	5000	350	ug/L		05/31/17 08:26	05/31/17 13:32	1
Barium	200	U	200	8.6	ug/L		05/31/17 08:26	05/31/17 13:32	1
Iron	150	U	150	92	ug/L		05/31/17 08:26	05/31/17 13:32	1
Chromium	10	U	10	3.3	ug/L		05/31/17 08:26	05/31/17 13:32	1
Magnesium	5000	U	5000	310	ug/L		05/31/17 08:26	05/31/17 13:32	1
Manganese	15	U	15	3.1	ug/L		05/31/17 08:26	05/31/17 13:32	1
Nickel	40	U	40	9.0	ug/L		05/31/17 08:26	05/31/17 13:32	1
Potassium	5000	U	5000	170	ug/L		05/31/17 08:26	05/31/17 13:32	1
Sodium	5000	U	5000	410	ug/L		05/31/17 08:26	05/31/17 13:32	1

Lab Sample ID: LCS 460-440312/2-A
Matrix: Water
Analysis Batch: 440371

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 440312

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	20000	20000		ug/L		100	80 - 120
Barium	2000	2080		ug/L		104	80 - 120
Iron	1000	1020		ug/L		102	80 - 120
Chromium	200	206		ug/L		103	80 - 120
Magnesium	20000	19900		ug/L		100	80 - 120
Manganese	500	522		ug/L		104	80 - 120
Nickel	500	529		ug/L		106	80 - 120
Potassium	20000	18900		ug/L		95	80 - 120

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

Lab Sample ID: LCS 460-440312/2-A
Matrix: Water
Analysis Batch: 440371

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 440312

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	20000	19400		ug/L		97	80 - 120

Method: 6010C - TCLP Metals (ICP)

Lab Sample ID: MB 460-438275/1-A
Matrix: Solid
Analysis Batch: 438310

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 438275

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	10	U	10	1.8	ug/L		05/19/17 22:40	05/20/17 20:07	1
Arsenic	15	U	15	4.4	ug/L		05/19/17 22:40	05/20/17 20:07	1
Barium	200	U	200	8.6	ug/L		05/19/17 22:40	05/20/17 20:07	1
Cadmium	4.0	U	4.0	1.8	ug/L		05/19/17 22:40	05/20/17 20:07	1
Lead	10	U	10	4.1	ug/L		05/19/17 22:40	05/20/17 20:07	1
Selenium	20	U	20	4.4	ug/L		05/19/17 22:40	05/20/17 20:07	1

Lab Sample ID: MB 460-438275/1-A
Matrix: Solid
Analysis Batch: 438449

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 438275

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	10	U	10	3.3	ug/L		05/19/17 22:40	05/21/17 14:48	1

Lab Sample ID: LCS 460-438275/2-A ^2
Matrix: Solid
Analysis Batch: 438310

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 438275

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Silver	500	434		ug/L		87	80 - 120
Arsenic	5000	4710		ug/L		94	80 - 120
Barium	10000	10000		ug/L		100	80 - 120
Cadmium	1000	1030		ug/L		103	80 - 120
Lead	5000	5310		ug/L		106	80 - 120
Selenium	1000	922		ug/L		92	80 - 120

Lab Sample ID: LCS 460-438275/2-A ^2
Matrix: Solid
Analysis Batch: 438449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 438275

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	5000	5940		ug/L		119	80 - 120

Lab Sample ID: LB 460-437940/1-E ^5
Matrix: Solid
Analysis Batch: 438310

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 438275

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	50	U	50	9.0	ug/L		05/19/17 22:40	05/20/17 21:28	5
Arsenic	75	U	75	22	ug/L		05/19/17 22:40	05/20/17 21:28	5

Method: 6010C - TCLP Metals (ICP) (Continued)

Lab Sample ID: LB 460-437940/1-E ^5
Matrix: Solid
Analysis Batch: 438310

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 438275

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	1000	U	1000	43	ug/L		05/19/17 22:40	05/20/17 21:28	5
Cadmium	20	U	20	9.2	ug/L		05/19/17 22:40	05/20/17 21:28	5
Lead	50	U	50	20	ug/L		05/19/17 22:40	05/20/17 21:28	5
Selenium	100	U	100	22	ug/L		05/19/17 22:40	05/20/17 21:28	5

Lab Sample ID: LB 460-437940/1-E ^5
Matrix: Solid
Analysis Batch: 438449

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 438275

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	50	U	50	17	ug/L		05/19/17 22:40	05/21/17 15:52	5

Lab Sample ID: LB 460-438149/1-B ^5
Matrix: Solid
Analysis Batch: 438310

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 438275

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	50	U	50	9.0	ug/L		05/19/17 22:40	05/20/17 21:32	5
Arsenic	75	U	75	22	ug/L		05/19/17 22:40	05/20/17 21:32	5
Barium	1000	U	1000	43	ug/L		05/19/17 22:40	05/20/17 21:32	5
Cadmium	20	U	20	9.2	ug/L		05/19/17 22:40	05/20/17 21:32	5
Lead	27.3	J	50	20	ug/L		05/19/17 22:40	05/20/17 21:32	5
Selenium	100	U	100	22	ug/L		05/19/17 22:40	05/20/17 21:32	5

Lab Sample ID: LB 460-438149/1-B ^5
Matrix: Solid
Analysis Batch: 438449

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 438275

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	50	U	50	17	ug/L		05/19/17 22:40	05/21/17 15:56	5

Method: 7470A - TCLP Mercury

Lab Sample ID: MB 460-438549/1-A
Matrix: Solid
Analysis Batch: 438632

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 438549

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.17	ug/L		05/22/17 10:59	05/22/17 13:56	1

