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MEMORANDUM

10 June 2020
File No. 129862-013

TO: Ohio EPA
Sylvia Chinn-Levy

C: RACER Trust
Pam Barnett

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

SUBJECT: RACER Elyria – OHD004201091
Former Debris Pile Updated Findings

Haley & Aldrich, Inc. (Haley &Aldrich) is pleased to submit this memorandum summarizing the results of the activities described in the 18 February 2020 Ohio EPA comments (revised on 24 February 2020) on the memorandum *RACER Elyria Former Debris Pile Findings and Sampling Plan* (Former Debris Pile Sampling Plan) related to the RACER Elyria site ("Site") (See Figure 1). The purpose of this memorandum is to summarize the additional investigation and findings related to the former Debris Pile.

Background

A debris pile was observed by Haley & Aldrich staff on 8 March 2019 during vegetation clearing. The debris pile, measuring approximately 10 feet by 15 feet, was located approximately 50 feet northeast of Manhole #1, a raised invert (See attached Figures 1 and 2). The debris appeared to include remnants from two or three drums along with other material.

On 19 September 2019, under the supervision of Haley & Aldrich field staff, Haley & Aldrich Construction Services completed the cleanup and removal of the debris pile. The debris was removed until native soil was observed, and the area was visually free of remnants of debris. A composite soil confirmation sample was collected from the native soils exposed by the debris removal.

An elevated concentration of chromium was detected in the soil composite sample collected on 19 September 2019. This result was inconsistent with the concentration of constituents in the debris removed and was also inconsistent with observed concentrations of chromium in soils at the Site. Additional soil sampling was recommended in the *RACER Elyria Former Debris Pile Findings and Sampling Plan*, dated 18 February 2020, and approved by the Ohio EPA on 19 February 2020. The

Former Debris Pile Sampling Plan was revised on 24 February 2020 to include recommendations provided by Ohio EPA.

Additional Investigation Activities

On 27 February 2020, three (3) borings were advanced using a hand auger to a depth of 2 feet below ground surface (bgs) within the former debris pile, as shown on Figure 3. Soils were field-screened with a photo-ionization detector and the soil type classified based on visual characteristics. One soil sample was collected from each boring location from 0 to 2 feet bgs for analysis of:

- Total Chromium by EPA SW846 method 6010B;
- Trivalent chromium using EPA SW846 method 6010B and;
- Hexavalent Chromium using EPASW846 method 7199.

One field duplicate and one equipment blank were also collected during the sampling event and submitted to the laboratory for analysis. Soil samples were collected in laboratory-provided 8-ounce unpreserved soil jars, then packaged in a cooler containing ice for preservation. After soil sampling was completed at each location the boreholes were backfilled with original material. The samples were shipped under proper chain-of-custody procedures to TestAmerica Laboratories, Inc. in North Canton, Ohio.

Results

The laboratory data indicates the chromium detections observed in the samples collected on 27 February 2020 are predominantly trivalent chromium, with minor detections of hexavalent chromium. Table 1 summarizes the analytical data collected during the debris pile characterization, post-removal confirmation sampling, and most recent hand auger sampling. Laboratory reports are provided in Attachment 1 and boring logs are provided in Attachment 2.

Total chromium observed in samples collected during the 27 February 2020 sampling was detected at concentrations greater than the Ohio EPA Background Number for Lorain County. While the concentrations of total chromium observed in the most recent soil sampling slightly exceed the Ohio EPA Background Number for Lorain County, the concentrations of total chromium and hexavalent chromium are less than Industrial RSLs and less than twenty-times the hazardous waste screening level. Based on the data collected to date, the material in the debris pile has not impacted the soils greater than risk-based standards.

Based on the results described above, no further action of the former debris pile area is warranted.

Attachments:

Table 1 – Summary of Analytical Results
Figure 1 – Debris Pile Location
Figure 2 – Debris Pile Location with Photos
Figure 3 – Soil Borings

Attachment 1 – Laboratory Reports
Attachment 2 – Boring Logs

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TABLES

TABLE I
SUMMARY OF COMPOSITE DEBRIS ANALYTICAL RESULTS
RACER ELYRIA
ELYRIA, OHIO

Location Sample Date Sample Name	Ohio EPA Background Numbers Lorain County	Industrial Regional Screening Level	10x Industrial Regional Screening Level	Hazardous Waste Screening (TCLP)	Hazardous Waste Screening (20x-Solids)	DEBRIS 03/13/2019 WC1-NSA-031319	CONF. SAMPLE 9/19/2019 7082-091919-1500	SB-01 2/27/2020 SB01-022720-1145	SB-02 2/27/2020 SB02-022720-1245	FD (SB-02) 2/27/2020 7082-022720-0001	SB-03 2/27/2020 SB03-022720-1330	EB 2/27/2020 7082-022720-0002
Inorganic Compounds (mg/kg)												
Aluminum	11521	110000	1100000	-	-	**1800** [<A]	**12000** [A]	-	-	-	-	-
Antimony	-	47	470	-	-	ND (12)	ND (1.2)	-	-	-	-	-
Arsenic	19.1	3	30	-	100	**3.8** [<A]	**9.3** [<A]	-	-	-	-	-
Barium	82.6	22000	220000	-	2000	**23 J** [<A]	**82** [<A]	-	-	-	-	-
Beryllium	0.61	230	2300	-	-	**0.094 J** [<A]	**0.63** [A]	-	-	-	-	-
Cadmium	-	98	980	-	20	**0.16 J**	**0.52**	-	-	-	-	-
Calcium	2522	-	-	-	-	**800** [<A]	**6100** [A]	-	-	-	-	-
Chromium	18.2	1800000	18000000	-	100	**28** [A]	**250** [AD]	**23.3** [A]	**41.4** [A]	**28.2** [A]	**32** [A]	ND
Hexavalent Chromium	-	6.3	63	-	-	-	-	0.32 J	**3.8**	ND	**0.65**	ND
Trivalent Chromium	-	-	-	-	-	-	-	**22.9**	**37.6**	**28.2**	**31.4**	ND
Cobalt	15.7	35	350	-	-	**27** [A]	**9.2** [<A]	-	-	-	-	-
Copper	26	4700	47000	-	-	**28000** [AB]	**120** [A]	-	-	-	-	-
Iron	36177	82000	820000	-	-	**3400** [<A]	**26000** [<A]	-	-	-	-	-
Lead	29.5	800	8000	-	100	**68** [A]	**25** [<A]	-	-	-	-	-
Magnesium	3076	-	-	-	-	**280 J** [<A]	**3000** [<A]	-	-	-	-	-
Manganese	1504	2600	26000	-	-	**15** [<A]	**400** [<A]	-	-	-	-	-
Mercury	0.0513	4.6	46	-	4	**0.029 J** [<A]	**0.062 J** [A]	-	-	-	-	-
Nickel	30.4	2200	22000	-	-	**1200** [A]	**180** [A]	-	-	-	-	-
Potassium	679	-	-	-	-	**140 J** [<A]	**1700** [A]	-	-	-	-	-
Selenium	1.79	580	5800	-	20	**0.77 J** [<A]	**1.1 J** [<A]	-	-	-	-	-
Silver	-	580	5800	-	100	**0.21 J**	ND (0.58)	-	-	-	-	-
Sodium	37.3	-	-	-	-	**91 J** [A]	ND (580)	-	-	-	-	-
Thallium	0.966	1.2	12	-	-	ND (1.2)	ND (1.2)	-	-	-	-	-
Vanadium	25.5	580	5800	-	-	**4.4 J** [<A]	**26** [A]	-	-	-	-	-
Zinc	73.6	35000	350000	-	-	**640** [A]	**150** [A]	-	-	-	-	-
PCBs (µg/kg)												
Aroclor-1016 (PCB-1016)	-	5100	51000	-	-	ND (330)	ND (73)	-	-	-	-	-
Aroclor-1221 (PCB-1221)	-	830	8300	-	-	ND (330)	ND (73)	-	-	-	-	-
Aroclor-1232 (PCB-1232)	-	720	7200	-	-	ND (330)	ND (73)	-	-	-	-	-
Aroclor-1242 (PCB-1242)	-	950	9500	-	-	ND (330)	ND (73)	-	-	-	-	-
Aroclor-1248 (PCB-1248)	-	950	9500	-	-	ND (330)	ND (73)	-	-	-	-	-
Aroclor-1254 (PCB-1254)	-	970	9700	-	-	ND (330)	ND (73)	-	-	-	-	-
Aroclor-1260 (PCB-1260)	-	990	9900	-	-	ND (330)	ND (73)	-	-	-	-	-
Aroclor-1262 (PCB-1262)	-	-	-	-	-	ND (330)	ND (73)	-	-	-	-	-
Aroclor-1268 (PCB-1268)	-	-	-	-	-	ND (330)	ND (73)	-	-	-	-	-
Semi-Volatile Organic Compounds (µg/kg)												
2,2'-oxybis(1-Chloropropane)	-	4700000	47000000	-	-	ND (360000)	ND (150)	-	-	-	-	-
2,4,5-Trichlorophenol	-	8200000	82000000	-	8000000	ND (540000)	ND (230)	-	-	-	-	-
2,4,6-Trichlorophenol	-	82000	820000	-	40000	ND (540000)	ND (230)	-	-	-	-	-
2,4-Dichlorophenol	-	250000	2500000	-	-	ND (540000)	ND (230)	-	-	-	-	-
2,4-Dimethylphenol	-	1600000	16000000	-	-	ND (540000)	ND (230)	-	-	-	-	-
2,4-Dinitrophenol	-	160000	1600000	-	-	ND (1200000)	ND (500)	-	-	-	-	-
2,4-Dinitrotoluene	-	7400	74000	-	2600	ND (720000)	ND (310)	-	-	-	-	-
2,6-Dinitrotoluene	-	1500	15000	-	-	ND (720000)	ND (310)	-	-	-	-	-
2-Chloronaphthalene	-	6000000	60000000	-	-	ND (180000)	ND (76)	-	-	-	-	-
2-Chlorophenol	-	580000	5800000	-	-	ND (180000)	ND (76)	-	-	-	-	-
2-Methylnaphthalene	-	300000	3000000	-	-	**270000**	**19 J**	-	-	-	-	-
2-Methylphenol (o-Cresol)	-	4100000	41000000	-	4000000	ND (720000)	ND (310)	-	-	-	-	-
2-Nitroaniline	-	800000	8000000	-	-	ND (720000)	ND (310)	-	-	-	-	-
2-Nitrophenol	-	-	-	-	-	ND (180000)	ND (76)	-	-	-	-	-
3&4-Methylphenol	-	-	-	-	-	ND (1400000)	ND (610)	-	-	-	-	-
3,3'-Dichlorobenzidine	-	5100	51000	-	-	ND (360000)	ND (150)	-	-	-	-	-
3-Nitroaniline	-	-	-	-	-	ND (720000)	ND (310)	-	-	-	-	-
4,6-Dinitro-2-methylphenol	-	6600	66000	-	-	ND (1200000)	ND (500)	-	-	-	-	-
4-Bromophenyl phenyl ether	-	-	-	-	-	ND (180000)	ND (76)	-	-	-	-	-

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4-Chloro-3-methylphenol	-	8200000	82000000	-	-	ND (540000)	ND (230)	-	-	-	-	-
4-Chloroaniline	-	11000	110000	-	-	ND (540000)	ND (230)	-	-	-	-	-
4-Chlorophenyl phenyl ether	-	-	-	-	-	ND (180000)	ND (76)	-	-	-	-	-
4-Nitroaniline	-	110000	1100000	-	-	ND (720000)	ND (310)	-	-	-	-	-
4-Nitrophenol	-	-	-	-	-	ND (1200000)	ND (500)	-	-	-	-	-
Acenaphthene	-	4500000	45000000	-	-	ND (54000)	ND (23)	-	-	-	-	-
Acenaphthylene	-	-	-	-	-	ND (54000)	ND (23)	-	-	-	-	-
Acetophenone	-	12000000	120000000	-	-	ND (360000)	**17 J**	-	-	-	-	-
Anthracene	-	23000000	230000000	-	-	ND (54000)	**6.6 J**	-	-	-	-	-
Atrazine	-	10000	100000	-	-	ND (720000)	ND (310)	-	-	-	-	-
Benzaldehyde	-	820000	8200000	-	-	ND (360000)	**71 J**	-	-	-	-	-
Benzo(a)anthracene	-	21000	210000	-	-	ND (54000)	**31**	-	-	-	-	-
Benzo(a)pyrene	-	2100	21000	-	-	ND (54000)	**39**	-	-	-	-	-
Benzo(b)fluoranthene	-	21000	210000	-	-	ND (54000)	**61**	-	-	-	-	-
Benzo(g,h,i)perylene	-	-	-	-	-	ND (54000)	**35**	-	-	-	-	-
Benzo(k)fluoranthene	-	210000	2100000	-	-	ND (54000)	**35**	-	-	-	-	-
Biphenyl	-	20000	200000	-	-	**130000 J [B]**	ND (76)	-	-	-	-	-
bis(2-Chloroethoxy)methane	-	250000	2500000	-	-	ND (360000)	ND (150)	-	-	-	-	-
bis(2-Chloroethyl)ether	-	1000	10000	-	-	ND (360000)	ND (150)	-	-	-	-	-
bis(2-Ethylhexyl)phthalate	-	160000	1600000	-	-	ND (250000)	ND (110)	-	-	-	-	-
Butyl benzylphthalate	-	1200000	12000000	-	-	ND (250000)	ND (110)	-	-	-	-	-
Caprolactam	-	40000000	400000000	-	-	ND (1200000)	ND (500)	-	-	-	-	-
Carbazole	-	-	-	-	-	ND (180000)	ND (76)	-	-	-	-	-
Chrysene	-	2100000	21000000	-	-	ND (54000)	**46**	-	-	-	-	-
Dibenz(a,h)anthracene	-	2100	21000	-	-	ND (54000)	ND (23)	-	-	-	-	-
Dibenzofuran	-	100000	1000000	-	-	ND (180000)	ND (76)	-	-	-	-	-
Diethyl phthalate	-	66000000	660000000	-	-	ND (250000)	ND (110)	-	-	-	-	-
Dimethyl phthalate	-	-	-	-	-	ND (250000)	ND (110)	-	-	-	-	-
Di-n-butylphthalate	-	8200000	82000000	-	-	ND (250000)	ND (110)	-	-	-	-	-
Di-n-octyl phthalate	-	820000	8200000	-	-	ND (250000)	ND (110)	-	-	-	-	-
Fluoranthene	-	3000000	30000000	-	-	ND (54000)	**68**	-	-	-	-	-
Fluorene	-	3000000	30000000	-	-	**17000 J**	ND (23)	-	-	-	-	-
Hexachlorobenzene	-	960	9600	-	2600	ND (54000)	ND (23)	-	-	-	-	-
Hexachlorobutadiene	-	5300	53000	-	10000	ND (180000)	ND (76)	-	-	-	-	-
Hexachlorocyclopentadiene	-	750	7500	-	-	ND (1200000)	ND (500)	-	-	-	-	-
Hexachloroethane	-	8000	80000	-	60000	ND (180000)	ND (76)	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	-	21000	210000	-	-	ND (54000)	**29**	-	-	-	-	-
Isophorone	-	2400000	24000000	-	-	ND (180000)	ND (76)	-	-	-	-	-
Naphthalene	-	17000	170000	-	-	ND (54000)	**14 J**	-	-	-	-	-
Nitrobenzene	-	22000	220000	-	40000	ND (360000)	ND (150)	-	-	-	-	-
N-Nitrosodi-n-propylamine	-	330	3300	-	-	ND (180000)	ND (76)	-	-	-	-	-
N-Nitrosodiphenylamine	-	470000	4700000	-	-	ND (180000)	ND (76)	-	-	-	-	-
Pentachlorophenol	-	4000	40000	-	2000000	ND (540000)	ND (230)	-	-	-	-	-
Phenanthrene	-	-	-	-	-	ND (54000)	**39**	-	-	-	-	-
Phenol	-	25000000	250000000	-	-	ND (180000)	**92**	-	-	-	-	-
Pyrene	-	2300000	23000000	-	-	ND (54000)	**59**	-	-	-	-	-
Volatile Organic Compounds (µg/kg)												
1,1,1-Trichloroethane	-	3600000	36000000	-	-	ND (64)	ND (7.5)	-	-	-	-	-
1,1,2,2-Tetrachloroethane	-	2700	27000	-	-	ND (64) *	ND (7.5)	-	-	-	-	-
1,1,2-Trichloroethane	-	630	6300	-	-	ND (64)	ND (7.5)	-	-	-	-	-
1,1-Dichloroethane	-	16000	160000	-	-	ND (64)	ND (7.5)	-	-	-	-	-
1,1-Dichloroethene	-	100000	1000000	-	14000	ND (64)	ND (7.5)	-	-	-	-	-
1,2,4-Trichlorobenzene	-	26000	260000	-	-	ND (64) *	ND (7.5)	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	-	64	640	-	-	ND (130) *	ND (15)	-	-	-	-	-
1,2-Dibromoethane (Ethylene Dibromide)	-	160	1600	-	-	ND (64)	ND (7.5)	-	-	-	-	-
1,2-Dichlorobenzene	-	930000	9300000	-	-	ND (64) *	ND (7.5)	-	-	-	-	-
1,2-Dichloroethane	-	2000	20000	-	10000	ND (64)	ND (7.5)	-	-	-	-	-
1,2-Dichloropropane	-	6600	66000	-	-	ND (64)	ND (7.5)	-	-	-	-	-

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1,3-Dichlorobenzene	-	-	-	-	-	ND (64) *	ND (7.5)	-	-	-	-	-
1,4-Dichlorobenzene	-	11000	110000	-	150000	ND (64) *	ND (7.5)	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	-	19000000	190000000	-	4000000	ND (260)	**17 J**	-	-	-	-	-
2-Hexanone	-	130000	1300000	-	-	ND (260)	ND (30)	-	-	-	-	-
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	-	14000000	140000000	-	-	ND (260)	ND (30)	-	-	-	-	-
Acetone	-	67000000	670000000	-	-	ND (320)	ND (38)	-	-	-	-	-
Benzene	-	5100	51000	-	10000	ND (64)	ND (7.5)	-	-	-	-	-
Bromodichloromethane	-	1300	13000	-	-	ND (64)	ND (7.5)	-	-	-	-	-
Bromoform	-	86000	860000	-	-	ND (64)	ND (7.5)	-	-	-	-	-
Bromomethane (Methyl Bromide)	-	3000	30000	-	-	ND (64)	ND (7.5)	-	-	-	-	-
Carbon disulfide	-	350000	3500000	-	-	ND (64)	ND (7.5)	-	-	-	-	-
Carbon tetrachloride	-	2900	29000	-	10000	ND (64)	ND (7.5)	-	-	-	-	-
Chlorobenzene	-	130000	1300000	-	2000000	ND (64)	ND (7.5)	-	-	-	-	-
Chloroethane	-	5700000	57000000	-	-	ND (64)	ND (7.5)	-	-	-	-	-
Chloroform (Trichloromethane)	-	1400	14000	-	120000	ND (64)	ND (7.5)	-	-	-	-	-
Chloromethane (Methyl Chloride)	-	46000	460000	-	-	ND (64)	ND (7.5)	-	-	-	-	-
cis-1,2-Dichloroethene	-	230000	2300000	-	-	ND (64)	ND (7.5)	-	-	-	-	-
cis-1,3-Dichloropropene	-	-	-	-	-	ND (64)	ND (7.5)	-	-	-	-	-
Cyclohexane	-	2700000	27000000	-	-	ND (130)	ND (15)	-	-	-	-	-
Dibromochloromethane	-	39000	390000	-	-	ND (64)	ND (7.5)	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	-	37000	370000	-	-	ND (64)	ND (7.5)	-	-	-	-	-
Ethylbenzene	-	25000	250000	-	-	ND (64)	ND (7.5)	-	-	-	-	-
Isopropylbenzene (Cumene)	-	990000	9900000	-	-	**18 J**	ND (7.5)	-	-	-	-	-
Methyl acetate	-	120000000	1200000000	-	-	ND (320)	ND (38)	-	-	-	-	-
Methyl cyclohexane	-	-	-	-	-	ND (130)	ND (15)	-	-	-	-	-
Methyl Tert Butyl Ether	-	210000	2100000	-	-	ND (64)	ND (7.5)	-	-	-	-	-
Methylene chloride	-	320000	3200000	-	-	ND (320)	ND (38)	-	-	-	-	-
Styrene	-	3500000	35000000	-	-	ND (64)	ND (7.5)	-	-	-	-	-
Tetrachloroethene	-	39000	390000	-	14000	ND (64)	ND (7.5)	-	-	-	-	-
Toluene	-	4700000	47000000	-	-	ND (64)	ND (7.5)	-	-	-	-	-
trans-1,2-Dichloroethene	-	2300000	23000000	-	-	ND (64)	ND (7.5)	-	-	-	-	-
trans-1,3-Dichloropropene	-	-	-	-	-	ND (64)	ND (7.5)	-	-	-	-	-
Trichloroethene	-	1900	19000	-	10000	ND (64)	ND (7.5)	-	-	-	-	-
Trichlorofluoromethane (CFC-11)	-	35000000	350000000	-	-	ND (64)	ND (7.5)	-	-	-	-	-
Trifluorotrichloroethane (Freon 113)	-	2800000	28000000	-	-	ND (64)	ND (7.5)	-	-	-	-	-
Vinyl chloride	-	1700	17000	-	4000	ND (64)	ND (7.5)	-	-	-	-	-
Xylene (total)	-	250000	2500000	-	-	**20 J**	ND (15)	-	-	-	-	-
TCLP Inorganic Compounds (mg/L)												
Arsenic	-	-	-	5	-	**0.017 JB**	-	-	-	-	-	-
Barium	-	-	-	100	-	**0.11 J**	-	-	-	-	-	-
Cadmium	-	-	-	1	-	**0.0034 J**	-	-	-	-	-	-
Chromium	-	-	-	5	-	**0.027 J**	-	-	-	-	-	-
Lead	-	-	-	5	-	**0.17 J**	-	-	-	-	-	-
Mercury	-	-	-	0.2	-	ND (0.002)	-	-	-	-	-	-
Selenium	-	-	-	1	-	ND (0.05)	-	-	-	-	-	-
Silver	-	-	-	5	-	ND (0.05)	-	-	-	-	-	-
TCLP Semi-Volatile Organic Compounds (mg/L)												
1,4-Dichlorobenzene	-	-	-	7.5	-	ND (0.004)	-	-	-	-	-	-
2,4,5-Trichlorophenol	-	-	-	400	-	ND (0.004)	-	-	-	-	-	-
2,4,6-Trichlorophenol	-	-	-	2	-	ND (0.004)	-	-	-	-	-	-
2,4-Dinitrotoluene	-	-	-	0.13	-	ND (0.004)	-	-	-	-	-	-
2-Methylphenol (o-Cresol)	-	-	-	200	-	**0.0008 J**	-	-	-	-	-	-
3&4-Methylphenol	-	-	-	-	-	**0.0012 J**	-	-	-	-	-	-
Hexachlorobenzene	-	-	-	0.13	-	ND (0.0008)	-	-	-	-	-	-
Hexachlorobutadiene	-	-	-	0.5	-	ND (0.004)	-	-	-	-	-	-
Hexachloroethane	-	-	-	3	-	ND (0.004)	-	-	-	-	-	-
Nitrobenzene	-	-	-	2	-	ND (0.004)	-	-	-	-	-	-

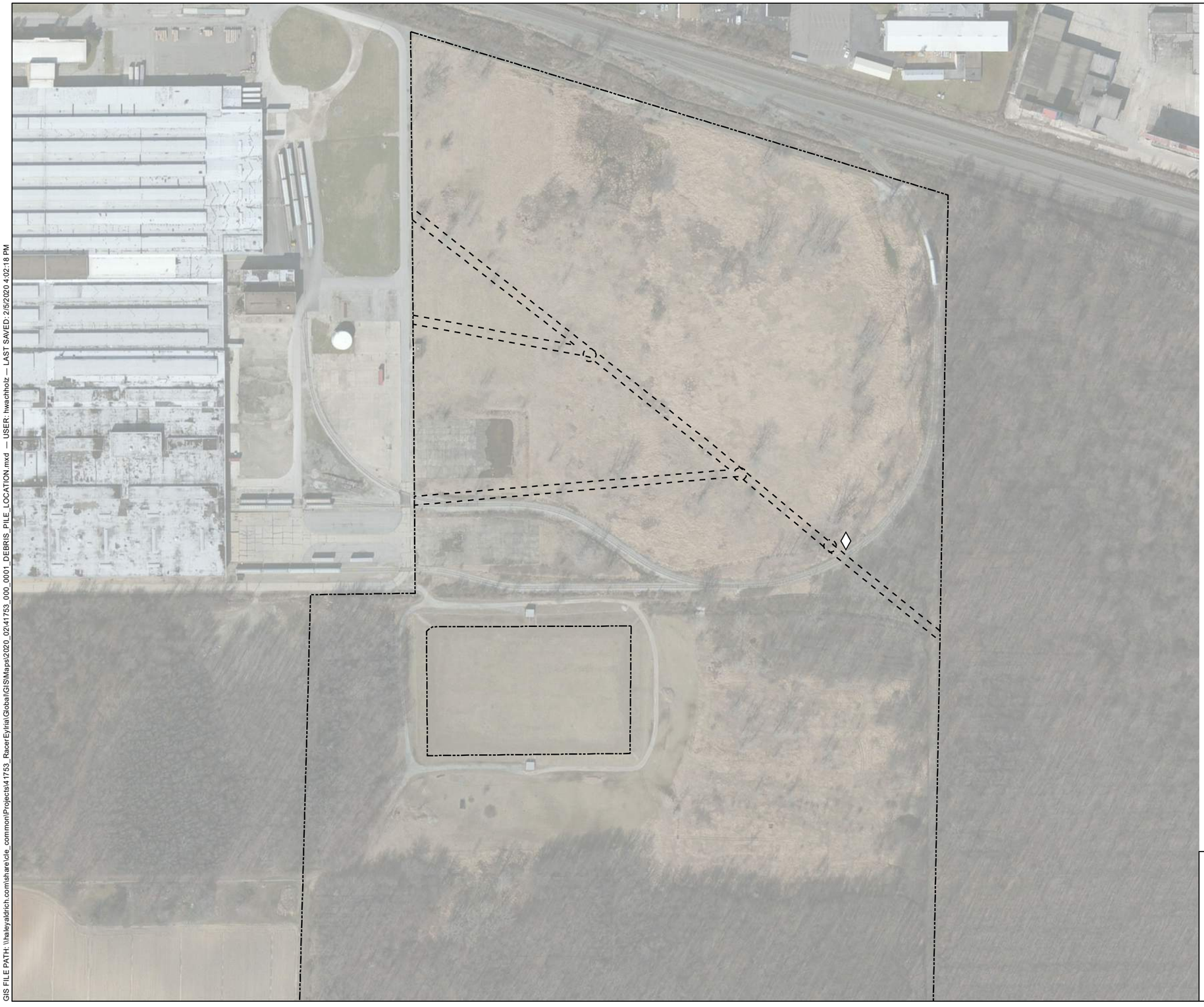
TABLE I
SUMMARY OF COMPOSITE DEBRIS ANALYTICAL RESULTS
RACER ELYRIA
ELYRIA, OHIO

Location Sample Date Sample Name	Ohio EPA Background Numbers Lorain County	Industrial Regional Screening Level	10x Industrial Regional Screening Level	Hazardous Waste Screening (TCLP)	Hazardous Waste Screening (20x-Solids)	DEBRIS 03/13/2019 WC1-NSA-031319	CONF. SAMPLE 9/19/2019 7082-091919-1500	SB-01 2/27/2020 SB01-022720-1145	SB-02 2/27/2020 SB02-022720-1245	FD (SB-02) 2/27/2020 7082-022720-0001	SB-03 2/27/2020 SB03-022720-1330	EB 2/27/2020 7082-022720-0002
Pentachlorophenol	-	-	-	100	-	ND (0.016)	-	-	-	-	-	-
Pyridine	-	-	-	5	-	ND (0.004)	-	-	-	-	-	-
TCLP Volatile Organic Compounds (mg/L)												
1,1-Dichloroethene	-	-	-	0.7	-	ND (0.025)	-	-	-	-	-	-
1,2-Dichloroethane	-	-	-	0.5	-	ND (0.025)	-	-	-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	-	-	-	200	-	ND (0.25)	-	-	-	-	-	-
Benzene	-	-	-	0.5	-	ND (0.025)	-	-	-	-	-	-
Carbon tetrachloride	-	-	-	0.5	-	ND (0.025)	-	-	-	-	-	-
Chlorobenzene	-	-	-	100	-	ND (0.025)	-	-	-	-	-	-
Chloroform (Trichloromethane)	-	-	-	6	-	ND (0.025)	-	-	-	-	-	-
Tetrachloroethene	-	-	-	0.7	-	ND (0.025)	-	-	-	-	-	-
Trichloroethene	-	-	-	0.5	-	ND (0.025)	-	-	-	-	-	-
Vinyl chloride	-	-	-	0.2	-	ND (0.025)	-	-	-	-	-	-

Notes and Abbreviations:

1. [<A] - Less than EPA Background Number - Cuyahoga County - Not screened against other criteria.
   [A] - Exceeds Ohio EPA Background Number - Lorain County
   [B] - Industrial Regional Screening Level (RSL), TR= 1E-06, THQ=0.1
   [C] - 10X Industrial Regional Screening Level (RSL), TR= 1E-06, THQ=0.1
   [D] - Hazardous Waste Screening Level
2. Results in **bold** were detected.
3. ND - Not detected above reporting limit (shown in parenthesis)
   J - Estimated result
   B - Compound was found in blank and sample
   * - ISTD response or retention time outside of acceptable limits.
   mg/kg - milligrams per kilogram
   µg/kg - micrograms per kilogram
   EPA - Environmental Protection Agency
   mg/L - milligrams per liter
   PCB - Polychlorinated biphenyls
   TCLP - Toxicity Characteristic Leaching Procedure

FIGURES



LEGEND

- DEBRIS PILE LOCATION
- STORM SEWERS
- SITE BOUNDARY

NOTES

1. SEWER SURVEY INFORMATION UPDATED ON MAY 4, 2015.
2. DEBRIS PILE DIMENSIONS APPROXIMATELY 10 X 15 FEET
3. AERIAL IMAGERY SOURCE: ESRI

N

0 250 500

SCALE IN FEET

HALEY ALDRICH

RACER ELYRIA
ELYRIA, OHIO

DEBRIS PILE LOCATION

FEBRUARY 2020

FIGURE 1

GIS FILE PATH: \\haleyaldrich.com\share\cle_common\Projects\41753_RacerEyrialGlobal\GISMaps\2020_02\41753_000_0001_DEBRIS_PILE_LOCATION.mxd — USER: hwachholz — LAST SAVED: 2/5/2020 4:02:18 PM

DEBRIS PILE OBSERVED
MARCH, 2019

DEBRIS PILE REMOVED
SEPTEMBER, 2019

LEGEND

- DEBRIS PILE LOCATION
- STORM SEWERS
- SITE BOUNDARY

NOTES

1. SEWER SURVEY INFORMATION UPDATED ON MAY 4, 2015.
2. DEBRIS PILE DIMENSIONS APPROXIMATELY 10 X 15 FEET
3. AERIAL IMAGERY SOURCE: ESRI

N

0 75 150
SCALE IN FEET

HALEY ALDRICH

RACER ELYRIA
ELYRIA, OHIO

DEBRIS PILE LOCATION

FEBRUARY 2020

FIGURE 2

GIS FILE PATH: \\haleyaldrich.com\share\cle_common\Projects\141753_RacerElyria\Global\GIS\Maps\2020_02\141753_000_0002_DEBRIS_PILE_LOCATION.mxd — USER: hwachholz — LAST SAVED: 2/5/2020 4:34:57 PM

LEGEND

- PROPOSED SOIL BORING LOCATION
- SEWER INVERT
- STORM SEWERS
- FORMER DEBRIS PILE

NOTES

1. SEWER SURVEY INFORMATION UPDATED ON MAY 4, 2015.
2. DEBRIS PILE DIMENSIONS APPROXIMATELY 10 X 15 X 2.5 FEET
3. AERIAL IMAGERY SOURCE: ESRI

N

0 25 50

SCALE IN FEET

HALEY ALDRICH

RACER ELYRIA
ELYRIA, OHIO

SOIL BORINGS

APRIL 2020

FIGURE 3

GIS FILE PATH: C:\Users\sdeyoung\OneDrive - haleyaldrich.com\Documents\Bronson\GIS\SoilGasGW\41753_000_0001_FORMER_DEBRIS_PILE_SOIL_BORINGS.mxd — USER: sdeyoung — LAST SAVED: 4/28/2020 11:29:03 AM

ATTACHMENT 1

Laboratory 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: 240-109412-1
Client Project/Site: Racer Elyria

For:
Haley & Aldrich, Inc.
455 E. Eisenhower Parkway
Suite 210
Ann Arbor, Michigan 48108-2280

Attn: Ban Aragona

Denise D Heckler

Authorized for release by:
3/21/2019 3:38:05 PM
Denise Heckler, Project Manager II
(330)966-9477
denise.heckler@testamericainc.com

Designee for

Leslie Howell, Project Manager I
(330)966-9266
leslie.howell@testamericainc.com

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

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

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	ISTD response or retention time outside acceptable limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

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.
X	Surrogate is outside control limits

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
X	Surrogate is outside control limits

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.
B	Compound was found in the blank and sample.

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: 240-109412-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: Haley & Aldrich, Inc.

Project: Racer Elyria

Report Number: 240-109412-1

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 sample was received on 3/14/2019 11:15 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2º C.

The COC lists both total and TCLP PCBs. Only total PCBs were analyzed.

VOLATILES ORGANICS COMPOUNDS (GCMS)

Sample WC1-NSA-031319 (240-109412-1) was analyzed for volatiles organics compounds (GCMS) in accordance with EPA SW846 Methods 1311/8260B. The sample was analyzed on 03/20/2019.

Internal standard (ISTD) response for the following samples were outside control limits: WC1-NSA-031319 (240-109412-1), (240-109412-A-1-L MS) and (240-109412-A-1-M MSD). The sample was re-extracted and/or re-analyzed with concurring results, and the second set of data has been reported.

The following samples were diluted due to the abundance of non-target analytes: WC1-NSA-031319 (240-109412-1), (240-109412-A-1-L MS) and (240-109412-A-1-M MSD). 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.

Job ID: 240-109412-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

VOLATILE ORGANIC COMPOUNDS
Sample WC1-NSA-031319 (240-109412-1) was analyzed for volatile organic compounds in accordance with SW-846 Method 8260B. The sample was prepared and analyzed on 03/18/2019.

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

GC/MS SEMIVOLATILES
Sample WC1-NSA-031319 (240-109412-1) was analyzed for GC/MS Semivolatiles in accordance with SW-846 Method 8270C. The sample was prepared on 03/19/2019 and analyzed on 03/21/2019.

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

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)
Sample WC1-NSA-031319 (240-109412-1) was analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270C. The sample was prepared on 03/16/2019 and analyzed on 03/19/2019.

The following sample was diluted due to the nature of the sample matrix: WC1-NSA-031319 (240-109412-1). Elevated reporting limits (RLs) are provided. The surrogates are considered diluted out.

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

POLYCHLORINATED BIPHENYLS (PCBS)
Sample WC1-NSA-031319 (240-109412-1) was analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The sample was prepared on 03/16/2019 and analyzed on 03/21/2019.

Due to the sample dilution, DCB Decachlorobiphenyl failed the surrogate recovery criteria high for WC1-NSA-031319 (240-109412-1).

The following sample was diluted due to the nature of the sample matrix: WC1-NSA-031319 (240-109412-1). 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.

METALS ICP
Sample WC1-NSA-031319 (240-109412-1) was analyzed for Metals ICP in accordance with EPA SW-846 Methods 1311/6010B. The sample was prepared on 03/19/2019 and analyzed on 03/20/2019 and 03/21/2019.

Arsenic was detected in method blank LB 240-372095/1-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.

The following sample was diluted due to the nature of the sample matrix: WC1-NSA-031319 (240-109412-1). 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.

METALS (ICP)
Sample WC1-NSA-031319 (240-109412-1) was analyzed for Metals (ICP) in accordance with SW-846 Method 6010B. The sample was prepared on 03/18/2019 and analyzed on 03/19/2019.

The following sample was diluted due to the nature of the sample matrix: WC1-NSA-031319 (240-109412-1). 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.

Job ID: 240-109412-1 (Continued)

Laboratory: TestAmerica Canton (Continued)

MERCURY

Sample WC1-NSA-031319 (240-109412-1) was analyzed for Mercury with particle size reduction in accordance with EPA SW-846 Methods 1311/7470A. The sample was prepared on 03/19/2019 and analyzed on 03/20/2019.

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

MERCURY

Sample WC1-NSA-031319 (240-109412-1) was analyzed for mercury in accordance with EPA SW-846 Method 7471A. The sample was prepared on 03/18/2019 and analyzed on 03/19/2019.

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

TestAmerica Job ID: 240-109412-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
7470A	Mercury (CVAA)	SW846	TAL CAN
7471A	Mercury (CVAA)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN
1311	TCLP Extraction	SW846	TAL CAN
3010A	Preparation, Total Metals	SW846	TAL CAN
3050B	Preparation, Metals	SW846	TAL CAN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL CAN
3540C	Soxhlet Extraction	SW846	TAL CAN
5030A	Purge and Trap	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN
7470A	Preparation, Mercury	SW846	TAL CAN
7471A	Preparation, Mercury	SW846	TAL CAN
Part Size Red	Particle Size Reduction Preparation	None	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

None = None

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

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

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

TestAmerica Job ID: 240-109412-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-109412-1	WC1-NSA-031319	Solid	03/13/19 15:00	03/14/19 11:15

Detection Summary

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

TestAmerica Job ID: 240-109412-1

Client Sample ID: WC1-NSA-031319 — Lab Sample ID: 240-109412-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Xylenes, Total	20	J	130	20	ug/Kg	1	☼	8260B	Total/NA
Isopropylbenzene	18	J	64	11	ug/Kg	1	☼	8260B	Total/NA
1,1'-Biphenyl	130000	J	180000	61000	ug/Kg	500	☼	8270C	Total/NA
2-Methylnaphthalene	270000		54000	7100	ug/Kg	500	☼	8270C	Total/NA
Fluorene	17000	J	54000	9900	ug/Kg	500	☼	8270C	Total/NA
3 & 4 Methylphenol	0.0012	J	0.0040	0.00019	mg/L	1		8270C	TCLP
2-Methylphenol	0.00080	J	0.0040	0.00021	mg/L	1		8270C	TCLP
Aluminum	1800		24	6.4	mg/Kg	1	☼	6010B	Total/NA
Barium	23	J	24	0.43	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.094	J	0.60	0.064	mg/Kg	1	☼	6010B	Total/NA
Calcium	800		600	43	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.16	J	0.24	0.057	mg/Kg	1	☼	6010B	Total/NA
Cobalt	27		1.2	0.24	mg/Kg	1	☼	6010B	Total/NA
Chromium	28		0.60	0.18	mg/Kg	1	☼	6010B	Total/NA
Copper	28000		30	2.8	mg/Kg	10	☼	6010B	Total/NA
Iron	3400		12	8.3	mg/Kg	1	☼	6010B	Total/NA
Potassium	140	J	600	43	mg/Kg	1	☼	6010B	Total/NA
Magnesium	280	J	600	55	mg/Kg	1	☼	6010B	Total/NA
Manganese	15		1.8	0.37	mg/Kg	1	☼	6010B	Total/NA
Silver	0.21	J	0.60	0.097	mg/Kg	1	☼	6010B	Total/NA
Sodium	91	J	600	75	mg/Kg	1	☼	6010B	Total/NA
Nickel	1200		4.8	0.28	mg/Kg	1	☼	6010B	Total/NA
Vanadium	4.4	J	6.0	0.98	mg/Kg	1	☼	6010B	Total/NA
Zinc	640		6.0	1.6	mg/Kg	1	☼	6010B	Total/NA
Arsenic	3.8		1.2	0.38	mg/Kg	1	☼	6010B	Total/NA
Lead	68		12	3.4	mg/Kg	10	☼	6010B	Total/NA
Selenium	0.77	J	1.8	0.56	mg/Kg	1	☼	6010B	Total/NA
Arsenic	0.017	J B	0.050	0.0041	mg/L	1		6010B	TCLP
Barium	0.11	J	0.50	0.0013	mg/L	1		6010B	TCLP
Cadmium	0.0034	J	0.050	0.00020	mg/L	1		6010B	TCLP
Chromium	0.027	J	0.050	0.00063	mg/L	1		6010B	TCLP
Lead	0.17	J	1.0	0.055	mg/L	20		6010B	TCLP
Mercury	0.029	J	0.14	0.024	mg/Kg	1	☼	7471A	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: WC1-NSA-031319
Date Collected: 03/13/19 15:00
Date Received: 03/14/19 11:15