Lab Sample ID: LCS 460-438549/2-A
Matrix: Solid
Analysis Batch: 438632

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 438549

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.76		ug/L		95	80 - 120

Method: 7470A - TCLP Mercury (Continued)

Lab Sample ID: MB 460-438789/1-A
Matrix: Solid
Analysis Batch: 438858

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 438789

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.17	ug/L		05/23/17 11:34	05/23/17 15:07	1

Lab Sample ID: LCS 460-438789/2-A
Matrix: Solid
Analysis Batch: 438858

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 438789

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.04		ug/L		101	80 - 120

Lab Sample ID: LB 460-437940/1-F
Matrix: Solid
Analysis Batch: 438632

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 438549

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.17	ug/L		05/22/17 10:59	05/22/17 14:50	1

Lab Sample ID: LB 460-438172/1-E
Matrix: Solid
Analysis Batch: 438632

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 438549

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20	U	0.20	0.17	ug/L		05/22/17 10:59	05/22/17 14:52	1

Method: 9012B - Cyanide, Total andor Amenable

Lab Sample ID: MB 460-440062/1-A
Matrix: Solid
Analysis Batch: 440110

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 440062

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.10	U	0.10	0.027	mg/Kg		05/30/17 07:00	05/30/17 12:08	1

Lab Sample ID: HLCS 460-440062/3-A
Matrix: Solid
Analysis Batch: 440110

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 440062

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	2.00	1.98		mg/Kg		99	90 - 110

Lab Sample ID: LCSSRM 460-440062/4-A ^40
Matrix: Solid
Analysis Batch: 440110

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 440062

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	159	92.4		mg/Kg		58.1	41.1 - 142.8

Method: 9012B - Cyanide, Total andor Amenable (Continued)

Lab Sample ID: LLCS 460-440062/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 440110 — **Prep Batch: 440062**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	1.00	1.05		mg/Kg		105	90 - 110

Lab Sample ID: 460-133539-2 MS — **Client Sample ID: 0171-051617-1400**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 440110 — **Prep Batch: 440062**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.10	U F2 F1	2.00	0.268	F1	mg/Kg		13	47 - 118

Lab Sample ID: 460-133539-2 MSD — **Client Sample ID: 0171-051617-1400**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 440110 — **Prep Batch: 440062**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.10	U F2 F1	2.00	0.0373	J F1 F2	mg/Kg		2	47 - 118	151	35

Lab Sample ID: MB 460-440072/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 440110 — **Prep Batch: 440072**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.010	U	0.010	0.0020	mg/L		05/30/17 07:00	05/30/17 12:26	1

Lab Sample ID: HLCS 460-440072/3-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 440110 — **Prep Batch: 440072**

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.200	0.207		mg/L		104	90 - 110

Lab Sample ID: LLCS 460-440072/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 440110 — **Prep Batch: 440072**

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.100	0.103		mg/L		103	90 - 110

Lab Sample ID: 460-133539-1 MS — **Client Sample ID: 0171-051617-1330**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 440110 — **Prep Batch: 440072**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Total	0.024		0.200	0.242		mg/L		109	90 - 110

Lab Sample ID: 460-133539-1 MSD — **Client Sample ID: 0171-051617-1330**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 440110 — **Prep Batch: 440072**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Cyanide, Total	0.024		0.200	0.233		mg/L		105	90 - 110	4	10

Method: 9034 - Sulfide, Acid Soluble and Insoluble (Titrimetric)

Lab Sample ID: MB 460-438815/1-A
Matrix: Solid
Analysis Batch: 438817

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 438815

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	8.7	U	8.7	3.4	mg/Kg		05/21/17 11:00	05/21/17 16:00	1

Lab Sample ID: LCS 460-438815/3-A
Matrix: Solid
Analysis Batch: 438817

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 438815

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	75.2	55.6		mg/Kg		74	70 - 130

Lab Sample ID: 460-133539-2 MS
Matrix: Solid
Analysis Batch: 438817

Client Sample ID: 0171-051617-1400
Prep Type: Total/NA
Prep Batch: 438815

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	8.7	U F1	55.6	35.4	F1	mg/Kg		64	70 - 130

Lab Sample ID: 460-133539-2 MSD
Matrix: Solid
Analysis Batch: 438817

Client Sample ID: 0171-051617-1400
Prep Type: Total/NA
Prep Batch: 438815

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfide	8.7	U F1	55.6	32.4	F1	mg/Kg		58	70 - 130	9	15

Method: 9045D - Corrosivity as pH

Lab Sample ID: MB 460-440139/2
Matrix: Solid
Analysis Batch: 440139

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	5.9				SU			05/30/17 13:47	1
Corrosivity	5.9				SU			05/30/17 13:47	1

Lab Sample ID: LCSSRM 460-440139/3
Matrix: Solid
Analysis Batch: 440139

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.50	7.5		SU		99.7	97.3 - 102.7
Corrosivity	7.50	7.5		SU		99.7	97.3 - 102.7

Method: D854 - Specific Gravity

Lab Sample ID: LCS 140-11445/3
Matrix: Solid
Analysis Batch: 11445

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Density			0.997	0.9971		g/cm3		100	99 - 101		

Lab Sample ID: 460-133539-2 DU
Matrix: Solid
Analysis Batch: 11445

Client Sample ID: 0171-051617-1400
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Density	2.36			2.397		g/cm3				1	10

Lab Sample ID: LCS 140-11481/3
Matrix: Solid
Analysis Batch: 11481

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Specific Gravity			1.00	1.000		NONE		100	99 - 101		