Lab Sample ID: 240-109412-1
Matrix: Solid
Percent Solids: 76.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	320	U	320	270	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Benzene	64	U	64	8.9	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Dichlorobromomethane	64	U	64	8.7	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Bromoform	64	U	64	31	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Bromomethane	64	U	64	13	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
2-Butanone (MEK)	260	U	260	45	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Carbon disulfide	64	U	64	15	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Carbon tetrachloride	64	U	64	42	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Chlorobenzene	64	U	64	12	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Chloroethane	64	U	64	16	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Chloroform	64	U	64	10	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Chloromethane	64	U	64	13	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
1,1-Dichloroethane	64	U	64	8.9	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
1,2-Dichloroethane	64	U	64	9.9	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
1,1-Dichloroethene	64	U	64	12	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
1,2-Dichloropropane	64	U	64	11	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
cis-1,3-Dichloropropene	64	U	64	18	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
trans-1,3-Dichloropropene	64	U	64	13	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Ethylbenzene	64	U	64	13	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
2-Hexanone	260	U	260	52	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Methylene Chloride	320	U	320	150	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
4-Methyl-2-pentanone (MIBK)	260	U	260	47	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Styrene	64	U	64	15	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
1,1,2,2-Tetrachloroethane	64	U *	64	18	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Tetrachloroethene	64	U	64	9.3	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Toluene	64	U	64	9.9	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Trichloroethene	64	U	64	8.1	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Vinyl chloride	64	U	64	11	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Xylenes, Total	**20**	**J**	130	20	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
1,1,1-Trichloroethane	64	U	64	10	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
1,1,2-Trichloroethane	64	U	64	14	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Cyclohexane	130	U	130	18	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
1,2-Dibromo-3-Chloropropane	130	U *	130	46	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Ethylene Dibromide	64	U	64	9.8	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Dichlorodifluoromethane	64	U	64	12	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
cis-1,2-Dichloroethene	64	U	64	8.3	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
trans-1,2-Dichloroethene	64	U	64	5.9	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Isopropylbenzene	**18**	**J**	64	11	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Methyl acetate	320	U	320	43	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Methyl tert-butyl ether	64	U	64	10	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	64	U	64	16	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
1,2,4-Trichlorobenzene	64	U *	64	7.3	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
1,2-Dichlorobenzene	64	U *	64	14	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
1,3-Dichlorobenzene	64	U *	64	10	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
1,4-Dichlorobenzene	64	U *	64	11	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Trichlorofluoromethane	64	U	64	14	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Chlorodibromomethane	64	U	64	36	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1
Methylcyclohexane	130	U	130	16	ug/Kg	☼	03/18/19 12:11	03/18/19 17:59	1

Client Sample ID: WC1-NSA-031319
Date Collected: 03/13/19 15:00
Date Received: 03/14/19 11:15

Lab Sample ID: 240-109412-1
Matrix: Solid
Percent Solids: 76.3

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*88*		*48 - 123*	*03/18/19 12:11*	*03/18/19 17:59*	*1*
4-Bromofluorobenzene (Surr)	*116*	*	*49 - 141*	*03/18/19 12:11*	*03/18/19 17:59*	*1*
Toluene-d8 (Surr)	*121*		*62 - 135*	*03/18/19 12:11*	*03/18/19 17:59*	*1*
Dibromofluoromethane (Surr)	*93*		*49 - 132*	*03/18/19 12:11*	*03/18/19 17:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	0.025	U	0.025	0.00019	mg/L			03/20/19 15:10	1
1,2-Dichloroethane	0.025	U	0.025	0.00021	mg/L			03/20/19 15:10	1
2-Butanone (MEK)	0.25	U	0.25	0.0012	mg/L			03/20/19 15:10	1
Benzene	0.025	U	0.025	0.00013	mg/L			03/20/19 15:10	1
Carbon tetrachloride	0.025	U	0.025	0.00026	mg/L			03/20/19 15:10	1
Chlorobenzene	0.025	U	0.025	0.00014	mg/L			03/20/19 15:10	1
Chloroform	0.025	U	0.025	0.00013	mg/L			03/20/19 15:10	1
Tetrachloroethene	0.025	U	0.025	0.00015	mg/L			03/20/19 15:10	1
Trichloroethene	0.025	U	0.025	0.00010	mg/L			03/20/19 15:10	1
Vinyl chloride	0.025	U	0.025	0.00020	mg/L			03/20/19 15:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*107*		*66 - 120*		*03/20/19 15:10*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 120*		*03/20/19 15:10*	*1*
Toluene-d8 (Surr)	*90*		*72 - 120*		*03/20/19 15:10*	*1*
Dibromofluoromethane (Surr)	*113*		*64 - 121*		*03/20/19 15:10*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	**130000**	**J**	180000	61000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
bis (2-chloroisopropyl) ether	360000	U	360000	36000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
2,4,5-Trichlorophenol	540000	U	540000	250000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
2,4,6-Trichlorophenol	540000	U	540000	230000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
2,4-Dichlorophenol	540000	U	540000	160000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
2,4-Dimethylphenol	540000	U	540000	140000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
2,4-Dinitrophenol	1200000	U	1200000	510000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
2,4-Dinitrotoluene	720000	U	720000	220000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
2,6-Dinitrotoluene	720000	U	720000	200000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
2-Chloronaphthalene	180000	U	180000	50000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
2-Chlorophenol	180000	U	180000	36000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
2-Methylnaphthalene	**270000**		54000	7100	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
2-Methylphenol	720000	U	720000	110000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
2-Nitroaniline	720000	U	720000	140000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
2-Nitrophenol	180000	U	180000	47000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
3,3'-Dichlorobenzidine	360000	U	360000	160000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
3-Nitroaniline	720000	U	720000	180000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
4,6-Dinitro-2-methylphenol	1200000	U	1200000	290000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
4-Bromophenyl phenyl ether	180000	U	180000	50000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
4-Chloro-3-methylphenol	540000	U	540000	160000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
4-Chloroaniline	540000	U	540000	110000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
4-Chlorophenyl phenyl ether	180000	U	180000	50000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
4-Nitroaniline	720000	U	720000	220000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
4-Nitrophenol	1200000	U	1200000	340000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Acenaphthene	54000	U	54000	10000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500

Client Sample ID: WC1-NSA-031319
Date Collected: 03/13/19 15:00
Date Received: 03/14/19 11:15

Lab Sample ID: 240-109412-1
Matrix: Solid
Percent Solids: 76.3

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	54000	U	54000	14000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Acetophenone	360000	U	360000	40000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Anthracene	54000	U	54000	8700	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Atrazine	720000	U	720000	130000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Benzaldehyde	360000	U	360000	83000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Benzo[a]anthracene	54000	U	54000	12000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Benzo[a]pyrene	54000	U	54000	34000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Benzo[b]fluoranthene	54000	U	54000	23000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Benzo[g,h,i]perylene	54000	U	54000	26000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Benzo[k]fluoranthene	54000	U	54000	25000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Bis(2-chloroethoxy)methane	360000	U	360000	43000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Bis(2-chloroethyl)ether	360000	U	360000	43000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Bis(2-ethylhexyl) phthalate	250000	U	250000	180000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Butyl benzyl phthalate	250000	U	250000	79000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Caprolactam	1200000	U	1200000	270000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Carbazole	180000	U	180000	69000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Chrysene	54000	U	54000	5400	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Dibenz(a,h)anthracene	54000	U	54000	25000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Dibenzofuran	180000	U	180000	47000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Diethyl phthalate	250000	U	250000	110000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Dimethyl phthalate	250000	U	250000	50000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Di-n-butyl phthalate	250000	U	250000	79000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Di-n-octyl phthalate	250000	U	250000	100000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Fluoranthene	54000	U	54000	16000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Fluorene	**17000**	**J**	54000	9900	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Hexachlorobenzene	54000	U	54000	10000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Hexachlorobutadiene	180000	U	180000	43000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Hexachlorocyclopentadiene	1200000	U	1200000	220000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Hexachloroethane	180000	U	180000	32000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Indeno[1,2,3-cd]pyrene	54000	U	54000	27000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Isophorone	180000	U	180000	43000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Naphthalene	54000	U	54000	8700	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Nitrobenzene	360000	U	360000	47000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
N-Nitrosodi-n-propylamine	180000	U	180000	40000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
N-Nitrosodiphenylamine	180000	U	180000	43000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Pentachlorophenol	540000	U	540000	210000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Phenol	180000	U	180000	29000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Phenanthrene	54000	U	54000	8000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
Pyrene	54000	U	54000	7700	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500
3 & 4 Methylphenol	1400000	U	1400000	100000	ug/Kg	☼	03/16/19 10:43	03/19/19 19:04	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*0*	*X*	*32 - 120*	*03/16/19 10:43*	*03/19/19 19:04*	*500*
2-Fluorophenol (Surr)	*0*	*X*	*29 - 120*	*03/16/19 10:43*	*03/19/19 19:04*	*500*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*10 - 120*	*03/16/19 10:43*	*03/19/19 19:04*	*500*
Nitrobenzene-d5 (Surr)	*0*	*X*	*30 - 120*	*03/16/19 10:43*	*03/19/19 19:04*	*500*
Phenol-d5 (Surr)	*0*	*X*	*29 - 120*	*03/16/19 10:43*	*03/19/19 19:04*	*500*
Terphenyl-d14 (Surr)	*0*	*X*	*41 - 120*	*03/16/19 10:43*	*03/19/19 19:04*	*500*

Client Sample ID: WC1-NSA-031319
Date Collected: 03/13/19 15:00
Date Received: 03/14/19 11:15

Lab Sample ID: 240-109412-1
Matrix: Solid
Percent Solids: 76.3

Method: 8270C - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.0040	U	0.0040	0.00033	mg/L		03/19/19 12:40	03/21/19 11:34	1
2,4,5-Trichlorophenol	0.0040	U	0.0040	0.0020	mg/L		03/19/19 12:40	03/21/19 11:34	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.0018	mg/L		03/19/19 12:40	03/21/19 11:34	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.0021	mg/L		03/19/19 12:40	03/21/19 11:34	1
Hexachlorobenzene	0.00080	U	0.00080	0.00016	mg/L		03/19/19 12:40	03/21/19 11:34	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00054	mg/L		03/19/19 12:40	03/21/19 11:34	1
Hexachloroethane	0.0040	U	0.0040	0.00040	mg/L		03/19/19 12:40	03/21/19 11:34	1
3 & 4 Methylphenol	**0.0012**	**J**	0.0040	0.00019	mg/L		03/19/19 12:40	03/21/19 11:34	1
2-Methylphenol	**0.00080**	**J**	0.0040	0.00021	mg/L		03/19/19 12:40	03/21/19 11:34	1
Nitrobenzene	0.0040	U	0.0040	0.00051	mg/L		03/19/19 12:40	03/21/19 11:34	1
Pentachlorophenol	0.016	U	0.016	0.0031	mg/L		03/19/19 12:40	03/21/19 11:34	1
Pyridine	0.0040	U	0.0040	0.00036	mg/L		03/19/19 12:40	03/21/19 11:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*79*		*38 - 120*	*03/19/19 12:40*	*03/21/19 11:34*	*1*
2-Fluorophenol (Surr)	*62*		*10 - 120*	*03/19/19 12:40*	*03/21/19 11:34*	*1*
2,4,6-Tribromophenol (Surr)	*88*		*28 - 120*	*03/19/19 12:40*	*03/21/19 11:34*	*1*
Nitrobenzene-d5 (Surr)	*75*		*32 - 120*	*03/19/19 12:40*	*03/21/19 11:34*	*1*
Phenol-d5 (Surr)	*51*		*10 - 120*	*03/19/19 12:40*	*03/21/19 11:34*	*1*
Terphenyl-d14 (Surr)	*53*		*23 - 127*	*03/19/19 12:40*	*03/21/19 11:34*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	330	U	330	150	ug/Kg	☼	03/16/19 09:59	03/21/19 07:27	5
Aroclor-1221	330	U	330	160	ug/Kg	☼	03/16/19 09:59	03/21/19 07:27	5
Aroclor-1232	330	U	330	150	ug/Kg	☼	03/16/19 09:59	03/21/19 07:27	5
Aroclor-1242	330	U	330	130	ug/Kg	☼	03/16/19 09:59	03/21/19 07:27	5
Aroclor-1248	330	U	330	160	ug/Kg	☼	03/16/19 09:59	03/21/19 07:27	5
Aroclor-1254	330	U	330	150	ug/Kg	☼	03/16/19 09:59	03/21/19 07:27	5
Aroclor-1260	330	U	330	150	ug/Kg	☼	03/16/19 09:59	03/21/19 07:27	5
Aroclor-1262	330	U	330	200	ug/Kg	☼	03/16/19 09:59	03/21/19 07:27	5
Aroclor-1268	330	U	330	150	ug/Kg	☼	03/16/19 09:59	03/21/19 07:27	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*88*		*14 - 128*	*03/16/19 09:59*	*03/21/19 07:27*	*5*
DCB Decachlorobiphenyl	*136*	*X*	*10 - 132*	*03/16/19 09:59*	*03/21/19 07:27*	*5*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1800**		24	6.4	mg/Kg	☼	03/18/19 14:00	03/19/19 11:15	1
Antimony	12	U	12	4.3	mg/Kg	☼	03/18/19 14:00	03/19/19 11:19	10
Barium	**23**	**J**	24	0.43	mg/Kg	☼	03/18/19 14:00	03/19/19 11:15	1
Beryllium	**0.094**	**J**	0.60	0.064	mg/Kg	☼	03/18/19 14:00	03/19/19 11:15	1
Calcium	**800**		600	43	mg/Kg	☼	03/18/19 14:00	03/19/19 11:15	1
Cadmium	**0.16**	**J**	0.24	0.057	mg/Kg	☼	03/18/19 14:00	03/19/19 11:15	1
Cobalt	**27**		1.2	0.24	mg/Kg	☼	03/18/19 14:00	03/19/19 11:15	1
Chromium	**28**		0.60	0.18	mg/Kg	☼	03/18/19 14:00	03/19/19 11:15	1
Copper	**28000**		30	2.8	mg/Kg	☼	03/18/19 14:00	03/19/19 11:19	10
Iron	**3400**		12	8.3	mg/Kg	☼	03/18/19 14:00	03/19/19 11:15	1
Potassium	**140**	**J**	600	43	mg/Kg	☼	03/18/19 14:00	03/19/19 11:15	1

Client Sample ID: WC1-NSA-031319
Date Collected: 03/13/19 15:00
Date Received: 03/14/19 11:15

Lab Sample ID: 240-109412-1
Matrix: Solid
Percent Solids: 76.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	280	J	600	55	mg/Kg	☼	03/18/19 14:00	03/19/19 11:15	1
Manganese	15		1.8	0.37	mg/Kg	☼	03/18/19 14:00	03/19/19 11:15	1
Silver	0.21	J	0.60	0.097	mg/Kg	☼	03/18/19 14:00	03/19/19 11:15	1
Sodium	91	J	600	75	mg/Kg	☼	03/18/19 14:00	03/19/19 11:15	1
Nickel	1200		4.8	0.28	mg/Kg	☼	03/18/19 14:00	03/19/19 11:15	1
Vanadium	4.4	J	6.0	0.98	mg/Kg	☼	03/18/19 14:00	03/19/19 11:15	1
Zinc	640		6.0	1.6	mg/Kg	☼	03/18/19 14:00	03/19/19 11:15	1
Arsenic	3.8		1.2	0.38	mg/Kg	☼	03/18/19 14:00	03/19/19 11:15	1
Lead	68		12	3.4	mg/Kg	☼	03/18/19 14:00	03/19/19 11:19	10
Selenium	0.77	J	1.8	0.56	mg/Kg	☼	03/18/19 14:00	03/19/19 11:15	1
Thallium	1.2	U	1.2	0.48	mg/Kg	☼	03/18/19 14:00	03/19/19 11:15	1

Method: 6010B - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.017	J B	0.050	0.0041	mg/L		03/19/19 14:00	03/20/19 17:16	1
Barium	0.11	J	0.50	0.0013	mg/L		03/19/19 14:00	03/20/19 17:16	1
Cadmium	0.0034	J	0.050	0.00020	mg/L		03/19/19 14:00	03/20/19 17:16	1
Chromium	0.027	J	0.050	0.00063	mg/L		03/19/19 14:00	03/20/19 17:16	1
Lead	0.17	J	1.0	0.055	mg/L		03/19/19 14:00	03/21/19 11:19	20
Selenium	0.050	U	0.050	0.0060	mg/L		03/19/19 14:00	03/20/19 17:16	1
Silver	0.050	U	0.050	0.00062	mg/L		03/19/19 14:00	03/20/19 17:16	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.00013	mg/L		03/19/19 12:00	03/20/19 17:04	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.029	J	0.14	0.024	mg/Kg	☼	03/18/19 16:00	03/19/19 11:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	76.3		0.1	0.1	%			03/15/19 13:16	1
Percent Moisture	23.7		0.1	0.1	%			03/15/19 13:16	1

Surrogate Summary

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

TestAmerica Job ID: 240-109412-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(48-123)	(49-141)	(62-135)	(49-132)
240-109412-1	WC1-NSA-031319	88	116 *	121	93
240-109412-1 MS	WC1-NSA-031319	92	124 *	124	98
240-109412-1 MSD	WC1-NSA-031319	90	117 *	122	95
LCS 240-371992/5	Lab Control Sample	86	90	100	95
MB 240-371992/7	Method Blank	89	89	99	92

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(66-120)	(72-120)	(72-120)	(64-121)
LCS 240-372202/16	Lab Control Sample	103	101	95	110

Surrogate Legend

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

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

Matrix: Solid — **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(66-120)	(72-120)	(72-120)	(64-121)
240-109412-1	WC1-NSA-031319	107	98	90	113
LB 240-372102/1-A MB	Method Blank	87	112	92	101

Surrogate Legend

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

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(32-120)	(29-120)	(10-120)	(30-120)	(29-120)	(41-120)
240-109412-1	WC1-NSA-031319	0 X	0 X	0 X	0 X	0 X	0 X
LCS 240-371874/7-A	Lab Control Sample	81	91	55	85	93	95
MB 240-371874/6-A	Method Blank	89	96	33	90	97	102

Surrogate Summary

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

TestAmerica Job ID: 240-109412-1

Surrogate Legend

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

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(38-120)	(10-120)	(28-120)	(32-120)	(10-120)	(23-127)
LCS 240-372253/18-A	Lab Control Sample	86	90	92	86	60	102
MB 240-372253/17-A	Method Blank	83	80	108	73	63	96

Surrogate Legend

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

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: TCLP**

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	TBP	NBZ	PHL	TPHL
Lab Sample ID	Client Sample ID	(38-120)	(10-120)	(28-120)	(32-120)	(10-120)	(23-127)
240-109412-1	WC1-NSA-031319	79	62	88	75	51	53

Surrogate Legend

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

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

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

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX2	DCBP2
Lab Sample ID	Client Sample ID	(14-128)	(10-132)
240-109412-1	WC1-NSA-031319	88	136 X
LCS 240-371868/12-A	Lab Control Sample	76	81
MB 240-371868/11-A	Method Blank	75	87