Lab Sample ID: 460-133539-2 DU
Matrix: Solid
Analysis Batch: 11481

Client Sample ID: 0171-051617-1400
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Specific Gravity	2.37			2.404		NONE				1	10

GC/MS VOA

Leach Batch: 437906

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-2	0171-051617-1400	TCLP	Solid	1311	
LB 460-437906/1-A	Method Blank	TCLP	Solid	1311	

Analysis Batch: 439167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-2	0171-051617-1400	TCLP	Solid	8260B	437906
MB 460-439167/6	Method Blank	Total/NA	Solid	8260B	
LCS 460-439167/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 460-439167/4	Lab Control Sample Dup	Total/NA	Solid	8260B	

Analysis Batch: 439597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 460-437906/1-A	Method Blank	TCLP	Solid	8260B	437906
MB 460-439597/8	Method Blank	Total/NA	Solid	8260B	
LCS 460-439597/4	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 460-439597/5	Lab Control Sample Dup	Total/NA	Solid	8260B	

GC/MS Semi VOA

Leach Batch: 437940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-2	0171-051617-1400	TCLP	Solid	1311	
LB 460-437940/1-B	Method Blank	TCLP	Solid	1311	

Prep Batch: 438125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-2	0171-051617-1400	TCLP	Solid	3510C	437940
LB 460-437940/1-B	Method Blank	TCLP	Solid	3510C	437940
MB 460-438125/1-A	Method Blank	Total/NA	Solid	3510C	
LCS 460-438125/2-A	Lab Control Sample	Total/NA	Solid	3510C	
LCSD 460-438125/3-A	Lab Control Sample Dup	Total/NA	Solid	3510C	

Analysis Batch: 438659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 460-437940/1-B	Method Blank	TCLP	Solid	8270C	438125
MB 460-438125/1-A	Method Blank	Total/NA	Solid	8270C	438125
LCS 460-438125/2-A	Lab Control Sample	Total/NA	Solid	8270C	438125
LCSD 460-438125/3-A	Lab Control Sample Dup	Total/NA	Solid	8270C	438125

Analysis Batch: 439465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-2	0171-051617-1400	TCLP	Solid	8270C	438125

HPLC/IC

Analysis Batch: 439827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-1 - DL	0171-051617-1330	Total/NA	Water	9056A	
MB 460-439827/3	Method Blank	Total/NA	Water	9056A	
LCS 460-439827/5	Lab Control Sample	Total/NA	Water	9056A	

HPLC/IC (Continued)

Analysis Batch: 439827 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 460-439827/6	Lab Control Sample Dup	Total/NA	Water	9056A	
460-133539-1 MS - DL	0171-051617-1330	Total/NA	Water	9056A	
460-133539-1 MSD - DL	0171-051617-1330	Total/NA	Water	9056A	
460-133539-1 DU - DL	0171-051617-1330	Total/NA	Water	9056A	

Metals

Leach Batch: 437940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-2	0171-051617-1400	TCLP	Solid	1311	
LB 460-437940/1-E ^5	Method Blank	TCLP	Solid	1311	
LB 460-437940/1-F	Method Blank	TCLP	Solid	1311	

Leach Batch: 438149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 460-438149/1-B ^5	Method Blank	TCLP	Solid	1311	

Leach Batch: 438172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 460-438172/1-E	Method Blank	TCLP	Solid	1311	

Prep Batch: 438275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-2	0171-051617-1400	TCLP	Solid	3010A	437940
LB 460-437940/1-E ^5	Method Blank	TCLP	Solid	3010A	437940
LB 460-438149/1-B ^5	Method Blank	TCLP	Solid	3010A	438149
MB 460-438275/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 460-438275/2-A ^2	Lab Control Sample	Total/NA	Solid	3010A	

Analysis Batch: 438310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-2	0171-051617-1400	TCLP	Solid	6010C	438275
LB 460-437940/1-E ^5	Method Blank	TCLP	Solid	6010C	438275
LB 460-438149/1-B ^5	Method Blank	TCLP	Solid	6010C	438275
MB 460-438275/1-A	Method Blank	Total/NA	Solid	6010C	438275
LCS 460-438275/2-A ^2	Lab Control Sample	Total/NA	Solid	6010C	438275

Analysis Batch: 438449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 460-437940/1-E ^5	Method Blank	TCLP	Solid	6010C	438275
LB 460-438149/1-B ^5	Method Blank	TCLP	Solid	6010C	438275
MB 460-438275/1-A	Method Blank	Total/NA	Solid	6010C	438275
LCS 460-438275/2-A ^2	Lab Control Sample	Total/NA	Solid	6010C	438275

Prep Batch: 438549

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 460-437940/1-F	Method Blank	TCLP	Solid	7470A	437940
LB 460-438172/1-E	Method Blank	TCLP	Solid	7470A	438172
MB 460-438549/1-A	Method Blank	Total/NA	Solid	7470A	
LCS 460-438549/2-A	Lab Control Sample	Total/NA	Solid	7470A	

Metals (Continued)

Analysis Batch: 438632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 460-437940/1-F	Method Blank	TCLP	Solid	7470A	438549
LB 460-438172/1-E	Method Blank	TCLP	Solid	7470A	438549
MB 460-438549/1-A	Method Blank	Total/NA	Solid	7470A	438549
LCS 460-438549/2-A	Lab Control Sample	Total/NA	Solid	7470A	438549

Prep Batch: 438789

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-2	0171-051617-1400	TCLP	Solid	7470A	437940
MB 460-438789/1-A	Method Blank	Total/NA	Solid	7470A	
LCS 460-438789/2-A	Lab Control Sample	Total/NA	Solid	7470A	