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

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

Lab Sample ID: MB 240-371992/7
Matrix: Solid
Analysis Batch: 371992

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	21	ug/Kg			03/18/19 13:15	1
Dichlorobromomethane	5.0	U	5.0	0.68	ug/Kg			03/18/19 13:15	1
Bromoform	5.0	U	5.0	2.4	ug/Kg			03/18/19 13:15	1
Bromomethane	5.0	U	5.0	0.99	ug/Kg			03/18/19 13:15	1
2-Butanone (MEK)	20	U	20	3.6	ug/Kg			03/18/19 13:15	1
Carbon disulfide	5.0	U	5.0	1.2	ug/Kg			03/18/19 13:15	1
Benzene	5.0	U	5.0	0.70	ug/Kg			03/18/19 13:15	1
Carbon tetrachloride	5.0	U	5.0	3.3	ug/Kg			03/18/19 13:15	1
Chlorobenzene	5.0	U	5.0	0.92	ug/Kg			03/18/19 13:15	1
Chloroethane	5.0	U	5.0	1.2	ug/Kg			03/18/19 13:15	1
Chloroform	5.0	U	5.0	0.79	ug/Kg			03/18/19 13:15	1
Chloromethane	5.0	U	5.0	1.0	ug/Kg			03/18/19 13:15	1
1,1-Dichloroethane	5.0	U	5.0	0.69	ug/Kg			03/18/19 13:15	1
1,2-Dichloroethane	5.0	U	5.0	0.77	ug/Kg			03/18/19 13:15	1
1,1-Dichloroethene	5.0	U	5.0	0.90	ug/Kg			03/18/19 13:15	1
1,2-Dichloropropane	5.0	U	5.0	0.85	ug/Kg			03/18/19 13:15	1
cis-1,3-Dichloropropene	5.0	U	5.0	1.4	ug/Kg			03/18/19 13:15	1
trans-1,3-Dichloropropene	5.0	U	5.0	1.0	ug/Kg			03/18/19 13:15	1
Ethylbenzene	5.0	U	5.0	1.0	ug/Kg			03/18/19 13:15	1
2-Hexanone	20	U	20	4.1	ug/Kg			03/18/19 13:15	1
Methylene Chloride	25	U	25	12	ug/Kg			03/18/19 13:15	1
4-Methyl-2-pentanone (MIBK)	20	U	20	3.7	ug/Kg			03/18/19 13:15	1
Styrene	5.0	U	5.0	1.2	ug/Kg			03/18/19 13:15	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1.4	ug/Kg			03/18/19 13:15	1
Tetrachloroethene	5.0	U	5.0	0.73	ug/Kg			03/18/19 13:15	1
Toluene	5.0	U	5.0	0.77	ug/Kg			03/18/19 13:15	1
Trichloroethene	5.0	U	5.0	0.63	ug/Kg			03/18/19 13:15	1
Vinyl chloride	5.0	U	5.0	0.84	ug/Kg			03/18/19 13:15	1
Xylenes, Total	10	U	10	1.6	ug/Kg			03/18/19 13:15	1
1,1,1-Trichloroethane	5.0	U	5.0	0.82	ug/Kg			03/18/19 13:15	1
1,1,2-Trichloroethane	5.0	U	5.0	1.1	ug/Kg			03/18/19 13:15	1
Cyclohexane	10	U	10	1.4	ug/Kg			03/18/19 13:15	1
1,2-Dibromo-3-Chloropropane	10	U	10	3.6	ug/Kg			03/18/19 13:15	1
Ethylene Dibromide	5.0	U	5.0	0.77	ug/Kg			03/18/19 13:15	1
Dichlorodifluoromethane	5.0	U	5.0	0.94	ug/Kg			03/18/19 13:15	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.65	ug/Kg			03/18/19 13:15	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.47	ug/Kg			03/18/19 13:15	1
Isopropylbenzene	5.0	U	5.0	0.83	ug/Kg			03/18/19 13:15	1
Methyl acetate	25	U	25	3.4	ug/Kg			03/18/19 13:15	1
Methyl tert-butyl ether	5.0	U	5.0	0.82	ug/Kg			03/18/19 13:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	1.3	ug/Kg			03/18/19 13:15	1
1,2,4-Trichlorobenzene	5.0	U	5.0	0.57	ug/Kg			03/18/19 13:15	1
1,2-Dichlorobenzene	5.0	U	5.0	1.1	ug/Kg			03/18/19 13:15	1
1,3-Dichlorobenzene	5.0	U	5.0	0.82	ug/Kg			03/18/19 13:15	1
1,4-Dichlorobenzene	5.0	U	5.0	0.88	ug/Kg			03/18/19 13:15	1
Trichlorofluoromethane	5.0	U	5.0	1.1	ug/Kg			03/18/19 13:15	1
Chlorodibromomethane	5.0	U	5.0	2.8	ug/Kg			03/18/19 13:15	1
Methylcyclohexane	10	U	10	1.2	ug/Kg			03/18/19 13:15	1

QC Sample Results

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

TestAmerica Job ID: 240-109412-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		48 - 123		03/18/19 13:15	1
4-Bromofluorobenzene (Surr)	89		49 - 141		03/18/19 13:15	1
Toluene-d8 (Surr)	99		62 - 135		03/18/19 13:15	1
Dibromofluoromethane (Surr)	92		49 - 132		03/18/19 13:15	1

Lab Sample ID: LCS 240-371992/5
Matrix: Solid
Analysis Batch: 371992

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	95.0		ug/Kg		95	43 - 159
Dichlorobromomethane	50.0	46.7		ug/Kg		93	63 - 132
Bromoform	50.0	49.8		ug/Kg		100	46 - 137
Bromomethane	20.0	15.4		ug/Kg		77	10 - 152
2-Butanone (MEK)	100	88.0		ug/Kg		88	45 - 148
Carbon disulfide	50.0	47.7		ug/Kg		95	29 - 153
Benzene	50.0	47.0		ug/Kg		94	74 - 123
Carbon tetrachloride	50.0	43.8		ug/Kg		88	56 - 139
Chlorobenzene	50.0	48.3		ug/Kg		97	80 - 120
Chloroethane	20.0	16.0		ug/Kg		80	15 - 155
Chloroform	50.0	46.8		ug/Kg		94	72 - 124
Chloromethane	20.0	15.6		ug/Kg		78	45 - 128
1,1-Dichloroethane	50.0	46.1		ug/Kg		92	72 - 122
1,2-Dichloroethane	50.0	46.6		ug/Kg		93	64 - 126
1,1-Dichloroethene	50.0	45.9		ug/Kg		92	57 - 139
1,2-Dichloropropane	50.0	47.8		ug/Kg		96	78 - 122
cis-1,3-Dichloropropene	50.0	48.2		ug/Kg		96	63 - 137
trans-1,3-Dichloropropene	50.0	45.4		ug/Kg		91	55 - 121
Ethylbenzene	50.0	47.5		ug/Kg		95	76 - 120
2-Hexanone	100	89.0		ug/Kg		89	52 - 145
Methylene Chloride	50.0	41.5		ug/Kg		83	62 - 137
4-Methyl-2-pentanone (MIBK)	100	87.5		ug/Kg		88	53 - 139
Styrene	50.0	46.1		ug/Kg		92	76 - 121
1,1,2,2-Tetrachloroethane	50.0	49.7		ug/Kg		99	68 - 128
Tetrachloroethene	50.0	51.5		ug/Kg		103	76 - 120
Toluene	50.0	46.8		ug/Kg		94	76 - 120
Trichloroethene	50.0	50.4		ug/Kg		101	73 - 126
Vinyl chloride	20.0	16.1		ug/Kg		80	52 - 130
Xylenes, Total	100	96.3		ug/Kg		96	79 - 120
1,1,1-Trichloroethane	50.0	46.7		ug/Kg		93	64 - 135
1,1,2-Trichloroethane	50.0	50.0		ug/Kg		100	78 - 120
Cyclohexane	50.0	44.6		ug/Kg		89	64 - 130
1,2-Dibromo-3-Chloropropane	50.0	45.2		ug/Kg		90	38 - 135
Ethylene Dibromide	50.0	52.1		ug/Kg		104	76 - 120
Dichlorodifluoromethane	20.0	15.8		ug/Kg		79	26 - 138
cis-1,2-Dichloroethene	50.0	47.5		ug/Kg		95	74 - 123
trans-1,2-Dichloroethene	50.0	49.0		ug/Kg		98	71 - 133
Isopropylbenzene	50.0	49.2		ug/Kg		98	77 - 124
Methyl acetate	100	90.3		ug/Kg		90	52 - 136
Methyl tert-butyl ether	50.0	35.4		ug/Kg		71	66 - 127
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	47.3		ug/Kg		95	56 - 138
1,2,4-Trichlorobenzene	50.0	48.4		ug/Kg		97	54 - 120
1,2-Dichlorobenzene	50.0	50.2		ug/Kg		100	73 - 120

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

Lab Sample ID: LCS 240-371992/5
Matrix: Solid
Analysis Batch: 371992

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,3-Dichlorobenzene	50.0	48.8		ug/Kg		98	70 - 120
1,4-Dichlorobenzene	50.0	50.1		ug/Kg		100	71 - 120
Trichlorofluoromethane	20.0	17.3		ug/Kg		87	47 - 146
Chlorodibromomethane	50.0	50.4		ug/Kg		101	58 - 131
Methylcyclohexane	50.0	43.6		ug/Kg		87	68 - 127
m-Xylene & p-Xylene	50.0	48.4		ug/Kg		97	77 - 120
o-Xylene	50.0	47.9		ug/Kg		96	79 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*86*		*48 - 123*
4-Bromofluorobenzene (Surr)	*90*		*49 - 141*
Toluene-d8 (Surr)	*100*		*62 - 135*
Dibromofluoromethane (Surr)	*95*		*49 - 132*

Lab Sample ID: 240-109412-1 MS
Matrix: Solid
Analysis Batch: 371992

Client Sample ID: WC1-NSA-031319
Prep Type: Total/NA
Prep Batch: 372049

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	320	U	1180	1480		ug/Kg	☼	126	10 - 160
Dichlorobromomethane	64	U	589	394		ug/Kg	☼	67	32 - 129
Bromoform	64	U	589	324		ug/Kg	☼	55	18 - 120
Bromomethane	64	U	235	209		ug/Kg	☼	89	10 - 159
2-Butanone (MEK)	260	U	1180	1320		ug/Kg	☼	112	20 - 148
Carbon disulfide	64	U	589	561		ug/Kg	☼	95	16 - 145
Benzene	64	U	589	487		ug/Kg	☼	83	39 - 133
Carbon tetrachloride	64	U	589	381		ug/Kg	☼	65	22 - 142
Chlorobenzene	64	U	589	431		ug/Kg	☼	73	21 - 131
Chloroethane	64	U	235	218		ug/Kg	☼	93	17 - 162
Chloroform	64	U	589	497		ug/Kg	☼	84	51 - 130
Chloromethane	64	U	235	209		ug/Kg	☼	89	26 - 149
1,1-Dichloroethane	64	U	589	525		ug/Kg	☼	89	50 - 133
1,2-Dichloroethane	64	U	589	509		ug/Kg	☼	86	42 - 127
1,1-Dichloroethene	64	U	589	571		ug/Kg	☼	97	36 - 150
1,2-Dichloropropane	64	U	589	465		ug/Kg	☼	79	51 - 128
cis-1,3-Dichloropropene	64	U	589	408		ug/Kg	☼	69	15 - 132
trans-1,3-Dichloropropene	64	U	589	514		ug/Kg	☼	87	15 - 120
Ethylbenzene	64	U	589	405		ug/Kg	☼	69	20 - 135
2-Hexanone	260	U	1180	1580		ug/Kg	☼	135	15 - 147
Methylene Chloride	320	U	589	523		ug/Kg	☼	89	39 - 145
4-Methyl-2-pentanone (MIBK)	260	U	1180	1580		ug/Kg	☼	134	29 - 143
Styrene	64	U	589	335		ug/Kg	☼	57	10 - 134
1,1,2,2-Tetrachloroethane	64	U *	589	744	*	ug/Kg	☼	126	16 - 178
Tetrachloroethene	64	U	589	495		ug/Kg	☼	84	20 - 151
Toluene	64	U	589	564		ug/Kg	☼	96	29 - 141
Trichloroethene	64	U	589	452		ug/Kg	☼	77	25 - 148
Vinyl chloride	64	U	235	211		ug/Kg	☼	89	31 - 148
Xylenes, Total	20	J	1180	773		ug/Kg	☼	64	19 - 137

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

Lab Sample ID: 240-109412-1 MS
Matrix: Solid
Analysis Batch: 371992

Client Sample ID: WC1-NSA-031319
Prep Type: Total/NA
Prep Batch: 372049

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	64	U	589	462		ug/Kg	☼	78	38 - 143
1,1,2-Trichloroethane	64	U	589	598		ug/Kg	☼	102	31 - 151
Cyclohexane	130	U	589	335		ug/Kg	☼	57	34 - 137
1,2-Dibromo-3-Chloropropane	130	U *	589	369	*	ug/Kg	☼	63	10 - 141
Ethylene Dibromide	64	U	589	593		ug/Kg	☼	101	36 - 125
Dichlorodifluoromethane	64	U	235	196		ug/Kg	☼	83	15 - 150
cis-1,2-Dichloroethene	64	U	589	529		ug/Kg	☼	90	50 - 128
trans-1,2-Dichloroethene	64	U	589	579		ug/Kg	☼	98	44 - 141
Isopropylbenzene	18	J	589	336		ug/Kg	☼	54	20 - 138
Methyl acetate	320	U	1180	1370		ug/Kg	☼	116	12 - 160
Methyl tert-butyl ether	64	U	589	482		ug/Kg	☼	82	48 - 134
1,1,2-Trichloro-1,2,2-trifluoroethane	64	U	589	434		ug/Kg	☼	74	37 - 147
1,2,4-Trichlorobenzene	64	U *	589	140	*	ug/Kg	☼	24	10 - 120
1,2-Dichlorobenzene	64	U *	589	330	*	ug/Kg	☼	56	10 - 130
1,3-Dichlorobenzene	64	U *	589	366	*	ug/Kg	☼	62	10 - 131
1,4-Dichlorobenzene	64	U *	589	374	*	ug/Kg	☼	64	10 - 130
Trichlorofluoromethane	64	U	235	202		ug/Kg	☼	86	38 - 149
Chlorodibromomethane	64	U	589	483		ug/Kg	☼	82	27 - 126
Methylcyclohexane	130	U	589	261		ug/Kg	☼	44	23 - 133
m-Xylene & p-Xylene	130	U	589	393		ug/Kg	☼	67	16 - 137
o-Xylene	20	J	589	380		ug/Kg	☼	61	21 - 138

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*48 - 123*
4-Bromofluorobenzene (Surr)	*124*	*	*49 - 141*
Toluene-d8 (Surr)	*124*		*62 - 135*
Dibromofluoromethane (Surr)	*98*		*49 - 132*

Lab Sample ID: 240-109412-1 MSD
Matrix: Solid
Analysis Batch: 371992

Client Sample ID: WC1-NSA-031319
Prep Type: Total/NA
Prep Batch: 372049

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	320	U	1300	1610		ug/Kg	☼	124	10 - 160	8	39
Dichlorobromomethane	64	U	648	430		ug/Kg	☼	66	32 - 129	9	39
Bromoform	64	U	648	380		ug/Kg	☼	59	18 - 120	16	40
Bromomethane	64	U	259	241		ug/Kg	☼	93	10 - 159	14	40
2-Butanone (MEK)	260	U	1300	1450		ug/Kg	☼	112	20 - 148	9	36
Carbon disulfide	64	U	648	600		ug/Kg	☼	93	16 - 145	7	40
Benzene	64	U	648	518		ug/Kg	☼	80	39 - 133	6	40
Carbon tetrachloride	64	U	648	405		ug/Kg	☼	63	22 - 142	6	40
Chlorobenzene	64	U	648	472		ug/Kg	☼	73	21 - 131	9	40
Chloroethane	64	U	259	237		ug/Kg	☼	91	17 - 162	8	40
Chloroform	64	U	648	529		ug/Kg	☼	82	51 - 130	6	32
Chloromethane	64	U	259	225		ug/Kg	☼	87	26 - 149	7	37
1,1-Dichloroethane	64	U	648	562		ug/Kg	☼	87	50 - 133	7	40
1,2-Dichloroethane	64	U	648	559		ug/Kg	☼	86	42 - 127	9	34

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

Lab Sample ID: 240-109412-1 MSD
Matrix: Solid
Analysis Batch: 371992

Client Sample ID: WC1-NSA-031319
Prep Type: Total/NA
Prep Batch: 372049

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	64	U	648	633		ug/Kg	☼	98	36 - 150	10	40
1,2-Dichloropropane	64	U	648	491		ug/Kg	☼	76	51 - 128	5	36
cis-1,3-Dichloropropene	64	U	648	452		ug/Kg	☼	70	15 - 132	10	40
trans-1,3-Dichloropropene	64	U	648	569		ug/Kg	☼	88	15 - 120	10	40
Ethylbenzene	64	U	648	449		ug/Kg	☼	69	20 - 135	10	40
2-Hexanone	260	U	1300	1820		ug/Kg	☼	141	15 - 147	14	40
Methylene Chloride	320	U	648	590		ug/Kg	☼	91	39 - 145	12	40
4-Methyl-2-pentanone (MIBK)	260	U	1300	1820		ug/Kg	☼	140	29 - 143	14	40
Styrene	64	U	648	366		ug/Kg	☼	56	10 - 134	9	40
1,1,2,2-Tetrachloroethane	64	U *	648	818	*	ug/Kg	☼	126	16 - 178	10	40
Tetrachloroethene	64	U	648	519		ug/Kg	☼	80	20 - 151	5	40
Toluene	64	U	648	602		ug/Kg	☼	93	29 - 141	7	40
Trichloroethene	64	U	648	488		ug/Kg	☼	75	25 - 148	8	40
Vinyl chloride	64	U	259	230		ug/Kg	☼	89	31 - 148	9	37
Xylenes, Total	20	J	1300	846		ug/Kg	☼	64	19 - 137	9	40
1,1,1-Trichloroethane	64	U	648	500		ug/Kg	☼	77	38 - 143	8	40
1,1,2-Trichloroethane	64	U	648	658		ug/Kg	☼	102	31 - 151	10	40
Cyclohexane	130	U	648	350		ug/Kg	☼	54	34 - 137	4	34
1,2-Dibromo-3-Chloropropane	130	U *	648	463	*	ug/Kg	☼	71	10 - 141	23	40
Ethylene Dibromide	64	U	648	669		ug/Kg	☼	103	36 - 125	12	40
Dichlorodifluoromethane	64	U	259	214		ug/Kg	☼	83	15 - 150	9	31
cis-1,2-Dichloroethene	64	U	648	574		ug/Kg	☼	88	50 - 128	8	40
trans-1,2-Dichloroethene	64	U	648	626		ug/Kg	☼	96	44 - 141	8	40
Isopropylbenzene	18	J	648	364		ug/Kg	☼	53	20 - 138	8	40
Methyl acetate	320	U	1300	1600		ug/Kg	☼	123	12 - 160	15	33
Methyl tert-butyl ether	64	U	648	516		ug/Kg	☼	80	48 - 134	7	34
1,1,2-Trichloro-1,2,2-trifluoroethane	64	U	648	471		ug/Kg	☼	73	37 - 147	8	37
1,2,4-Trichlorobenzene	64	U *	648	167	*	ug/Kg	☼	26	10 - 120	17	40
1,2-Dichlorobenzene	64	U *	648	370	*	ug/Kg	☼	57	10 - 130	11	40
1,3-Dichlorobenzene	64	U *	648	409	*	ug/Kg	☼	63	10 - 131	11	40
1,4-Dichlorobenzene	64	U *	648	402	*	ug/Kg	☼	62	10 - 130	7	40
Trichlorofluoromethane	64	U	259	226		ug/Kg	☼	87	38 - 149	11	39
Chlorodibromomethane	64	U	648	540		ug/Kg	☼	83	27 - 126	11	40
Methylcyclohexane	130	U	648	269		ug/Kg	☼	42	23 - 133	3	36
m-Xylene & p-Xylene	130	U	648	431		ug/Kg	☼	66	16 - 137	9	40
o-Xylene	20	J	648	415		ug/Kg	☼	61	21 - 138	9	40

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*48 - 123*
4-Bromofluorobenzene (Surr)	*117*	*	*49 - 141*
Toluene-d8 (Surr)	*122*		*62 - 135*
Dibromofluoromethane (Surr)	*95*		*49 - 132*

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

Lab Sample ID: LCS 240-372202/16
Matrix: Solid
Analysis Batch: 372202

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Butanone (MEK)	2.00	1.90		mg/L		95	44 - 149
Benzene	1.00	1.03		mg/L		103	77 - 124
Carbon tetrachloride	1.00	1.12		mg/L		112	58 - 145
Chlorobenzene	1.00	0.957		mg/L		96	80 - 120
Chloroform	1.00	1.08		mg/L		108	74 - 128
1,2-Dichloroethane	1.00	1.04		mg/L		104	70 - 132
1,1-Dichloroethene	1.00	1.14		mg/L		114	69 - 137
Tetrachloroethene	1.00	1.02		mg/L		102	76 - 120
Trichloroethene	1.00	1.10		mg/L		110	73 - 129
Vinyl chloride	1.00	1.03		mg/L		103	61 - 143

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*66 - 120*
4-Bromofluorobenzene (Surr)	*101*		*72 - 120*
Toluene-d8 (Surr)	*95*		*72 - 120*
Dibromofluoromethane (Surr)	*110*		*64 - 121*

Lab Sample ID: LB 240-372102/1-A MB
Matrix: Solid
Analysis Batch: 372202

Client Sample ID: Method Blank
Prep Type: TCLP

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	0.25	U	0.25	0.0012	mg/L			03/19/19 16:17	1
Benzene	0.025	U	0.025	0.00013	mg/L			03/19/19 16:17	1
Carbon tetrachloride	0.025	U	0.025	0.00026	mg/L			03/19/19 16:17	1
Chlorobenzene	0.025	U	0.025	0.00014	mg/L			03/19/19 16:17	1
Chloroform	0.025	U	0.025	0.00013	mg/L			03/19/19 16:17	1
1,2-Dichloroethane	0.025	U	0.025	0.00021	mg/L			03/19/19 16:17	1
1,1-Dichloroethene	0.025	U	0.025	0.00019	mg/L			03/19/19 16:17	1
Tetrachloroethene	0.025	U	0.025	0.00015	mg/L			03/19/19 16:17	1
Trichloroethene	0.025	U	0.025	0.00010	mg/L			03/19/19 16:17	1
Vinyl chloride	0.025	U	0.025	0.00020	mg/L			03/19/19 16:17	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*66 - 120*		*03/19/19 16:17*	*1*
4-Bromofluorobenzene (Surr)	*112*		*72 - 120*		*03/19/19 16:17*	*1*
Toluene-d8 (Surr)	*92*		*72 - 120*		*03/19/19 16:17*	*1*
Dibromofluoromethane (Surr)	*101*		*64 - 121*		*03/19/19 16:17*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-371874/6-A
Matrix: Solid
Analysis Batch: 372162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 371874

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1'-Biphenyl	50	U	50	17	ug/Kg		03/16/19 10:43	03/19/19 11:14	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-371874/6-A
Matrix: Solid
Analysis Batch: 372162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 371874

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
bis (2-chloroisopropyl) ether	100	U	100	10	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
2,4,5-Trichlorophenol	150	U	150	69	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
2,4,6-Trichlorophenol	150	U	150	64	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
2,4-Dichlorophenol	150	U	150	44	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
2,4-Dimethylphenol	150	U	150	40	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
2,4-Dinitrophenol	330	U	330	140	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
2,4-Dinitrotoluene	200	U	200	62	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
2,6-Dinitrotoluene	200	U	200	56	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
2-Chloronaphthalene	50	U	50	14	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
2-Chlorophenol	50	U	50	10	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
2-Methylnaphthalene	15	U	15	2.0	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
2-Methylphenol	200	U	200	31	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
2-Nitroaniline	200	U	200	40	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
2-Nitrophenol	50	U	50	13	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
3,3'-Dichlorobenzidine	100	U	100	43	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
3-Nitroaniline	200	U	200	49	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
4,6-Dinitro-2-methylphenol	330	U	330	80	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
4-Bromophenyl phenyl ether	50	U	50	14	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
4-Chloro-3-methylphenol	150	U	150	45	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
4-Chloroaniline	150	U	150	30	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
4-Chlorophenyl phenyl ether	50	U	50	14	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
4-Nitroaniline	200	U	200	60	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
4-Nitrophenol	330	U	330	94	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Acenaphthene	15	U	15	2.9	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Acenaphthylene	15	U	15	4.0	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Acetophenone	100	U	100	11	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Anthracene	15	U	15	2.4	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Atrazine	200	U	200	36	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Benzaldehyde	100	U	100	23	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Benzo[a]anthracene	15	U	15	3.4	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Benzo[a]pyrene	15	U	15	9.3	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Benzo[b]fluoranthene	15	U	15	6.5	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Benzo[g,h,i]perylene	15	U	15	7.1	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Benzo[k]fluoranthene	15	U	15	6.9	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Bis(2-chloroethoxy)methane	100	U	100	12	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Bis(2-chloroethyl)ether	100	U	100	12	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Bis(2-ethylhexyl) phthalate	70	U	70	51	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Butyl benzyl phthalate	70	U	70	22	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Caprolactam	330	U	330	75	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Carbazole	50	U	50	19	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Chrysene	15	U	15	1.5	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Dibenz(a,h)anthracene	15	U	15	6.9	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Dibenzofuran	50	U	50	13	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Diethyl phthalate	70	U	70	31	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Dimethyl phthalate	70	U	70	14	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Di-n-butyl phthalate	70	U	70	22	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Di-n-octyl phthalate	70	U	70	28	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Fluoranthene	15	U	15	4.5	ug/Kg		03/16/19 10:43	03/19/19 11:14	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-371874/6-A
Matrix: Solid
Analysis Batch: 372162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 371874

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	15	U	15	2.7	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Hexachlorobenzene	15	U	15	2.9	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Hexachlorobutadiene	50	U	50	12	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Hexachlorocyclopentadiene	330	U	330	62	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Hexachloroethane	50	U	50	9.0	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Indeno[1,2,3-cd]pyrene	15	U	15	7.4	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Isophorone	50	U	50	12	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Naphthalene	15	U	15	2.4	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Nitrobenzene	100	U	100	13	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
N-Nitrosodi-n-propylamine	50	U	50	11	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
N-Nitrosodiphenylamine	50	U	50	12	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Pentachlorophenol	150	U	150	58	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Phenol	50	U	50	8.0	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Phenanthrene	15	U	15	2.2	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
Pyrene	15	U	15	2.1	ug/Kg		03/16/19 10:43	03/19/19 11:14	1
3 & 4 Methylphenol	400	U	400	29	ug/Kg		03/16/19 10:43	03/19/19 11:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*89*		*32 - 120*	*03/16/19 10:43*	*03/19/19 11:14*	*1*
2-Fluorophenol (Surr)	*96*		*29 - 120*	*03/16/19 10:43*	*03/19/19 11:14*	*1*
2,4,6-Tribromophenol (Surr)	*33*		*10 - 120*	*03/16/19 10:43*	*03/19/19 11:14*	*1*
Nitrobenzene-d5 (Surr)	*90*		*30 - 120*	*03/16/19 10:43*	*03/19/19 11:14*	*1*
Phenol-d5 (Surr)	*97*		*29 - 120*	*03/16/19 10:43*	*03/19/19 11:14*	*1*
Terphenyl-d14 (Surr)	*102*		*41 - 120*	*03/16/19 10:43*	*03/19/19 11:14*	*1*

Lab Sample ID: LCS 240-371874/7-A
Matrix: Solid
Analysis Batch: 372162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 371874

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1'-Biphenyl	667	541		ug/Kg		81	48 - 120
bis (2-chloroisopropyl) ether	667	545		ug/Kg		82	37 - 120
2,4,5-Trichlorophenol	667	524		ug/Kg		79	34 - 120
2,4,6-Trichlorophenol	667	441		ug/Kg		66	19 - 120
2,4-Dichlorophenol	667	532		ug/Kg		80	48 - 120
2,4-Dimethylphenol	667	528		ug/Kg		79	37 - 120
2,4-Dinitrophenol	1330	450		ug/Kg		34	10 - 120
2,4-Dinitrotoluene	667	607		ug/Kg		91	53 - 120
2,6-Dinitrotoluene	667	561		ug/Kg		84	54 - 120
2-Chloronaphthalene	667	532		ug/Kg		80	49 - 120
2-Chlorophenol	667	562		ug/Kg		84	50 - 120
2-Methylnaphthalene	667	553		ug/Kg		83	49 - 120
2-Methylphenol	667	575		ug/Kg		86	49 - 120
2-Nitroaniline	667	591		ug/Kg		89	46 - 120
2-Nitrophenol	667	621		ug/Kg		93	46 - 120
3,3'-Dichlorobenzidine	1330	774		ug/Kg		58	40 - 120
3-Nitroaniline	667	432		ug/Kg		65	48 - 120
4,6-Dinitro-2-methylphenol	1330	856		ug/Kg		64	18 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-371874/7-A
Matrix: Solid
Analysis Batch: 372162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 371874

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Bromophenyl phenyl ether	667	549		ug/Kg		82	51 - 120
4-Chloro-3-methylphenol	667	549		ug/Kg		82	47 - 120
4-Chloroaniline	667	303		ug/Kg		45	37 - 120
4-Chlorophenyl phenyl ether	667	536		ug/Kg		80	49 - 120
4-Nitroaniline	667	543		ug/Kg		81	49 - 120
4-Nitrophenol	1330	849		ug/Kg		64	42 - 120
Acenaphthene	667	550		ug/Kg		83	48 - 120
Acenaphthylene	667	537		ug/Kg		80	46 - 120
Acetophenone	667	540		ug/Kg		81	46 - 120
Anthracene	667	559		ug/Kg		84	51 - 120
Atrazine	1330	1220		ug/Kg		91	57 - 120
Benzaldehyde	1330	1120		ug/Kg		84	48 - 120
Benzo[a]anthracene	667	581		ug/Kg		87	53 - 120
Benzo[a]pyrene	667	555		ug/Kg		83	50 - 120
Benzo[b]fluoranthene	667	630		ug/Kg		94	48 - 120
Benzo[g,h,i]perylene	667	575		ug/Kg		86	50 - 120
Benzo[k]fluoranthene	667	553		ug/Kg		83	51 - 120
Bis(2-chloroethoxy)methane	667	547		ug/Kg		82	50 - 120
Bis(2-chloroethyl)ether	667	541		ug/Kg		81	48 - 120
Bis(2-ethylhexyl) phthalate	667	639		ug/Kg		96	52 - 120
Butyl benzyl phthalate	667	603		ug/Kg		91	53 - 120
Caprolactam	1330	1200		ug/Kg		90	59 - 120
Carbazole	667	576		ug/Kg		86	56 - 120
Chrysene	667	558		ug/Kg		84	54 - 120
Dibenz(a,h)anthracene	667	536		ug/Kg		80	48 - 120
Dibenzofuran	667	526		ug/Kg		79	49 - 120
Diethyl phthalate	667	563		ug/Kg		84	52 - 120
Dimethyl phthalate	667	556		ug/Kg		83	53 - 120
Di-n-butyl phthalate	667	579		ug/Kg		87	56 - 120
Di-n-octyl phthalate	667	550		ug/Kg		83	42 - 120
Fluoranthene	667	596		ug/Kg		89	53 - 120
Fluorene	667	560		ug/Kg		84	50 - 120
Hexachlorobenzene	667	573		ug/Kg		86	46 - 120
Hexachlorobutadiene	667	516		ug/Kg		77	44 - 120
Hexachlorocyclopentadiene	667	272	J	ug/Kg		41	14 - 120
Hexachloroethane	667	538		ug/Kg		81	45 - 120
Indeno[1,2,3-cd]pyrene	667	561		ug/Kg		84	49 - 120
Isophorone	667	545		ug/Kg		82	47 - 120
Naphthalene	667	518		ug/Kg		78	48 - 120
Nitrobenzene	667	567		ug/Kg		85	48 - 120
N-Nitrosodi-n-propylamine	667	529		ug/Kg		79	49 - 120
N-Nitrosodiphenylamine	667	549		ug/Kg		82	53 - 120
Pentachlorophenol	1330	587		ug/Kg		44	14 - 120
Phenol	667	614		ug/Kg		92	49 - 120
Phenanthrene	667	554		ug/Kg		83	52 - 120
Pyrene	667	559		ug/Kg		84	55 - 120
3 & 4 Methylphenol	667	569		ug/Kg		85	50 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-371874/7-A
Matrix: Solid
Analysis Batch: 372162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 371874

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*81*		*32 - 120*
2-Fluorophenol (Surr)	*91*		*29 - 120*
2,4,6-Tribromophenol (Surr)	*55*		*10 - 120*
Nitrobenzene-d5 (Surr)	*85*		*30 - 120*
Phenol-d5 (Surr)	*93*		*29 - 120*
Terphenyl-d14 (Surr)	*95*		*41 - 120*

Lab Sample ID: MB 240-372253/17-A
Matrix: Solid
Analysis Batch: 372617

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 372253

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.0040	U	0.0040	0.00033	mg/L		03/19/19 12:40	03/21/19 09:57	1
2,4,5-Trichlorophenol	0.0040	U	0.0040	0.0020	mg/L		03/19/19 12:40	03/21/19 09:57	1
2,4,6-Trichlorophenol	0.0040	U	0.0040	0.0018	mg/L		03/19/19 12:40	03/21/19 09:57	1
Pyridine	0.0040	U	0.0040	0.00036	mg/L		03/19/19 12:40	03/21/19 09:57	1
2,4-Dinitrotoluene	0.0040	U	0.0040	0.0021	mg/L		03/19/19 12:40	03/21/19 09:57	1
2-Methylphenol	0.0040	U	0.0040	0.00021	mg/L		03/19/19 12:40	03/21/19 09:57	1
Hexachlorobenzene	0.00080	U	0.00080	0.00016	mg/L		03/19/19 12:40	03/21/19 09:57	1
Hexachlorobutadiene	0.0040	U	0.0040	0.00054	mg/L		03/19/19 12:40	03/21/19 09:57	1
Hexachloroethane	0.0040	U	0.0040	0.00040	mg/L		03/19/19 12:40	03/21/19 09:57	1
Nitrobenzene	0.0040	U	0.0040	0.00051	mg/L		03/19/19 12:40	03/21/19 09:57	1
Pentachlorophenol	0.016	U	0.016	0.0031	mg/L		03/19/19 12:40	03/21/19 09:57	1
3 & 4 Methylphenol	0.0040	U	0.0040	0.00019	mg/L		03/19/19 12:40	03/21/19 09:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*83*		*38 - 120*	*03/19/19 12:40*	*03/21/19 09:57*	*1*
2-Fluorophenol (Surr)	*80*		*10 - 120*	*03/19/19 12:40*	*03/21/19 09:57*	*1*
2,4,6-Tribromophenol (Surr)	*108*		*28 - 120*	*03/19/19 12:40*	*03/21/19 09:57*	*1*
Nitrobenzene-d5 (Surr)	*73*		*32 - 120*	*03/19/19 12:40*	*03/21/19 09:57*	*1*
Phenol-d5 (Surr)	*63*		*10 - 120*	*03/19/19 12:40*	*03/21/19 09:57*	*1*
Terphenyl-d14 (Surr)	*96*		*23 - 127*	*03/19/19 12:40*	*03/21/19 09:57*	*1*

Lab Sample ID: LCS 240-372253/18-A
Matrix: Solid
Analysis Batch: 372617

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 372253

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.0800	0.0696		mg/L		87	47 - 120
2,4,5-Trichlorophenol	0.0800	0.0764		mg/L		96	54 - 120
2,4,6-Trichlorophenol	0.0800	0.0741		mg/L		93	54 - 120
Pyridine	0.160	0.129		mg/L		81	23 - 120
2,4-Dinitrotoluene	0.0800	0.0752		mg/L		94	60 - 120
2-Methylphenol	0.0800	0.0683		mg/L		85	46 - 120
Hexachlorobenzene	0.0800	0.0886		mg/L		111	51 - 120
Hexachlorobutadiene	0.0800	0.0743		mg/L		93	44 - 120
Hexachloroethane	0.0800	0.0837		mg/L		105	44 - 120
Nitrobenzene	0.0800	0.0716		mg/L		89	55 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-372253/18-A
Matrix: Solid
Analysis Batch: 372617

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 372253

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Pentachlorophenol	0.160	0.185		mg/L		116	30 - 120
3 & 4 Methylphenol	0.0800	0.0758		mg/L		95	40 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*86*		*38 - 120*
2-Fluorophenol (Surr)	*90*		*10 - 120*
2,4,6-Tribromophenol (Surr)	*92*		*28 - 120*
Nitrobenzene-d5 (Surr)	*86*		*32 - 120*
Phenol-d5 (Surr)	*60*		*10 - 120*
Terphenyl-d14 (Surr)	*102*		*23 - 127*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-371868/11-A
Matrix: Solid
Analysis Batch: 372121

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 371868

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	50	U	50	22	ug/Kg		03/16/19 09:57	03/19/19 11:48	1
Aroclor-1221	50	U	50	24	ug/Kg		03/16/19 09:57	03/19/19 11:48	1
Aroclor-1232	50	U	50	23	ug/Kg		03/16/19 09:57	03/19/19 11:48	1
Aroclor-1242	50	U	50	19	ug/Kg		03/16/19 09:57	03/19/19 11:48	1
Aroclor-1248	50	U	50	24	ug/Kg		03/16/19 09:57	03/19/19 11:48	1
Aroclor-1254	50	U	50	23	ug/Kg		03/16/19 09:57	03/19/19 11:48	1
Aroclor-1260	50	U	50	22	ug/Kg		03/16/19 09:57	03/19/19 11:48	1
Aroclor-1262	50	U	50	31	ug/Kg		03/16/19 09:57	03/19/19 11:48	1
Aroclor-1268	50	U	50	23	ug/Kg		03/16/19 09:57	03/19/19 11:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*75*		*14 - 128*	*03/16/19 09:57*	*03/19/19 11:48*	*1*
DCB Decachlorobiphenyl	*87*		*10 - 132*	*03/16/19 09:57*	*03/19/19 11:48*	*1*

Lab Sample ID: LCS 240-371868/12-A
Matrix: Solid
Analysis Batch: 372121

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 371868

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	719		ug/Kg		72	47 - 120
Aroclor-1260	1000	798		ug/Kg		80	46 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*76*		*14 - 128*
DCB Decachlorobiphenyl	*81*		*10 - 132*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-372030/1-A
Matrix: Solid
Analysis Batch: 372380

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 372030

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	20	U	20	5.3	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Antimony	1.0	U	1.0	0.36	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Barium	20	U	20	0.36	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Beryllium	0.50	U	0.50	0.054	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Calcium	500	U	500	36	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Cadmium	0.20	U	0.20	0.048	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Cobalt	1.0	U	1.0	0.20	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Chromium	0.50	U	0.50	0.15	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Copper	2.5	U	2.5	0.24	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Iron	10	U	10	6.9	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Potassium	500	U	500	36	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Magnesium	500	U	500	46	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Manganese	1.5	U	1.5	0.31	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Silver	0.50	U	0.50	0.081	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Sodium	500	U	500	63	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Nickel	4.0	U	4.0	0.23	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Vanadium	5.0	U	5.0	0.82	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Zinc	5.0	U	5.0	1.4	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Arsenic	1.0	U	1.0	0.32	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Lead	1.0	U	1.0	0.28	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Selenium	1.5	U	1.5	0.47	mg/Kg		03/18/19 14:00	03/19/19 09:20	1
Thallium	1.0	U	1.0	0.40	mg/Kg		03/18/19 14:00	03/19/19 09:20	1