Analysis Batch: 438790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-2	0171-051617-1400	TCLP	Solid	6010C	438275

Analysis Batch: 438858

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-2	0171-051617-1400	TCLP	Solid	7470A	438789
MB 460-438789/1-A	Method Blank	Total/NA	Solid	7470A	438789
LCS 460-438789/2-A	Lab Control Sample	Total/NA	Solid	7470A	438789

Prep Batch: 440312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-1	0171-051617-1330	Total/NA	Water	3010A	
MB 460-440312/1-A	Method Blank	Total/NA	Water	3010A	
LCS 460-440312/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 440371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-1	0171-051617-1330	Total/NA	Water	6010C	440312
MB 460-440312/1-A	Method Blank	Total/NA	Water	6010C	440312
LCS 460-440312/2-A	Lab Control Sample	Total/NA	Water	6010C	440312

General Chemistry

Prep Batch: 438815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-2	0171-051617-1400	Total/NA	Solid	9030B	
MB 460-438815/1-A	Method Blank	Total/NA	Solid	9030B	
LCS 460-438815/3-A	Lab Control Sample	Total/NA	Solid	9030B	
460-133539-2 MS	0171-051617-1400	Total/NA	Solid	9030B	
460-133539-2 MSD	0171-051617-1400	Total/NA	Solid	9030B	

Analysis Batch: 438817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-2	0171-051617-1400	Total/NA	Solid	9034	438815
MB 460-438815/1-A	Method Blank	Total/NA	Solid	9034	438815
LCS 460-438815/3-A	Lab Control Sample	Total/NA	Solid	9034	438815
460-133539-2 MS	0171-051617-1400	Total/NA	Solid	9034	438815
460-133539-2 MSD	0171-051617-1400	Total/NA	Solid	9034	438815

General Chemistry (Continued)

Prep Batch: 440062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-2	0171-051617-1400	Total/NA	Solid	9012B	
MB 460-440062/1-A	Method Blank	Total/NA	Solid	9012B	
HLCS 460-440062/3-A	Lab Control Sample	Total/NA	Solid	9012B	
LCSSRM 460-440062/4-A ^4	Lab Control Sample	Total/NA	Solid	9012B	
LLCS 460-440062/2-A	Lab Control Sample	Total/NA	Solid	9012B	
460-133539-2 MS	0171-051617-1400	Total/NA	Solid	9012B	
460-133539-2 MSD	0171-051617-1400	Total/NA	Solid	9012B	

Prep Batch: 440072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-1	0171-051617-1330	Total/NA	Water	9012B	
MB 460-440072/1-A	Method Blank	Total/NA	Water	9012B	
HLCS 460-440072/3-A	Lab Control Sample	Total/NA	Water	9012B	
LLCS 460-440072/2-A	Lab Control Sample	Total/NA	Water	9012B	
460-133539-1 MS	0171-051617-1330	Total/NA	Water	9012B	
460-133539-1 MSD	0171-051617-1330	Total/NA	Water	9012B	

Analysis Batch: 440110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-1	0171-051617-1330	Total/NA	Water	9012B	440072
460-133539-2	0171-051617-1400	Total/NA	Solid	9012B	440062
MB 460-440062/1-A	Method Blank	Total/NA	Solid	9012B	440062
MB 460-440072/1-A	Method Blank	Total/NA	Water	9012B	440072
HLCS 460-440062/3-A	Lab Control Sample	Total/NA	Solid	9012B	440062
HLCS 460-440072/3-A	Lab Control Sample	Total/NA	Water	9012B	440072
LCSSRM 460-440062/4-A ^4	Lab Control Sample	Total/NA	Solid	9012B	440062
LLCS 460-440062/2-A	Lab Control Sample	Total/NA	Solid	9012B	440062
LLCS 460-440072/2-A	Lab Control Sample	Total/NA	Water	9012B	440072
460-133539-1 MS	0171-051617-1330	Total/NA	Water	9012B	440072
460-133539-1 MSD	0171-051617-1330	Total/NA	Water	9012B	440072
460-133539-2 MS	0171-051617-1400	Total/NA	Solid	9012B	440062
460-133539-2 MSD	0171-051617-1400	Total/NA	Solid	9012B	440062

Analysis Batch: 440132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-2	0171-051617-1400	Total/NA	Solid	1030	

Analysis Batch: 440139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-2	0171-051617-1400	Total/NA	Solid	9045D	
MB 460-440139/2	Method Blank	Total/NA	Solid	9045D	
LCSSRM 460-440139/3	Lab Control Sample	Total/NA	Solid	9045D	

Geotechnical

Analysis Batch: 11445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-2	0171-051617-1400	Total/NA	Solid	D854	
LCS 140-11445/3	Lab Control Sample	Total/NA	Solid	D854	
460-133539-2 DU	0171-051617-1400	Total/NA	Solid	D854	

Geotechnical (Continued)

Analysis Batch: 11481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-133539-2	0171-051617-1400	Total/NA	Solid	D854	
LCS 140-11481/3	Lab Control Sample	Total/NA	Solid	D854	
460-133539-2 DU	0171-051617-1400	Total/NA	Solid	D854	