Lab Sample ID: LCS 240-372030/2-A
Matrix: Solid
Analysis Batch: 372380

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 372030

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	200	206		mg/Kg		103	80 - 120
Antimony	50.0	47.3		mg/Kg		95	80 - 120
Barium	200	187		mg/Kg		94	80 - 120
Beryllium	5.00	4.76		mg/Kg		95	80 - 120
Calcium	5000	4770		mg/Kg		95	80 - 120
Cadmium	5.00	4.74		mg/Kg		95	80 - 120
Cobalt	50.0	48.8		mg/Kg		98	80 - 120
Chromium	20.0	19.6		mg/Kg		98	80 - 120
Copper	25.0	23.8		mg/Kg		95	80 - 120
Iron	100	102		mg/Kg		102	80 - 120
Potassium	5000	4840		mg/Kg		97	80 - 120
Magnesium	5000	4990		mg/Kg		100	80 - 120
Manganese	50.0	49.3		mg/Kg		99	80 - 120
Silver	5.00	4.81		mg/Kg		96	80 - 120
Sodium	5000	4850		mg/Kg		97	80 - 120
Nickel	50.0	49.4		mg/Kg		99	80 - 120
Vanadium	50.0	49.6		mg/Kg		99	80 - 120
Zinc	50.0	50.6		mg/Kg		101	80 - 120
Arsenic	200	197		mg/Kg		99	80 - 120
Lead	50.0	47.4		mg/Kg		95	80 - 120

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

Lab Sample ID: LCS 240-372030/2-A
Matrix: Solid
Analysis Batch: 372380

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 372030

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium	200	197		mg/Kg		99	80 - 120
Thallium	200	191		mg/Kg		96	80 - 120

Lab Sample ID: MB 240-372214/2-A
Matrix: Solid
Analysis Batch: 372509

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 372214

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.50	U	0.50	0.0013	mg/L		03/19/19 14:00	03/20/19 16:38	1
Cadmium	0.050	U	0.050	0.00020	mg/L		03/19/19 14:00	03/20/19 16:38	1
Chromium	0.050	U	0.050	0.00063	mg/L		03/19/19 14:00	03/20/19 16:38	1
Silver	0.050	U	0.050	0.00062	mg/L		03/19/19 14:00	03/20/19 16:38	1
Arsenic	0.050	U	0.050	0.0041	mg/L		03/19/19 14:00	03/20/19 16:38	1
Lead	0.050	U	0.050	0.0028	mg/L		03/19/19 14:00	03/20/19 16:38	1
Selenium	0.050	U	0.050	0.0060	mg/L		03/19/19 14:00	03/20/19 16:38	1

Lab Sample ID: LCS 240-372214/3-A
Matrix: Solid
Analysis Batch: 372509

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 372214

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	2.00	1.88		mg/L		94	50 - 150
Cadmium	0.0500	0.0487	J	mg/L		97	50 - 150
Chromium	0.200	0.195		mg/L		97	50 - 150
Silver	0.0500	0.0499	J	mg/L		100	50 - 150
Arsenic	2.00	2.07		mg/L		104	50 - 150
Lead	0.500	0.442		mg/L		88	50 - 150
Selenium	2.00	2.08		mg/L		104	50 - 150

Lab Sample ID: LB 240-372095/1-B
Matrix: Solid
Analysis Batch: 372509

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 372214

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.50	U	0.50	0.0013	mg/L		03/19/19 14:00	03/20/19 16:33	1
Cadmium	0.050	U	0.050	0.00020	mg/L		03/19/19 14:00	03/20/19 16:33	1
Chromium	0.050	U	0.050	0.00063	mg/L		03/19/19 14:00	03/20/19 16:33	1
Silver	0.050	U	0.050	0.00062	mg/L		03/19/19 14:00	03/20/19 16:33	1
Arsenic	0.00490	J	0.050	0.0041	mg/L		03/19/19 14:00	03/20/19 16:33	1
Lead	0.050	U	0.050	0.0028	mg/L		03/19/19 14:00	03/20/19 16:33	1
Selenium	0.050	U	0.050	0.0060	mg/L		03/19/19 14:00	03/20/19 16:33	1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 240-372217/2-A
Matrix: Solid
Analysis Batch: 372493

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 372217

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.00013	mg/L		03/19/19 12:00	03/20/19 16:53	1

Lab Sample ID: LCS 240-372217/3-A
Matrix: Solid
Analysis Batch: 372493

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 372217

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00500	0.00498		mg/L		100	80 - 120

Lab Sample ID: LB 240-372095/1-C
Matrix: Solid
Analysis Batch: 372493

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 372217

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0020	U	0.0020	0.00013	mg/L		03/19/19 12:00	03/20/19 16:51	1

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-372033/1-A
Matrix: Solid
Analysis Batch: 372210

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 372033

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10	U	0.10	0.018	mg/Kg		03/18/19 16:00	03/19/19 10:10	1

Lab Sample ID: LCS 240-372033/2-A
Matrix: Solid
Analysis Batch: 372210

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 372033

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.901		mg/Kg		108	80 - 120

GC/MS VOA

Processed Batch: 371711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	Total/NA	Solid	Part Size Red	
240-109412-1 MS	WC1-NSA-031319	Total/NA	Solid	Part Size Red	
240-109412-1 MSD	WC1-NSA-031319	Total/NA	Solid	Part Size Red	

Processed Batch: 371714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	TCLP	Solid	Part Size Red	

Analysis Batch: 371992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	Total/NA	Solid	8260B	372049
MB 240-371992/7	Method Blank	Total/NA	Solid	8260B	
LCS 240-371992/5	Lab Control Sample	Total/NA	Solid	8260B	
240-109412-1 MS	WC1-NSA-031319	Total/NA	Solid	8260B	372049
240-109412-1 MSD	WC1-NSA-031319	Total/NA	Solid	8260B	372049

Prep Batch: 372049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	Total/NA	Solid	5030A	371711
240-109412-1 MS	WC1-NSA-031319	Total/NA	Solid	5030A	371711
240-109412-1 MSD	WC1-NSA-031319	Total/NA	Solid	5030A	371711

Leach Batch: 372102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	TCLP	Solid	1311	371714
LB 240-372102/1-A MB	Method Blank	TCLP	Solid	1311	

Analysis Batch: 372202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LB 240-372102/1-A MB	Method Blank	TCLP	Solid	8260B	372102
LCS 240-372202/16	Lab Control Sample	Total/NA	Solid	8260B	

Analysis Batch: 372463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	TCLP	Solid	8260B	372102

GC/MS Semi VOA

Processed Batch: 371711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	Total/NA	Solid	Part Size Red	

Processed Batch: 371714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	TCLP	Solid	Part Size Red	

Prep Batch: 371874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	Total/NA	Solid	3540C	371711
MB 240-371874/6-A	Method Blank	Total/NA	Solid	3540C	

GC/MS Semi VOA (Continued)

Prep Batch: 371874 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-371874/7-A	Lab Control Sample	Total/NA	Solid	3540C	

Leach Batch: 372095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	TCLP	Solid	1311	371714

Analysis Batch: 372162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	Total/NA	Solid	8270C	371874
MB 240-371874/6-A	Method Blank	Total/NA	Solid	8270C	371874
LCS 240-371874/7-A	Lab Control Sample	Total/NA	Solid	8270C	371874

Prep Batch: 372253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	TCLP	Solid	3510C	372095
MB 240-372253/17-A	Method Blank	Total/NA	Solid	3510C	
LCS 240-372253/18-A	Lab Control Sample	Total/NA	Solid	3510C	

Analysis Batch: 372617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	TCLP	Solid	8270C	372253
MB 240-372253/17-A	Method Blank	Total/NA	Solid	8270C	372253
LCS 240-372253/18-A	Lab Control Sample	Total/NA	Solid	8270C	372253

GC Semi VOA

Processed Batch: 371711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	Total/NA	Solid	Part Size Red	

Prep Batch: 371868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	Total/NA	Solid	3540C	371711
MB 240-371868/11-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-371868/12-A	Lab Control Sample	Total/NA	Solid	3540C	

Analysis Batch: 372121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-371868/11-A	Method Blank	Total/NA	Solid	8082A	371868
LCS 240-371868/12-A	Lab Control Sample	Total/NA	Solid	8082A	371868

Analysis Batch: 372569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	Total/NA	Solid	8082A	371868

Metals

Processed Batch: 371711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	Total/NA	Solid	Part Size Red	

Metals (Continued)

Processed Batch: 371714

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	TCLP	Solid	Part Size Red	

Prep Batch: 372030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	Total/NA	Solid	3050B	371711
MB 240-372030/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 240-372030/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 372033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	Total/NA	Solid	7471A	371711
MB 240-372033/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 240-372033/2-A	Lab Control Sample	Total/NA	Solid	7471A	

Leach Batch: 372095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	TCLP	Solid	1311	371714
LB 240-372095/1-B	Method Blank	TCLP	Solid	1311	
LB 240-372095/1-C	Method Blank	TCLP	Solid	1311	

Analysis Batch: 372210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	Total/NA	Solid	7471A	372033
MB 240-372033/1-A	Method Blank	Total/NA	Solid	7471A	372033
LCS 240-372033/2-A	Lab Control Sample	Total/NA	Solid	7471A	372033

Prep Batch: 372214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	TCLP	Solid	3010A	372095
LB 240-372095/1-B	Method Blank	TCLP	Solid	3010A	372095
MB 240-372214/2-A	Method Blank	Total/NA	Solid	3010A	
LCS 240-372214/3-A	Lab Control Sample	Total/NA	Solid	3010A	

Prep Batch: 372217

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	TCLP	Solid	7470A	372095
LB 240-372095/1-C	Method Blank	TCLP	Solid	7470A	372095
MB 240-372217/2-A	Method Blank	Total/NA	Solid	7470A	
LCS 240-372217/3-A	Lab Control Sample	Total/NA	Solid	7470A	

Analysis Batch: 372380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	Total/NA	Solid	6010B	372030
240-109412-1	WC1-NSA-031319	Total/NA	Solid	6010B	372030
MB 240-372030/1-A	Method Blank	Total/NA	Solid	6010B	372030
LCS 240-372030/2-A	Lab Control Sample	Total/NA	Solid	6010B	372030

Analysis Batch: 372493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	TCLP	Solid	7470A	372217
LB 240-372095/1-C	Method Blank	TCLP	Solid	7470A	372217

Metals (Continued)

Analysis Batch: 372493 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-372217/2-A	Method Blank	Total/NA	Solid	7470A	372217
LCS 240-372217/3-A	Lab Control Sample	Total/NA	Solid	7470A	372217

Analysis Batch: 372509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	TCLP	Solid	6010B	372214
LB 240-372095/1-B	Method Blank	TCLP	Solid	6010B	372214
MB 240-372214/2-A	Method Blank	Total/NA	Solid	6010B	372214
LCS 240-372214/3-A	Lab Control Sample	Total/NA	Solid	6010B	372214

Analysis Batch: 372682

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	TCLP	Solid	6010B	372214

General Chemistry

Processed Batch: 371711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	Total/NA	Solid	Part Size Red	

Analysis Batch: 371807

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-109412-1	WC1-NSA-031319	Total/NA	Solid	Moisture	371711

Lab Chronicle

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

TestAmerica Job ID: 240-109412-1

Client Sample ID: WC1-NSA-031319

Lab Sample ID: 240-109412-1

Date Collected: 03/13/19 15:00

Matrix: Solid

Date Received: 03/14/19 11:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Processed	Part Size Red			371714	03/15/19 07:51	POP	TAL CAN
TCLP	Leach	1311			372102	03/18/19 16:55	DRJ	TAL CAN
TCLP	Analysis	8260B		1	372463	03/20/19 15:10	HMB	TAL CAN
TCLP	Processed	Part Size Red			371714	03/15/19 07:51	POP	TAL CAN
TCLP	Leach	1311			372095	03/18/19 16:55	DRJ	TAL CAN
TCLP	Prep	3510C			372253	03/19/19 12:40	ACS	TAL CAN
TCLP	Analysis	8270C		1	372617	03/21/19 11:34	JMG	TAL CAN
TCLP	Processed	Part Size Red			371714	03/15/19 07:51	POP	TAL CAN
TCLP	Leach	1311			372095	03/18/19 16:55	DRJ	TAL CAN
TCLP	Prep	3010A			372214	03/19/19 14:00	MBB	TAL CAN
TCLP	Analysis	6010B		20	372682	03/21/19 11:19	WKD	TAL CAN
TCLP	Processed	Part Size Red			371714	03/15/19 07:51	POP	TAL CAN
TCLP	Leach	1311			372095	03/18/19 16:55	DRJ	TAL CAN
TCLP	Prep	3010A			372214	03/19/19 14:00	MBB	TAL CAN
TCLP	Analysis	6010B		1	372509	03/20/19 17:16	WKD	TAL CAN
TCLP	Processed	Part Size Red			371714	03/15/19 07:51	POP	TAL CAN
TCLP	Leach	1311			372095	03/18/19 16:55	DRJ	TAL CAN
TCLP	Prep	7470A			372217	03/19/19 12:00	MBB	TAL CAN
TCLP	Analysis	7470A		1	372493	03/20/19 17:04	SEM	TAL CAN
Total/NA	Processed	Part Size Red			371711	03/15/19 07:45	POP	TAL CAN
Total/NA	Analysis	Moisture		1	371807	03/15/19 13:16	JMB	TAL CAN

Client Sample ID: WC1-NSA-031319

Lab Sample ID: 240-109412-1

Date Collected: 03/13/19 15:00

Matrix: Solid

Date Received: 03/14/19 11:15

Percent Solids: 76.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Processed	Part Size Red			371711	03/15/19 07:45	POP	TAL CAN
Total/NA	Prep	5030A			372049	03/18/19 12:11	SAM	TAL CAN
Total/NA	Analysis	8260B		1	371992	03/18/19 17:59	SAM	TAL CAN
Total/NA	Processed	Part Size Red			371711	03/15/19 07:45	POP	TAL CAN
Total/NA	Prep	3540C			371874	03/16/19 10:43	EMB	TAL CAN
Total/NA	Analysis	8270C		500	372162	03/19/19 19:04	JMG	TAL CAN
Total/NA	Processed	Part Size Red			371711	03/15/19 07:45	POP	TAL CAN
Total/NA	Prep	3540C			371868	03/16/19 09:59	EMB	TAL CAN
Total/NA	Analysis	8082A		5	372569	03/21/19 07:27	CSC	TAL CAN
Total/NA	Processed	Part Size Red			371711	03/15/19 07:45	POP	TAL CAN
Total/NA	Prep	3050B			372030	03/18/19 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	372380	03/19/19 11:15	WKD	TAL CAN
Total/NA	Processed	Part Size Red			371711	03/15/19 07:45	POP	TAL CAN
Total/NA	Prep	3050B			372030	03/18/19 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		10	372380	03/19/19 11:19	WKD	TAL CAN
Total/NA	Processed	Part Size Red			371711	03/15/19 07:45	POP	TAL CAN
Total/NA	Prep	7471A			372033	03/18/19 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	372210	03/19/19 11:00	AJC	TAL CAN

Lab Chronicle

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

TestAmerica Job ID: 240-109412-1

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

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

TestAmerica Job ID: 240-109412-1

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	02-23-20
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	04-30-19 *
Kentucky (UST)	State Program	4	58	02-23-20
Kentucky (WW)	State Program	4	98016	12-31-19
Minnesota	NELAP	5	039-999-348	12-31-19 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19 *
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-20
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-18-10	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-20 *
West Virginia DEP	State Program	3	210	12-31-19

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

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

3.4 | C3 ✓

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: J. PARTYKA	Lab PM: Howell, Leslie	Carrier Tracking No(s):	COC No: 240-50523-21768.1
Client Contact: Ban Aragona	Phone: 440.610.4664	E-Mail: leslie.howell@testamericainc.com		Page: Page 1 of 2
Company: Haley & Aldrich, Inc.				Job #:
Address: 3840 Packard Road Suite 100	Due Date Requested:			
City: Ann Arbor	TAT Requested (days): STD			
State, Zip: MI, 48108-2280				
Phone: 734-454-4917(Tel) 734-454-1233(Fax)	PO #: ~~129862-003~~ 129562-009			
Email: baragona@haleyaldrich.com	WO #:			
Project Name: Racer Elyria	Project #: ~~24018828~~			
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=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TOTAL VOC	TOTAL SVOC	TOTAL METALS	TOTAL PCB's	TCLP VOC	TCLP SVOC	TCLP METALS	TCLP PCB	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	N	N	N	N	N	N	N		
WC1-NSA-031319	3-13-19	1500	C	Water	N	N	X	X	X	X	X	X	X	X		
				Water												
				Water												
				Water												
				Solid												
				Solid												
				Solid												
				Solid												
				Solid												
				Solid												
				Solid												

240-109412 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:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		3/13/19 — 1800	H&A		3/14/19 1115	
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Cooler Temperature(s) °C and Other Remarks:

3/21/2019

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 109412
Canton Facility

Client HEA Site Name _____ Cooler unpacked by:

Cooler Received on 3/14/19 Opened on 3/14/19

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

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

TestAmerica Cooler # NA 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 **-0.2** °C) Observed Cooler Temp. 3.4 °C Corrected Cooler Temp. 3.2 °C
   IR GUN #36 (CF **+0.7**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
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 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC861525**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____ Yes No
16. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

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

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: JR

18. 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)

19. SAMPLE PRESERVATION

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

VOA Sample Preservation - Date/Time VOAs Frozen: _____

WI-NC-099

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

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

Laboratory Job ID: 240-119171-1
Client Project/Site: Racer Elyria

For:
Haley & Aldrich, Inc.
455 E. Eisenhower Parkway
Suite 210
Ann Arbor, Michigan 48108-2280

Attn: Ban Aragona

Leslie A Howell

Authorized for release by:
9/27/2019 4:47:17 PM

Leslie Howell, Project Manager I
(330)966-9266
leslie.howell@testamericainc.com

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

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

Table of Contents

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Definitions/Glossary

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

Job ID: 240-119171-1

Qualifiers

GC/MS VOA

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.

GC/MS Semi VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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.

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: 240-119171-1

Laboratory: Eurofins TestAmerica, Canton

Narrative

CASE NARRATIVE

Client: Haley & Aldrich, Inc.

Project: Racer Elyria

Report Number: 240-119171-1

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.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins 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 Eurofins TestAmerica and its client.

RECEIPT
The samples were received on 9/20/2019 9:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.0º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)
Sample 7082-091919-1500 (240-119171-1) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The sample was prepared and analyzed on 09/23/2019.

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

VOLATILE ORGANIC COMPOUNDS (GCMS)
Sample 7082-091919-0001 (240-119171-2) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The sample was analyzed on 09/23/2019.

1,2-Dichlorobenzene failed the recovery criteria high for the MS of sample 240-118760-5 in batch 240-401970.

1,2-Dichlorobenzene failed the recovery criteria low for the MSD of sample 240-118760-5 in batch 240-401970. Methylcyclohexane exceeded the RPD limit.

Job ID: 240-119171-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

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.

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Sample 7082-091919-1500 (240-119171-1) was analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270C. The sample was prepared on 09/23/2019 and analyzed on 09/25/2019.

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.

3,3'-Dichlorobenzidine and Hexachlorocyclopentadiene failed the recovery criteria low for the MS of sample 7082-091919-1500MS (240-119171-1) in batch 240-402392. 3-Nitroaniline failed the recovery criteria high.

3,3'-Dichlorobenzidine, 4-Nitroaniline and Hexachlorocyclopentadiene failed the recovery criteria low for the MSD of sample 7082-091919-1500MSD (240-119171-1) in batch 240-402392. 3-Nitroaniline failed the recovery criteria high.

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.

POLYCHLORINATED BIPHENYLS (PCBS)

Sample 7082-091919-1500 (240-119171-1) was analyzed for polychlorinated biphenyls (PCBs) in accordance with EPA SW-846 Method 8082A. The sample was prepared on 09/23/2019 and analyzed on 09/27/2019.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required. All of the samples in this data set analyzed for PCBs were subjected to the sulfuric acid cleanup procedure before instrumental analysis, per EPA Method 3665A.

Method(s) 8082A: The following samples required a copper clean-up to reduce matrix interferences caused by sulfur: (240-118717-B-15-G), (240-118717-B-15-H MS) and (240-118717-B-15-I MSD).

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

TOTAL METALS (ICP)

Sample 7082-091919-1500 (240-119171-1) was analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010B. The sample was prepared on 09/23/2019 and analyzed on 09/24/2019.

Antimony failed the recovery criteria low for the MS of sample 240-119174-1 in batch 240-402400. Several analytes failed the recovery criteria high.

Antimony failed the recovery criteria low for the MSD of sample 240-119174-1 in batch 240-402400. Several analytes failed the recovery criteria high.

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 MERCURY

Sample 7082-091919-1500 (240-119171-1) was analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The sample was prepared on 09/23/2019 and analyzed on 09/24/2019.