Lab Chronicle

Client: Haley & Aldrich, Inc.
Project/Site: Racer - Elyria, Ohio

TestAmerica Job ID: 460-133539-1

Client Sample ID: 0171-051617-1330

Lab Sample ID: 460-133539-1

Date Collected: 05/16/17 13:30

Matrix: Water

Date Received: 05/17/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	9056A	DL	10	439827	05/28/17 00:23	HXM	TAL EDI
Total/NA	Prep	3010A			440312	05/31/17 08:26	QZY	TAL EDI
Total/NA	Analysis	6010C		1	440371	05/31/17 14:00	CDC	TAL EDI
Total/NA	Prep	9012B			440072	05/30/17 07:00	IAA	TAL EDI
Total/NA	Analysis	9012B		1	440110	05/30/17 12:32	HTV	TAL EDI

Client Sample ID: 0171-051617-1400

Lab Sample ID: 460-133539-2

Date Collected: 05/16/17 14:00

Matrix: Solid

Date Received: 05/17/17 09:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			437906	05/18/17 13:27	JNP	TAL EDI
TCLP	Analysis	8260B		10	439167	05/25/17 07:31	EMM	TAL EDI
TCLP	Leach	1311			437940	05/18/17 17:10	YXG	TAL EDI
TCLP	Prep	3510C			438125	05/19/17 10:34	GRB	TAL EDI
TCLP	Analysis	8270C		1	439465	05/26/17 13:28	CBB	TAL EDI
TCLP	Leach	1311			437940	05/18/17 17:10	YXG	TAL EDI
TCLP	Prep	3010A			438275	05/19/17 22:40	GAE	TAL EDI
TCLP	Analysis	6010C		5	438310	05/20/17 21:15	CDC	TAL EDI
TCLP	Leach	1311			437940	05/18/17 17:10	YXG	TAL EDI
TCLP	Prep	3010A			438275	05/19/17 22:40	GAE	TAL EDI
TCLP	Analysis	6010C		5	438790	05/23/17 11:06	CDC	TAL EDI
TCLP	Leach	1311			437940	05/18/17 17:10	YXG	TAL EDI
TCLP	Prep	7470A			438789	05/23/17 11:34	RBS	TAL EDI
TCLP	Analysis	7470A		1	438858	05/23/17 15:57	RBS	TAL EDI
Total/NA	Analysis	1030		1	440132	05/30/17 15:46	YAH	TAL EDI
Total/NA	Prep	9012B			440062	05/30/17 07:00	IAA	TAL EDI
Total/NA	Analysis	9012B		1	440110	05/30/17 12:12	HTV	TAL EDI
Total/NA	Prep	9030B			438815	05/21/17 11:00	HTV	TAL EDI
Total/NA	Analysis	9034		1	438817	05/21/17 16:00	HTV	TAL EDI
Total/NA	Analysis	9045D		1	440139	05/30/17 13:51	YAH	TAL EDI
Total/NA	Analysis	D854		1	11445	05/20/17 00:00	MDR	TAL KNX
Total/NA	Analysis	D854		1	11481	05/20/17 00:00	MDR	TAL KNX

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL KNX = TestAmerica Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer - Elyria, Ohio

TestAmerica Job ID: 460-133539-1

Laboratory: TestAmerica Edison

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-18
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-17
New Jersey	NELAP	2	12028	06-30-17
New York	NELAP	2	11452	04-01-18
Pennsylvania	NELAP	3	68-00522	02-28-18
Rhode Island	State Program	1	LAO00132	12-30-17
USDA	Federal		NJCA-003-08	04-04-17 *

Laboratory: TestAmerica Knoxville

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

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		N/A	
Arkansas DEQ	State Program	6	88-0688	06-16-17
California	State Program	9	2423	06-30-18
Colorado	State Program	8	TN00009	02-28-18
Connecticut	State Program	1	PH-0223	09-30-17
Florida	NELAP	4	E87177	06-30-17
Georgia	State Program	4	906	04-13-20
Hawaii	State Program	9	N/A	04-13-18
Kansas	NELAP	7	E-10349	10-31-17
Kentucky (DW)	State Program	4	90101	12-31-17
L-A-B	DoD ELAP		L2311	02-13-19
Louisiana	NELAP	6	83979	06-30-17
Louisiana (DW)	NELAP	6	LA160005	12-31-17
Maryland	State Program	3	277	03-31-18
Michigan	State Program	5	9933	04-13-17 *
Nevada	State Program	9	TN00009	07-31-17
New Jersey	NELAP	2	TN001	06-30-17
New York	NELAP	2	10781	03-31-18
North Carolina (DW)	State Program	4	21705	07-31-17
North Carolina (WW/SW)	State Program	4	64	12-31-17
Ohio VAP	State Program	5	CL0059	11-22-18
Oklahoma	State Program	6	9415	08-31-17
Pennsylvania	NELAP	3	68-00576	12-31-17
Tennessee	State Program	4	2014	04-13-20
Texas	NELAP	6	T104704380-16-9	08-31-17
USDA	Federal		P330-13-00262	08-20-19
Utah	NELAP	8	TN00009	07-31-17
Virginia	NELAP	3	460176	09-14-17
Washington	State Program	10	C593	01-19-18
West Virginia (DW)	State Program	3	9955C	12-31-17
West Virginia DEP	State Program	3	345	04-30-18
Wisconsin	State Program	5	998044300	08-31-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer - Elyria, Ohio

TestAmerica Job ID: 460-133539-1

Method	Method Description	Protocol	Laboratory
8260B	TCLP Volatiles	SW846	TAL EDI
8270C	TCLP Semivolatiles	SW846	TAL EDI
9056A	Anions, Ion Chromatography	SW846	TAL EDI
6010C	Metals (ICP)	SW846	TAL EDI
6010C	TCLP Metals (ICP)	SW846	TAL EDI
7470A	TCLP Mercury	SW846	TAL EDI
1030	Ignitability, Solids	SW846	TAL EDI
9012B	Cyanide, Total andor Amenable	SW846	TAL EDI
9034	Sulfide, Acid Soluble and Insoluble (Titrimetric)	SW846	TAL EDI
9045D	Corrosivity as pH	SW846	TAL EDI
D854	Specific Gravity	ASTM	TAL KNX

Protocol References:

ASTM = ASTM International

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

Laboratory References:

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TAL KNX = TestAmerica Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: Haley & Aldrich, Inc.
Project/Site: Racer - Elyria, Ohio

TestAmerica Job ID: 460-133539-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-133539-1	0171-051617-1330	Water	05/16/17 13:30	05/17/17 09:30
460-133539-2	0171-051617-1400	Solid	05/16/17 14:00	05/17/17 09:30

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

2,8/C2,5

Chain of Custody Record

162271

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

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact							
Company Name: Haley & Aldrich	Project Manager: B. Aragona	Site Contact: T. Correll	Date: 5/16/17	COC No:			
Address: 6500 Rockside Rd Suite 220	Tel/Fax: 734-887-3410	Lab Contact: D. Pohl	Carrier: Fed Fx	1 of 1 COCs			
City/State/Zip: Independence, OH 44131	Analysis Turnaround Time: ☐ CALENDAR DAYS ☐ WORKING DAYS			Sampler:			
Phone: 216-706-1300	TAT if different from Below ____			For Lab Use Only:			
Fax:	☐ 2 weeks			Walk-in Client:			
Project Name: RACER	☐ 1 week			Lab Sampling:			
Site: Elyria	☐ 2 days						
P O # 179862-002	☐ 1 day			Job / SDG No.:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCLP VOCs	TCLP SVOCs	TCLP metals	Corrosivity	Reactivity	Cn, Sulfide	Spl. Cond.	total Metals	Sample Specific Notes:
0171-051617-1330	5/16/17	1330	G	AG		N	N								X	Final Rinseate
0171-051617-1400	↓	1400	G	SO		N	N	X	X	X	X	X	X	X	~~X~~	Solid Tanks

460-133539 Chain of Custody

5/16/17

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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

Special Instructions/QC Requirements & Comments: Sample 0171-051617-1400 (No Total metals) 1.5°C R28 JASD 5/18/17

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No.: NO CS		Cooler Temp. (°C): Obs'd: ____ Corr'd: ____		Therm ID No.: ____
Relinquished by: [signature]	Company: H+A Fed Ex	Date/Time: 5/16/17 2000	Received by: [signature]	Company: TA	Date/Time: 5-17-17 930
Relinquished by: [signature]	Company: TAC	Date/Time: 5/17/17 1600	Received by: [signature] via FedEx	Company: JASD	Date/Time: 5/18/17 0915
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 460-133539**
Canton Facility

Client H+A Site Name _____ Cooler unpacked by:

Cooler Received on 5.17.17 Opened on 5.17.17

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **-0.3** °C) Observed Cooler Temp. 2.8 °C Corrected Cooler Temp. 2.5 °C
   IR GUN #36 (CF **+0.8**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 2 Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 11-15 have been checked at the originating laboratory.
11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC697954**
12. Were VOAs on the COC? Yes No
13. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ Yes No
15. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

17. SAMPLE CONDITION

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

18. SAMPLE PRESERVATION

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

Ref: SOP NC-SC-0005, Sample Receiving
\\tacorp\corp\QA\QA_Facilities\Canton-QA\Document-Management\Work-Instruction\Word Version Work Instructions\WI-NC-099-042717 Cooler Receipt Form.doc djl

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 460-133539

Number of Coolers: 1 IR Gun # 8

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	1.5 °C	1.5 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

** Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.*

Initials: CA Date: 5/18/17

TestAmerica Canton
4101 Shuffel Street, N. H.
North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

2.8/C2.5

Chain of Custody Record

162271

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

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: B. Aragona	Site Contact: T. Correll	Date: 5/16/17	COC No:
Company Name: Haley & Aldrich	Tel/Fax: 734-887-8490	Lab Contact: D. Pohl	Carrier: Fed Ex	1 of 1 COCs
Address: 6500 Rockside Rd Suite 220	Analysis Turnaround Time			Sampler:
City/State/Zip: Independence, OH 44131	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 216-706-1300	TAT if different from Below _____			Walk-in Client:
Fax:	☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day			Lab Sampling:
Project Name: RACER				Job / SDG No.:
Site: Elyria				
PO # 179862-002				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCLP VOCs	TCLP SVOCs	TCLP metals	Corrosivity	Reactivity	Cn, Sulfide	Sep. Gravity	total Metals 6010	Sample Specific Notes:
0171-051617-1330	5/16/17	1330	G	AG		N	N								X	Final Rinseate
0171-051617-1400	↓	1400	G	SO		N	N	X	X	X	X	X	X	X	~~X~~	Solids, Tanks

460-133539 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H_2SO_4; 4=HNO_3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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

Special Instructions/QC Requirements & Comments: Sample 0171-051617-1400 (No Total Metals)

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
T. Correll	H&A Fed Ex	5/16/17 2000		TA	5.17.17 930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 440-133539**
Canton Facility

Client H+A Site Name _____ Cooler unpacked by:

Cooler Received on 5.17.17 Opened on 5.17.17

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **-0.3** °C) Observed Cooler Temp. 2.9 °C Corrected Cooler Temp. 2.5 °C
   IR GUN #36 (CF **+0.8**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 2 Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 11-15 have been checked at the originating laboratory.
11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC697954**
12. Were VOAs on the COC? Yes No
13. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ Yes No
15. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