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

Job ID: 240-119171-1 (Continued)

Laboratory: Eurofins TestAmerica, Canton (Continued)

PERCENT SOLIDS

Sample 7082-091919-1500 (240-119171-1) was analyzed for percent solids in accordance with ASTM Method D2216-80. The sample was analyzed on 09/23/2019.

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

Job ID: 240-119171-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
8270C	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL CAN
6010B	Metals (ICP)	SW846	TAL CAN
7471A	Mercury (CVAA)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN
3050B	Preparation, Metals	SW846	TAL CAN
3540C	Soxhlet Extraction	SW846	TAL CAN
5030A	Purge and Trap	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN
7471A	Preparation, Mercury	SW846	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

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

Job ID: 240-119171-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
240-119171-1	7082-091919-1500	Solid	09/19/19 15:00	09/20/19 09:20	
240-119171-2	7082-091919-0001	Water	09/19/19 00:00	09/20/19 09:20	

Detection Summary

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

Job ID: 240-119171-1

Client Sample ID: 7082-091919-1500 — Lab Sample ID: 240-119171-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	17	J	30	5.3	ug/Kg	1	☼	8260B	Total/NA
Acetophenone	17	J	150	17	ug/Kg	1	☼	8270C	Total/NA
Anthracene	6.6	J	23	3.7	ug/Kg	1	☼	8270C	Total/NA
Benzaldehyde	71	J	150	35	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]anthracene	31		23	5.2	ug/Kg	1	☼	8270C	Total/NA
Benzo[a]pyrene	39		23	14	ug/Kg	1	☼	8270C	Total/NA
Benzo[b]fluoranthene	61		23	9.9	ug/Kg	1	☼	8270C	Total/NA
Benzo[g,h,i]perylene	35		23	11	ug/Kg	1	☼	8270C	Total/NA
Benzo[k]fluoranthene	35		23	11	ug/Kg	1	☼	8270C	Total/NA
Chrysene	46		23	2.3	ug/Kg	1	☼	8270C	Total/NA
Fluoranthene	68		23	6.8	ug/Kg	1	☼	8270C	Total/NA
Indeno[1,2,3-cd]pyrene	29		23	11	ug/Kg	1	☼	8270C	Total/NA
2-Methylnaphthalene	19	J	23	3.0	ug/Kg	1	☼	8270C	Total/NA
Naphthalene	14	J	23	3.7	ug/Kg	1	☼	8270C	Total/NA
Phenanthrene	39		23	3.4	ug/Kg	1	☼	8270C	Total/NA
Phenol	92		76	12	ug/Kg	1	☼	8270C	Total/NA
Pyrene	59		23	3.3	ug/Kg	1	☼	8270C	Total/NA
Aluminum	12000		23	6.2	mg/Kg	1	☼	6010B	Total/NA
Arsenic	9.3		1.2	0.37	mg/Kg	1	☼	6010B	Total/NA
Barium	82		23	0.42	mg/Kg	1	☼	6010B	Total/NA
Beryllium	0.63		0.58	0.063	mg/Kg	1	☼	6010B	Total/NA
Cadmium	0.52		0.23	0.056	mg/Kg	1	☼	6010B	Total/NA
Calcium	6100		580	43	mg/Kg	1	☼	6010B	Total/NA
Chromium	250		0.58	0.18	mg/Kg	1	☼	6010B	Total/NA
Cobalt	9.2		1.2	0.23	mg/Kg	1	☼	6010B	Total/NA
Copper	120		2.9	0.28	mg/Kg	1	☼	6010B	Total/NA
Iron	26000		12	8.1	mg/Kg	1	☼	6010B	Total/NA
Lead	25		1.2	0.33	mg/Kg	1	☼	6010B	Total/NA
Magnesium	3000		580	54	mg/Kg	1	☼	6010B	Total/NA
Manganese	400		1.8	0.36	mg/Kg	1	☼	6010B	Total/NA
Nickel	180		4.7	0.27	mg/Kg	1	☼	6010B	Total/NA
Potassium	1700		580	42	mg/Kg	1	☼	6010B	Total/NA
Selenium	1.1	J	1.8	0.55	mg/Kg	1	☼	6010B	Total/NA
Vanadium	26		5.8	0.96	mg/Kg	1	☼	6010B	Total/NA
Zinc	150		5.8	1.6	mg/Kg	1	☼	6010B	Total/NA
Mercury	0.062	J	0.17	0.030	mg/Kg	1	☼	7471A	Total/NA

Client Sample ID: 7082-091919-0001 — Lab Sample ID: 240-119171-2

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 240-119171-1

Client Sample ID: 7082-091919-1500
Date Collected: 09/19/19 15:00
Date Received: 09/20/19 09:20

Lab Sample ID: 240-119171-1
Matrix: Solid
Percent Solids: 65.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	38	U	38	32	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Benzene	7.5	U	7.5	1.0	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Bromoform	7.5	U	7.5	3.6	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Bromomethane	7.5	U	7.5	1.5	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
2-Butanone (MEK)	**17**	**J**	30	5.3	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Carbon disulfide	7.5	U	7.5	1.7	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Carbon tetrachloride	7.5	U	7.5	4.9	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Chlorobenzene	7.5	U	7.5	1.4	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Chlorodibromomethane	7.5	U	7.5	4.2	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Chloroethane	7.5	U	7.5	1.8	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Chloroform	7.5	U	7.5	1.2	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Chloromethane	7.5	U	7.5	1.6	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
cis-1,2-Dichloroethene	7.5	U	7.5	0.98	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
cis-1,3-Dichloropropene	7.5	U	7.5	2.2	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Cyclohexane	15	U	15	2.1	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
1,2-Dibromo-3-Chloropropane	15	U	15	5.4	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
1,2-Dichlorobenzene	7.5	U	7.5	1.7	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
1,3-Dichlorobenzene	7.5	U	7.5	1.2	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
1,4-Dichlorobenzene	7.5	U	7.5	1.3	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Dichlorobromomethane	7.5	U	7.5	1.0	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Dichlorodifluoromethane	7.5	U	7.5	1.4	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
1,1-Dichloroethane	7.5	U	7.5	1.0	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
1,2-Dichloroethane	7.5	U	7.5	1.2	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
1,1-Dichloroethene	7.5	U	7.5	1.4	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
1,2-Dichloropropane	7.5	U	7.5	1.3	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Ethylbenzene	7.5	U	7.5	1.6	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Ethylene Dibromide	7.5	U	7.5	1.2	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
2-Hexanone	30	U	30	6.1	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Isopropylbenzene	7.5	U	7.5	1.3	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Methyl acetate	38	U	38	5.1	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Methylcyclohexane	15	U	15	1.8	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Methylene Chloride	38	U	38	18	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
4-Methyl-2-pentanone (MIBK)	30	U	30	5.6	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Methyl tert-butyl ether	7.5	U	7.5	1.2	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Styrene	7.5	U	7.5	1.7	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
1,1,2,2-Tetrachloroethane	7.5	U	7.5	2.2	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Tetrachloroethene	7.5	U	7.5	1.1	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Toluene	7.5	U	7.5	1.2	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
trans-1,2-Dichloroethene	7.5	U	7.5	0.70	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
trans-1,3-Dichloropropene	7.5	U	7.5	1.6	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
1,2,4-Trichlorobenzene	7.5	U	7.5	0.86	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
1,1,1-Trichloroethane	7.5	U	7.5	1.2	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
1,1,2-Trichloroethane	7.5	U	7.5	1.7	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Trichloroethene	7.5	U	7.5	0.95	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Trichlorofluoromethane	7.5	U	7.5	1.6	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	7.5	U	7.5	1.9	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Vinyl chloride	7.5	U	7.5	1.3	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1
Xylenes, Total	15	U	15	2.4	ug/Kg	☼	09/23/19 14:10	09/23/19 15:49	1

Client Sample ID: 7082-091919-1500

Date Collected: 09/19/19 15:00
Date Received: 09/20/19 09:20

Lab Sample ID: 240-119171-1

Matrix: Solid
Percent Solids: 65.4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*49 - 141*	*09/23/19 14:10*	*09/23/19 15:49*	*1*
Dibromofluoromethane (Surr)	*91*		*49 - 132*	*09/23/19 14:10*	*09/23/19 15:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*80*		*48 - 123*	*09/23/19 14:10*	*09/23/19 15:49*	*1*
Toluene-d8 (Surr)	*98*		*62 - 135*	*09/23/19 14:10*	*09/23/19 15:49*	*1*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	23	U	23	4.4	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Acenaphthylene	23	U	23	6.1	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Acetophenone	**17**	**J**	150	17	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Anthracene	**6.6**	**J**	23	3.7	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Atrazine	310	U	310	55	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Benzaldehyde	**71**	**J**	150	35	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Benzo[a]anthracene	**31**		23	5.2	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Benzo[a]pyrene	**39**		23	14	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Benzo[b]fluoranthene	**61**		23	9.9	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Benzo[g,h,i]perylene	**35**		23	11	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Benzo[k]fluoranthene	**35**		23	11	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
1,1'-Biphenyl	76	U	76	26	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Bis(2-chloroethoxy)methane	150	U	150	18	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Bis(2-chloroethyl)ether	150	U	150	18	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
bis (2-chloroisopropyl) ether	150	U	150	15	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Bis(2-ethylhexyl) phthalate	110	U	110	78	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
4-Bromophenyl phenyl ether	76	U	76	21	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Butyl benzyl phthalate	110	U	110	34	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Caprolactam	500	U	500	110	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Carbazole	76	U	76	29	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
4-Chloroaniline	230	U	230	46	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
4-Chloro-3-methylphenol	230	U	230	69	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
2-Chloronaphthalene	76	U	76	21	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
2-Chlorophenol	76	U	76	15	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
4-Chlorophenyl phenyl ether	76	U	76	21	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Chrysene	**46**		23	2.3	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Dibenz(a,h)anthracene	23	U	23	11	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Dibenzofuran	76	U	76	20	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
3,3'-Dichlorobenzidine	150	U F1	150	66	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
2,4-Dichlorophenol	230	U	230	67	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Diethyl phthalate	110	U	110	47	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
2,4-Dimethylphenol	230	U	230	61	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Dimethyl phthalate	110	U	110	21	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Di-n-butyl phthalate	110	U	110	34	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
4,6-Dinitro-2-methylphenol	500	U	500	120	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
2,4-Dinitrophenol	500	U	500	220	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
2,4-Dinitrotoluene	310	U	310	95	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
2,6-Dinitrotoluene	310	U	310	86	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Di-n-octyl phthalate	110	U	110	43	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Fluoranthene	**68**		23	6.8	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Fluorene	23	U	23	4.2	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Hexachlorobenzene	23	U	23	4.4	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Hexachlorobutadiene	76	U	76	18	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1

Client Sample ID: 7082-091919-1500

Date Collected: 09/19/19 15:00
Date Received: 09/20/19 09:20

Lab Sample ID: 240-119171-1

Matrix: Solid
Percent Solids: 65.4

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	500	U F1	500	95	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Hexachloroethane	76	U	76	14	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Indeno[1,2,3-cd]pyrene	**29**		23	11	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Isophorone	76	U	76	18	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
2-Methylnaphthalene	**19**	**J**	23	3.0	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
2-Methylphenol	310	U	310	47	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
3 & 4 Methylphenol	610	U	610	44	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Naphthalene	**14**	**J**	23	3.7	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
2-Nitroaniline	310	U	310	61	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
3-Nitroaniline	310	U F1	310	75	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
4-Nitroaniline	310	U F1	310	92	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Nitrobenzene	150	U	150	20	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
2-Nitrophenol	76	U	76	20	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
4-Nitrophenol	500	U	500	140	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
N-Nitrosodi-n-propylamine	76	U	76	17	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
N-Nitrosodiphenylamine	76	U	76	18	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Pentachlorophenol	230	U	230	89	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Phenanthrene	**39**		23	3.4	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Phenol	**92**		76	12	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
Pyrene	**59**		23	3.3	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
2,4,5-Trichlorophenol	230	U	230	110	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1
2,4,6-Trichlorophenol	230	U	230	98	ug/Kg	☼	09/23/19 09:02	09/25/19 12:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*72*		*32 - 120*	*09/23/19 09:02*	*09/25/19 12:03*	*1*
2-Fluorophenol (Surr)	*65*		*29 - 120*	*09/23/19 09:02*	*09/25/19 12:03*	*1*
Nitrobenzene-d5 (Surr)	*64*		*30 - 120*	*09/23/19 09:02*	*09/25/19 12:03*	*1*
Phenol-d5 (Surr)	*69*		*29 - 120*	*09/23/19 09:02*	*09/25/19 12:03*	*1*
Terphenyl-d14 (Surr)	*72*		*41 - 120*	*09/23/19 09:02*	*09/25/19 12:03*	*1*
2,4,6-Tribromophenol (Surr)	*65*		*10 - 120*	*09/23/19 09:02*	*09/25/19 12:03*	*1*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	73	U	73	32	ug/Kg	☼	09/23/19 07:59	09/27/19 09:25	1
Aroclor-1221	73	U	73	35	ug/Kg	☼	09/23/19 07:59	09/27/19 09:25	1
Aroclor-1232	73	U	73	34	ug/Kg	☼	09/23/19 07:59	09/27/19 09:25	1
Aroclor-1242	73	U	73	28	ug/Kg	☼	09/23/19 07:59	09/27/19 09:25	1
Aroclor-1248	73	U	73	35	ug/Kg	☼	09/23/19 07:59	09/27/19 09:25	1
Aroclor-1254	73	U	73	34	ug/Kg	☼	09/23/19 07:59	09/27/19 09:25	1
Aroclor-1260	73	U	73	32	ug/Kg	☼	09/23/19 07:59	09/27/19 09:25	1
Aroclor-1262	73	U	73	45	ug/Kg	☼	09/23/19 07:59	09/27/19 09:25	1
Aroclor-1268	73	U	73	34	ug/Kg	☼	09/23/19 07:59	09/27/19 09:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*107*		*10 - 132*	*09/23/19 07:59*	*09/27/19 09:25*	*1*
Tetrachloro-m-xylene	*103*		*14 - 128*	*09/23/19 07:59*	*09/27/19 09:25*	*1*

Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**12000**		23	6.2	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1

Client Sample ID: 7082-091919-1500
Date Collected: 09/19/19 15:00
Date Received: 09/20/19 09:20

Lab Sample ID: 240-119171-1
Matrix: Solid
Percent Solids: 65.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.2	U	1.2	0.42	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Arsenic	**9.3**		1.2	0.37	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Barium	**82**		23	0.42	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Beryllium	**0.63**		0.58	0.063	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Cadmium	**0.52**		0.23	0.056	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Calcium	**6100**		580	43	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Chromium	**250**		0.58	0.18	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Cobalt	**9.2**		1.2	0.23	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Copper	**120**		2.9	0.28	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Iron	**26000**		12	8.1	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Lead	**25**		1.2	0.33	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Magnesium	**3000**		580	54	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Manganese	**400**		1.8	0.36	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Nickel	**180**		4.7	0.27	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Potassium	**1700**		580	42	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Selenium	**1.1**	**J**	1.8	0.55	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Silver	0.58	U	0.58	0.095	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Sodium	580	U	580	73	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Thallium	1.2	U	1.2	0.47	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Vanadium	**26**		5.8	0.96	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1
Zinc	**150**		5.8	1.6	mg/Kg	☼	09/23/19 14:00	09/24/19 11:37	1

Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.062**	**J**	0.17	0.030	mg/Kg	☼	09/23/19 16:00	09/24/19 17:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	**65.4**		0.1	0.1	%			09/23/19 11:32	1
Percent Moisture	**34.6**		0.1	0.1	%			09/23/19 11:32	1

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

Job ID: 240-119171-1

Client Sample ID: 7082-091919-0001
Date Collected: 09/19/19 00:00
Date Received: 09/20/19 09:20

Lab Sample ID: 240-119171-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			09/23/19 18:58	1
Benzene	1.0	U	1.0	0.13	ug/L			09/23/19 18:58	1
Dichlorobromomethane	1.0	U	1.0	0.17	ug/L			09/23/19 18:58	1
Bromoform	1.0	U	1.0	0.76	ug/L			09/23/19 18:58	1
Bromomethane	1.0	U	1.0	0.42	ug/L			09/23/19 18:58	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			09/23/19 18:58	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			09/23/19 18:58	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			09/23/19 18:58	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			09/23/19 18:58	1
Chloroethane	1.0	U	1.0	0.83	ug/L			09/23/19 18:58	1
Chloroform	1.0	U	1.0	0.13	ug/L			09/23/19 18:58	1
Chloromethane	1.0	U	1.0	0.20	ug/L			09/23/19 18:58	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			09/23/19 18:58	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			09/23/19 18:58	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/23/19 18:58	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			09/23/19 18:58	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			09/23/19 18:58	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			09/23/19 18:58	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			09/23/19 18:58	1
2-Hexanone	10	U	10	0.54	ug/L			09/23/19 18:58	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			09/23/19 18:58	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			09/23/19 18:58	1
Styrene	1.0	U	1.0	0.10	ug/L			09/23/19 18:58	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			09/23/19 18:58	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/23/19 18:58	1
Toluene	1.0	U	1.0	0.14	ug/L			09/23/19 18:58	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/23/19 18:58	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/23/19 18:58	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			09/23/19 18:58	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			09/23/19 18:58	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			09/23/19 18:58	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			09/23/19 18:58	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.91	ug/L			09/23/19 18:58	1
Ethylene Dibromide	1.0	U	1.0	0.12	ug/L			09/23/19 18:58	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			09/23/19 18:58	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/23/19 18:58	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/23/19 18:58	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			09/23/19 18:58	1
Methyl acetate	10	U	10	1.7	ug/L			09/23/19 18:58	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			09/23/19 18:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			09/23/19 18:58	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			09/23/19 18:58	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/23/19 18:58	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/23/19 18:58	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			09/23/19 18:58	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			09/23/19 18:58	1
Chlorodibromomethane	1.0	U	1.0	0.39	ug/L			09/23/19 18:58	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			09/23/19 18:58	1

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

Job ID: 240-119171-1

Client Sample ID: 7082-091919-0001
Date Collected: 09/19/19 00:00
Date Received: 09/20/19 09:20

Lab Sample ID: 240-119171-2
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	117		70 - 121		09/23/19 18:58	1
4-Bromofluorobenzene (Surr)	97		59 - 120		09/23/19 18:58	1
Toluene-d8 (Surr)	99		70 - 123		09/23/19 18:58	1
Dibromofluoromethane (Surr)	89		75 - 128		09/23/19 18:58	1

Surrogate Summary

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

Job ID: 240-119171-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	DCA	TOL
Lab Sample ID	Client Sample ID	(49-141)	(49-132)	(48-123)	(62-135)
240-119171-1	7082-091919-1500	97	91	80	98
LCS 240-401988/5	Lab Control Sample	88	95	76	98
MB 240-401988/6	Method Blank	90	91	77	98

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(70-121)	(59-120)	(70-123)	(75-128)
240-119171-2	7082-091919-0001	117	97	99	89
LCS 240-401970/4	Lab Control Sample	115	101	103	92
MB 240-401970/6	Method Blank	118	103	105	92

Surrogate Legend

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

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

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

		Percent Surrogate Recovery (Acceptance Limits)					
		FBP	2FP	NBZ	PHL	TPHL	TBP
Lab Sample ID	Client Sample ID	(32-120)	(29-120)	(30-120)	(29-120)	(41-120)	(10-120)
240-119171-1	7082-091919-1500	72	65	64	69	72	65
240-119171-1 MS	7082-091919-1500	71	72	68	77	73	68
240-119171-1 MSD	7082-091919-1500	65	61	63	65	65	59
LCS 240-401944/24-A	Lab Control Sample	86	80	81	83	93	56
MB 240-401944/23-A	Method Blank	77	67	73	72	86	39

Surrogate Legend

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

Surrogate Summary

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

Job ID: 240-119171-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	DCBP1 (10-132)	TCX1 (14-128)								
240-119171-1	7082-091919-1500	107	103								
LCS 240-401937/24-A	Lab Control Sample	99	89								
MB 240-401937/23-A	Method Blank	106	94								