17. SAMPLE CONDITION

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

18. SAMPLE PRESERVATION

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

Ref: SOP NC-SC-0005, Sample Receiving
\\tacorp\corp\QA\QA_Facilities\Canton-QA\Document-Management\Work-Instruction\Word Version Work Instructions\WI-NC-099-042717 Cooler Receipt Form.doc djl

TestAmerica Edison
777 New Durham Road
Edison, NJ 08817
Phone (732) 549-3900 Fax (732) 549-3679

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Pohl, Denise	Carrier Tracking No(s):	COC No: 460-48434.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: denise.pohl@testamericainc.com	State of Origin: Ohio	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note):		Job #: 460-133539-1
Address: 5815 Middlebrook Pike, ,	Due Date Requested: 5/30/2017			
City: Knoxville	TAT Requested (days):			
State, Zip: TN, 37921				
Phone: 865-291-3000(Tel) 865-584-4315(Fax)	PO #:			
Email:	WO #:			
Project Name: Racer - Elyria, Ohio	Project #: 46020356			
Site:	SSOW#:			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	D854/ Specific Gravity	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
0171-051617-1400 (460-133539-2)	5/16/17	14:00 Eastern		Solid			X	1	
NO CUSTODY SEALS									
RECEIVED AT AT 0.1 / CT 0.1°C									
AKD 5-18-17									
1 COOLER FEDX# 725972846951									

460-133539 Chain of Custody

Preservation Codes:

A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid
E - NaHSO4
F - MeOH
G - Amchlor
H - Ascorbic Acid
I - Ice
J - DI Water
K - EDTA
L - EDA
M - Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S - H2SO4
T - TSP Dodecahydrate
U - Acetone
V - MCAA
W - pH 4-5
Z - other (specify)

Other:

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification
Unconfirmed

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

Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 5-17-17 1400	Company 240	Received by: [signature]	Date/Time: 5-18-17 09:20	Company TA KNOX
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

Loc: 460
133539

TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Log In Number:

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	/			☐ **Containers, Broken**
2. Were ambient air containers received intact?			/	☐ Checked in lab
3. The coolers/containers custody seal if present, is it intact?			/	☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			/	☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**
5. Were all of the sample containers received intact?	/			☐ **Containers, Broken**
6. Were samples received in appropriate containers?	/			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**
7. Do sample container labels match COC? (IDs, Dates, Times)	/			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**
8. Were all of the samples listed on the COC received?	/			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**
9. Is the date/time of sample collection noted?	/			☐ **COC; No Date/Time; Client Contacted**
10. Was the sampler identified on the COC?			/	☐ **Sampler Not Listed on COC**
11. Is the client and project name/# identified?	/			☐ **COC Incorrect/Incomplete**
12. Are tests/parameters listed for each sample?	/			☐ **COC No tests on COC**
13. Is the matrix of the samples noted?	/			☐ **COC Incorrect/Incomplete**
14. Was COC relinquished? (Signed/Dated/Timed)	/			☐ **COC Incorrect/Incomplete**
15. Were samples received within holding time?	/			☐ **Holding Time - Receipt**
16. Were samples received with correct chemical preservative (excluding Encore)?			/	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**
17. Were VOA samples received without headspace?			/	☐ **Headspace (VOA only)**
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:_____			/	☐ **Residual Chlorine**
19. For 1613B water samples is pH<9?			/	☐ If no, lab will adjust
20. For rad samples was sample activity info. Provided?			/	☐ Project missing info

Comments/Actions Taken

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: _____ PM Instructions: _____

Sample Receiving Associate: _____ Date: 5/18/17

QA026R30.doc, 080916

APPENDIX C

Waste Manifests

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: OHD004201091
2. Page 1 of: 1
3. Emergency Response Phone: (937) 620-8524
4. Manifest Tracking Number: 008689352 FLE

GENERATOR

5. Generator's Name and Mailing Address:
RACER TRUST
1400 LOWELL ST
ELYRIA OH 44035

Generator's Site Address (if different than mailing address)

Generator's Phone: (419) 499-1339

6. Transporter 1 Company Name: VICKERY TRANSPORTATION, INC. — U.S. EPA ID Number: OHR000103762

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address:
VICKERY ENVIRONMENTAL, INC.
3956 STATE ROUTE 412
VICKERY OH 43464

U.S. EPA ID Number: OHD020273819

Facility's Phone: (419) 547-7791

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ, NA3082, WASTE HAZARDOUS WASTE, LIQUID, N.O.S., 9,III,(F006)	001	TT	143	G	F006
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
WASTE PROFILE #OH894433 EMERGENCY RESPONSE CONTACT.
ERG #171
TRIP #: [illegible] TAG #: [illegible]

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Todd Connell — Signature: [signature] — Month 06 Day 26 Year 17

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: [illegible] — Signature: [signature] — Month 06 Day 26 Year 17
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H134 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name — Signature — Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

CWMI

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
OHD004201091	1	(937) 620-8524	008689352 FLE

GENERATOR

5. Generator's Name and Mailing Address
RACER TRUST
1400 LOWELL ST
ELYRIA OH 44035
Generator's Phone: (419) 499-1339

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: VICKERY TRANSPORTATION, INC. — U.S. EPA ID Number: OHR000103762

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
VICKERY ENVIRONMENTAL, INC.
3956 STATE ROUTE 412
VICKERY OH 43464
Facility's Phone: (419) 547-7791
U.S. EPA ID Number: OHD020273819

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. RQ, NA3082, WASTE HAZARDOUS WASTE, LIQUID, N.O.S., 9,III,(F006)	001	TT	175	G	F006
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
WASTE PROFILE #OHB94433 EMERGENCY RESPONSE CONTACT: _____
ERG #171
TRIP #: 327975 TAG #: 1860444

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Tony Correll — Signature: on behalf of RACER Trust and properties — Month 05 Day 16 Year 17

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Buel Nesbitt — Signature: Buel Nesbitt III — Month 05 Day 16 Year 17
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☒ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Greater than 10% Spillage discrepancy 143 Actual Gals Adj by Tony Correll 5/16/17
Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H134			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: MARILYN BINSACK — Signature: Marilyn Binsack — Month 05 Day 16 Year 17

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

APPENDIX D

Waste Profile

Date Printed: 05/11/17 Chemical Waste Management, Inc. Profile #

GENERATOR'S WASTE PROFILE SHEET VIC OH894759

(_) Check here if this is a Recertification LOCATION OF ORIGINAL Vickery Environmental, Inc.

A/B WASTE GENERATOR AND CUSTOMER INFORMATION

1. Generator Name: RACER TRUST
Generator USEPA ID: OHD004201091

2. Generator Address: 1400 LOWELL ST
ELYRIA OH 44035

Billing Address: (_) Same
HALEY & ALDRICH INC
70 BLANCHARD RD, SUITE 204
BURLINGTON MA 01803

3. Technical Contact/Phone: PAMELA BARNETT 973/751-8635

4. Alternate Contact/Phone: BAN ARAGONA (HALEY & ALDRICH) 617/886-7400

Billing Contact/Phone: BAN ARAGONA 617/886-7400

C. WASTE STREAM INFORMATION

1a Process Generating Waste: LEACHATE COLLECTION TANKS BEING STEAM CLEANED
1b Waste Name: (F006) LEACHATE TANK CLEANOUT SOLUTION
1c Color : VARIES
1d Strong Odor:(_);describe:
1e Physical State @ 70F: Solid(_) Liquid(X) Both(_) Gas(_) 1f Single Layer (X) Multilayer (_)
1g Free liq. range: 99 to 100% Gravity: 1.000 to 1.300 Viscosity: LOW BTU/lb: _____ to _____
1h pH: Range 5.0 to 10.0 or Not applicable (_)
1i Liquid Flash Point: < 73F (_) 73-99F (_) 100-139F (_) 140-199F (_) >= 200F (X) N.A. (_) Closed Cup (X) Open Cup (_)

2a Is this a USEPA hazardous waste (40 CFR Part 261)? Yes (X) No (_)
2a Identify ALL USEPA listed and characteristic waste code numbers (D,F,K,P,U): F006
State Waste Codes:
2b Do underlying hazardous constituents (UHCs) apply (40CFR268.48)?(N)
2d Is the waste predominantly debris subject to the Alternate Debris Standards(40 CFR268.45)? (N)
2e Is the waste predominantly soil subject to the Alternate Soil Treatment Standards(40 CFR268.49)? (N)
2f Does the waste contain asbestos? (N) If yes, is waste Friable(_) Non-Friable(_) or Both(_)
2g Waste contains benzene in concentrations _ _____ ppm. NESHAP?(N)
2h Is waste remediation from a major source of Haz Air Pollutants (Site Remediation NESHAP, 40CFR 63 subpart GGGGG)?(N)
If yes, does the waste contain <500 ppmw VOHAPs at the point of determination?(_)
2i Waste contains PCBs (< >) _ _____ ppm, regulated by 40 CFR 761?(N)
Are PCBs regulated under SIRS Mega Rule (40 CFR 761,61(a)?(_)

2j CHEMICAL COMPOSITION: List ALL constituents (incl. halogenated organics) present in any concentration and forward analysis

Constituents	Range		Unit Description	
WATER	97.9 to	100	%	
METAL HYDROXIDES	0 to	0.1	%	
COMMENTS	to			
(METAL HYDROXIDE SLUDGE)	to			
LEAD	0 to	1.3	MG/L	
SODIUM CARBONATE	0 to	0.5	%	See attach2
TOTAL COMPOSITION (MUST EQUAL OR EXCEED 100%):		102.100000		

2k Is the waste: Pyrophoric (_) Water-Reactive (_) Shock Sensitive (_) Oxidizer (_) Carcinogen (_) Infectious (_)
Other _____
2l Is waste Group 1 wastewater or residual under Hazardous Organic NESHAP?(N)
2m Does the waste contain radioactive material? (N) Regulated by NRC?(_) Is radioactive waste NORM?(_)
2n Is the waste a CERCLA (40 CFR 300, Appendx B) or state mandated cleanup?(N)

3a This is a Wastewater.
3e Physical Appearance: LOW VISCOSITY, LIQUID
3f If waste subject to the land ban & meets treatment standards, check here: (_) & supply analytical results where applicable.
3g Tracking Number: _____

D. DOT Information and Shipping Volume

D1 Anticipated Annual Volume: 18000 Units: GALLONS Shipping Frequency: MONTH
D2 PACKAGING: Bulk Solid (_) Bulk Liquid (X) Drum (_) Type/Size: TANK Other SHIPS 1,500 GALLONS PER MONTH

GENERATOR'S CERTIFICATION

I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste. Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I authorize CWM to obtain a sample from any waste shipment for purposes of recertification.

Signature Name and Title Date

Date Printed 05/11/17

Profile #
VIC OH894759

ATTACHMENT 2

CHEMICAL COMPOSITION: Additional constituents NOT included on page 1 of the Waste Profile

Constituents	Range	Unit Description
SODIUM GLUCONATE	0 to 0.5	%
NON-TRI CHEMICALS	0 to 1	%
ETHOXYLATED ALCOHOL	to	