Surrogate Legend

DCBP = DCB Decachlorobiphenyl

TCX = Tetrachloro-m-xylene

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

Job ID: 240-119171-1

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

Lab Sample ID: MB 240-401970/6
Matrix: Water
Analysis Batch: 401970

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	U	10	5.4	ug/L			09/23/19 11:34	1
Benzene	1.0	U	1.0	0.13	ug/L			09/23/19 11:34	1
Bromoform	1.0	U	1.0	0.76	ug/L			09/23/19 11:34	1
Bromomethane	1.0	U	1.0	0.42	ug/L			09/23/19 11:34	1
2-Butanone (MEK)	10	U	10	1.2	ug/L			09/23/19 11:34	1
Carbon disulfide	1.0	U	1.0	0.28	ug/L			09/23/19 11:34	1
Carbon tetrachloride	1.0	U	1.0	0.26	ug/L			09/23/19 11:34	1
Chlorobenzene	1.0	U	1.0	0.14	ug/L			09/23/19 11:34	1
Chloroethane	1.0	U	1.0	0.83	ug/L			09/23/19 11:34	1
Chloroform	1.0	U	1.0	0.13	ug/L			09/23/19 11:34	1
Chloromethane	1.0	U	1.0	0.20	ug/L			09/23/19 11:34	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.61	ug/L			09/23/19 11:34	1
Dichlorobromomethane	1.0	U	1.0	0.17	ug/L			09/23/19 11:34	1
1,1-Dichloroethane	1.0	U	1.0	0.17	ug/L			09/23/19 11:34	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			09/23/19 11:34	1
1,1-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/23/19 11:34	1
1,2-Dichloropropane	1.0	U	1.0	0.15	ug/L			09/23/19 11:34	1
Ethylbenzene	1.0	U	1.0	0.11	ug/L			09/23/19 11:34	1
2-Hexanone	10	U	10	0.54	ug/L			09/23/19 11:34	1
Cyclohexane	1.0	U	1.0	0.24	ug/L			09/23/19 11:34	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.91	ug/L			09/23/19 11:34	1
Ethylene Dibromide	1.0	U	1.0	0.12	ug/L			09/23/19 11:34	1
Dichlorodifluoromethane	1.0	U	1.0	0.35	ug/L			09/23/19 11:34	1
Methylene Chloride	5.0	U	5.0	2.6	ug/L			09/23/19 11:34	1
4-Methyl-2-pentanone (MIBK)	10	U	10	0.42	ug/L			09/23/19 11:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.16	ug/L			09/23/19 11:34	1
Isopropylbenzene	1.0	U	1.0	0.090	ug/L			09/23/19 11:34	1
Methyl acetate	10	U	10	1.7	ug/L			09/23/19 11:34	1
Methyl tert-butyl ether	1.0	U	1.0	0.070	ug/L			09/23/19 11:34	1
Styrene	1.0	U	1.0	0.10	ug/L			09/23/19 11:34	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.13	ug/L			09/23/19 11:34	1
Tetrachloroethene	1.0	U	1.0	0.15	ug/L			09/23/19 11:34	1
1,2-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/23/19 11:34	1
Toluene	1.0	U	1.0	0.14	ug/L			09/23/19 11:34	1
1,3-Dichlorobenzene	1.0	U	1.0	0.15	ug/L			09/23/19 11:34	1
1,4-Dichlorobenzene	1.0	U	1.0	0.16	ug/L			09/23/19 11:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.19	ug/L			09/23/19 11:34	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.67	ug/L			09/23/19 11:34	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.26	ug/L			09/23/19 11:34	1
Chlorodibromomethane	1.0	U	1.0	0.39	ug/L			09/23/19 11:34	1
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			09/23/19 11:34	1
Methylcyclohexane	1.0	U	1.0	0.33	ug/L			09/23/19 11:34	1
1,1,2-Trichloroethane	1.0	U	1.0	0.090	ug/L			09/23/19 11:34	1
Trichloroethene	1.0	U	1.0	0.10	ug/L			09/23/19 11:34	1
Trichlorofluoromethane	1.0	U	1.0	0.45	ug/L			09/23/19 11:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41	ug/L			09/23/19 11:34	1
Vinyl chloride	1.0	U	1.0	0.20	ug/L			09/23/19 11:34	1
Xylenes, Total	2.0	U	2.0	0.15	ug/L			09/23/19 11:34	1

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

Lab Sample ID: MB 240-401970/6
Matrix: Water
Analysis Batch: 401970

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*118*		*70 - 121*		*09/23/19 11:34*	*1*
4-Bromofluorobenzene (Surr)	*103*		*59 - 120*		*09/23/19 11:34*	*1*
Toluene-d8 (Surr)	*105*		*70 - 123*		*09/23/19 11:34*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 128*		*09/23/19 11:34*	*1*

Lab Sample ID: LCS 240-401970/4
Matrix: Water
Analysis Batch: 401970

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	20.0	24.1		ug/L		121	21 - 162
Benzene	10.0	9.37		ug/L		94	80 - 123
Bromoform	10.0	8.52		ug/L		85	49 - 141
Bromomethane	10.0	7.23		ug/L		72	41 - 175
2-Butanone (MEK)	20.0	21.4		ug/L		107	39 - 163
Carbon disulfide	10.0	7.97		ug/L		80	60 - 138
Carbon tetrachloride	10.0	9.50		ug/L		95	63 - 140
Chlorobenzene	10.0	9.83		ug/L		98	80 - 121
Chloroethane	10.0	8.35		ug/L		83	33 - 173
Chloroform	10.0	9.89		ug/L		99	79 - 127
Chloromethane	10.0	7.00		ug/L		70	54 - 143
cis-1,3-Dichloropropene	10.0	9.39		ug/L		94	64 - 132
Dichlorobromomethane	10.0	9.76		ug/L		98	77 - 125
1,1-Dichloroethane	10.0	9.78		ug/L		98	75 - 133
1,2-Dichloroethane	10.0	11.0		ug/L		110	71 - 135
1,1-Dichloroethene	10.0	8.39		ug/L		84	65 - 139
1,2-Dichloropropane	10.0	9.77		ug/L		98	78 - 133
Ethylbenzene	10.0	9.59		ug/L		96	80 - 120
2-Hexanone	20.0	22.7		ug/L		114	43 - 148
Cyclohexane	10.0	9.61		ug/L		96	58 - 145
1,2-Dibromo-3-Chloropropane	10.0	8.37		ug/L		84	46 - 132
Ethylene Dibromide	10.0	9.69		ug/L		97	77 - 123
Dichlorodifluoromethane	10.0	4.84		ug/L		48	29 - 148
Methylene Chloride	10.0	9.51		ug/L		95	70 - 134
4-Methyl-2-pentanone (MIBK)	20.0	21.1		ug/L		106	49 - 143
cis-1,2-Dichloroethene	10.0	9.63		ug/L		96	76 - 128
Isopropylbenzene	10.0	9.56		ug/L		96	74 - 120
Methyl acetate	20.0	23.0		ug/L		115	52 - 145
Methyl tert-butyl ether	10.0	9.77		ug/L		98	51 - 133
Styrene	10.0	9.31		ug/L		93	79 - 120
1,1,2,2-Tetrachloroethane	10.0	11.5		ug/L		115	65 - 139
Tetrachloroethene	10.0	8.50		ug/L		85	74 - 130
1,2-Dichlorobenzene	10.0	9.39		ug/L		94	78 - 120
Toluene	10.0	10.1		ug/L		101	78 - 129
1,3-Dichlorobenzene	10.0	9.40		ug/L		94	78 - 120
1,4-Dichlorobenzene	10.0	9.73		ug/L		97	78 - 120
trans-1,2-Dichloroethene	10.0	8.92		ug/L		89	78 - 133
trans-1,3-Dichloropropene	10.0	10.3		ug/L		103	55 - 128

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

Lab Sample ID: LCS 240-401970/4
Matrix: Water
Analysis Batch: 401970

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trichlorobenzene	10.0	7.84		ug/L		78	42 - 133
Chlorodibromomethane	10.0	9.51		ug/L		95	70 - 132
1,1,1-Trichloroethane	10.0	9.70		ug/L		97	69 - 134
Methylcyclohexane	10.0	9.07		ug/L		91	60 - 125
1,1,2-Trichloroethane	10.0	10.3		ug/L		103	78 - 133
Trichloroethene	10.0	7.79		ug/L		78	76 - 125
Trichlorofluoromethane	10.0	7.47		ug/L		75	51 - 164
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	7.09		ug/L		71	50 - 156
m-Xylene & p-Xylene	10.0	9.55		ug/L		96	80 - 120
Vinyl chloride	10.0	7.08		ug/L		71	58 - 143
o-Xylene	10.0	9.92		ug/L		99	80 - 120
Xylenes, Total	20.0	19.5		ug/L		97	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*115*		*70 - 121*
4-Bromofluorobenzene (Surr)	*101*		*59 - 120*
Toluene-d8 (Surr)	*103*		*70 - 123*
Dibromofluoromethane (Surr)	*92*		*75 - 128*

Lab Sample ID: MB 240-401988/6
Matrix: Solid
Analysis Batch: 401988

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	25	21	ug/Kg			09/23/19 13:40	1
Benzene	5.0	U	5.0	0.70	ug/Kg			09/23/19 13:40	1
Bromoform	5.0	U	5.0	2.4	ug/Kg			09/23/19 13:40	1
Bromomethane	5.0	U	5.0	0.99	ug/Kg			09/23/19 13:40	1
2-Butanone (MEK)	20	U	20	3.6	ug/Kg			09/23/19 13:40	1
Carbon disulfide	5.0	U	5.0	1.2	ug/Kg			09/23/19 13:40	1
Carbon tetrachloride	5.0	U	5.0	3.3	ug/Kg			09/23/19 13:40	1
Chlorobenzene	5.0	U	5.0	0.92	ug/Kg			09/23/19 13:40	1
Chloroethane	5.0	U	5.0	1.2	ug/Kg			09/23/19 13:40	1
Chloroform	5.0	U	5.0	0.79	ug/Kg			09/23/19 13:40	1
Chloromethane	5.0	U	5.0	1.0	ug/Kg			09/23/19 13:40	1
cis-1,3-Dichloropropene	5.0	U	5.0	1.4	ug/Kg			09/23/19 13:40	1
Dichlorobromomethane	5.0	U	5.0	0.68	ug/Kg			09/23/19 13:40	1
1,1-Dichloroethane	5.0	U	5.0	0.69	ug/Kg			09/23/19 13:40	1
1,2-Dichloroethane	5.0	U	5.0	0.77	ug/Kg			09/23/19 13:40	1
1,1-Dichloroethene	5.0	U	5.0	0.90	ug/Kg			09/23/19 13:40	1
1,2-Dichloropropane	5.0	U	5.0	0.85	ug/Kg			09/23/19 13:40	1
Ethylbenzene	5.0	U	5.0	1.0	ug/Kg			09/23/19 13:40	1
2-Hexanone	20	U	20	4.1	ug/Kg			09/23/19 13:40	1
Cyclohexane	10	U	10	1.4	ug/Kg			09/23/19 13:40	1
1,2-Dibromo-3-Chloropropane	10	U	10	3.6	ug/Kg			09/23/19 13:40	1
Ethylene Dibromide	5.0	U	5.0	0.77	ug/Kg			09/23/19 13:40	1
Dichlorodifluoromethane	5.0	U	5.0	0.94	ug/Kg			09/23/19 13:40	1
Methylene Chloride	25	U	25	12	ug/Kg			09/23/19 13:40	1

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

Lab Sample ID: MB 240-401988/6
Matrix: Solid
Analysis Batch: 401988

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	20	U	20	3.7	ug/Kg			09/23/19 13:40	1
cis-1,2-Dichloroethene	5.0	U	5.0	0.65	ug/Kg			09/23/19 13:40	1
Isopropylbenzene	5.0	U	5.0	0.83	ug/Kg			09/23/19 13:40	1
Methyl acetate	25	U	25	3.4	ug/Kg			09/23/19 13:40	1
Methyl tert-butyl ether	5.0	U	5.0	0.82	ug/Kg			09/23/19 13:40	1
Styrene	5.0	U	5.0	1.2	ug/Kg			09/23/19 13:40	1
1,1,2,2-Tetrachloroethane	5.0	U	5.0	1.4	ug/Kg			09/23/19 13:40	1
Tetrachloroethene	5.0	U	5.0	0.73	ug/Kg			09/23/19 13:40	1
1,2-Dichlorobenzene	5.0	U	5.0	1.1	ug/Kg			09/23/19 13:40	1
Toluene	5.0	U	5.0	0.77	ug/Kg			09/23/19 13:40	1
1,3-Dichlorobenzene	5.0	U	5.0	0.82	ug/Kg			09/23/19 13:40	1
1,4-Dichlorobenzene	5.0	U	5.0	0.88	ug/Kg			09/23/19 13:40	1
trans-1,2-Dichloroethene	5.0	U	5.0	0.47	ug/Kg			09/23/19 13:40	1
trans-1,3-Dichloropropene	5.0	U	5.0	1.0	ug/Kg			09/23/19 13:40	1
1,2,4-Trichlorobenzene	5.0	U	5.0	0.57	ug/Kg			09/23/19 13:40	1
Chlorodibromomethane	5.0	U	5.0	2.8	ug/Kg			09/23/19 13:40	1
1,1,1-Trichloroethane	5.0	U	5.0	0.82	ug/Kg			09/23/19 13:40	1
Methylcyclohexane	10	U	10	1.2	ug/Kg			09/23/19 13:40	1
1,1,2-Trichloroethane	5.0	U	5.0	1.1	ug/Kg			09/23/19 13:40	1
Trichloroethene	5.0	U	5.0	0.63	ug/Kg			09/23/19 13:40	1
Trichlorofluoromethane	5.0	U	5.0	1.1	ug/Kg			09/23/19 13:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	U	5.0	1.3	ug/Kg			09/23/19 13:40	1
Vinyl chloride	5.0	U	5.0	0.84	ug/Kg			09/23/19 13:40	1
Xylenes, Total	10	U	10	1.6	ug/Kg			09/23/19 13:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*77*		*48 - 123*		*09/23/19 13:40*	*1*
4-Bromofluorobenzene (Surr)	*90*		*49 - 141*		*09/23/19 13:40*	*1*
Toluene-d8 (Surr)	*98*		*62 - 135*		*09/23/19 13:40*	*1*
Dibromofluoromethane (Surr)	*91*		*49 - 132*		*09/23/19 13:40*	*1*

Lab Sample ID: LCS 240-401988/5
Matrix: Solid
Analysis Batch: 401988

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	100	81.3		ug/Kg		81	43 - 159
Benzene	50.0	40.7		ug/Kg		81	74 - 123
Bromoform	50.0	45.8		ug/Kg		92	46 - 137
Bromomethane	20.0	15.3		ug/Kg		77	10 - 152
2-Butanone (MEK)	100	80.5		ug/Kg		81	45 - 148
Carbon disulfide	50.0	41.8		ug/Kg		84	29 - 153
Carbon tetrachloride	50.0	33.8		ug/Kg		68	56 - 139
Chlorobenzene	50.0	42.4		ug/Kg		85	80 - 120
Chloroethane	20.0	14.3		ug/Kg		71	15 - 155
Chloroform	50.0	39.6		ug/Kg		79	72 - 124
Chloromethane	20.0	10.2		ug/Kg		51	45 - 128
cis-1,3-Dichloropropene	50.0	40.4		ug/Kg		81	63 - 137

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

Lab Sample ID: LCS 240-401988/5
Matrix: Solid
Analysis Batch: 401988

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorobromomethane	50.0	39.6		ug/Kg		79	63 - 132
1,1-Dichloroethane	50.0	37.4		ug/Kg		75	72 - 122
1,2-Dichloroethane	50.0	37.8		ug/Kg		76	64 - 126
1,1-Dichloroethene	50.0	42.5		ug/Kg		85	57 - 139
1,2-Dichloropropane	50.0	40.2		ug/Kg		80	78 - 122
Ethylbenzene	50.0	40.6		ug/Kg		81	76 - 120
2-Hexanone	100	80.2		ug/Kg		80	52 - 145
Cyclohexane	50.0	33.3		ug/Kg		67	64 - 130
1,2-Dibromo-3-Chloropropane	50.0	39.8		ug/Kg		80	38 - 135
Ethylene Dibromide	50.0	48.1		ug/Kg		96	76 - 120
Dichlorodifluoromethane	20.0	8.06		ug/Kg		40	26 - 138
Methylene Chloride	50.0	38.9		ug/Kg		78	62 - 137
4-Methyl-2-pentanone (MIBK)	100	77.7		ug/Kg		78	53 - 139
cis-1,2-Dichloroethene	50.0	42.1		ug/Kg		84	74 - 123
Isopropylbenzene	50.0	41.1		ug/Kg		82	77 - 124
Methyl acetate	100	83.6		ug/Kg		84	52 - 136
Methyl tert-butyl ether	50.0	38.1		ug/Kg		76	66 - 127
Styrene	50.0	42.0		ug/Kg		84	76 - 121
1,1,2,2-Tetrachloroethane	50.0	47.7		ug/Kg		95	68 - 128
Tetrachloroethene	50.0	44.1		ug/Kg		88	76 - 120
1,2-Dichlorobenzene	50.0	44.9		ug/Kg		90	73 - 120
Toluene	50.0	41.1		ug/Kg		82	76 - 120
1,3-Dichlorobenzene	50.0	42.6		ug/Kg		85	70 - 120
1,4-Dichlorobenzene	50.0	43.8		ug/Kg		88	71 - 120
trans-1,2-Dichloroethene	50.0	43.8		ug/Kg		88	71 - 133
trans-1,3-Dichloropropene	50.0	37.1		ug/Kg		74	55 - 121
1,2,4-Trichlorobenzene	50.0	42.3		ug/Kg		85	54 - 120
Chlorodibromomethane	50.0	44.1		ug/Kg		88	58 - 131
1,1,1-Trichloroethane	50.0	35.9		ug/Kg		72	64 - 135
Methylcyclohexane	50.0	36.1		ug/Kg		72	68 - 127
1,1,2-Trichloroethane	50.0	45.1		ug/Kg		90	78 - 120
Trichloroethene	50.0	42.8		ug/Kg		86	73 - 126
Trichlorofluoromethane	20.0	15.3		ug/Kg		76	47 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	39.8		ug/Kg		80	56 - 138
m-Xylene & p-Xylene	50.0	40.1		ug/Kg		80	77 - 120
Vinyl chloride	20.0	10.9		ug/Kg		54	52 - 130
o-Xylene	50.0	40.4		ug/Kg		81	79 - 120
Xylenes, Total	100	80.5		ug/Kg		81	79 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*76*		*48 - 123*
4-Bromofluorobenzene (Surr)	*88*		*49 - 141*
Toluene-d8 (Surr)	*98*		*62 - 135*
Dibromofluoromethane (Surr)	*95*		*49 - 132*

Method: 8270C - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-401944/23-A
Matrix: Solid
Analysis Batch: 402392

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 401944

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	15	U	15	2.9	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Acenaphthylene	15	U	15	4.0	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Acetophenone	100	U	100	11	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Anthracene	15	U	15	2.4	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Atrazine	200	U	200	36	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Benzaldehyde	100	U	100	23	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Benzo[a]anthracene	15	U	15	3.4	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Benzo[a]pyrene	15	U	15	9.3	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Benzo[b]fluoranthene	15	U	15	6.5	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Benzo[g,h,i]perylene	15	U	15	7.1	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Benzo[k]fluoranthene	15	U	15	6.9	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
1,1'-Biphenyl	50	U	50	17	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Bis(2-chloroethoxy)methane	100	U	100	12	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Bis(2-chloroethyl)ether	100	U	100	12	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
bis (2-chloroisopropyl) ether	100	U	100	10	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Bis(2-ethylhexyl) phthalate	70	U	70	51	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
4-Bromophenyl phenyl ether	50	U	50	14	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Butyl benzyl phthalate	70	U	70	22	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Caprolactam	330	U	330	75	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Carbazole	50	U	50	19	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
4-Chloroaniline	150	U	150	30	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
4-Chloro-3-methylphenol	150	U	150	45	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
2-Chloronaphthalene	50	U	50	14	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
2-Chlorophenol	50	U	50	10	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
4-Chlorophenyl phenyl ether	50	U	50	14	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Chrysene	15	U	15	1.5	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Dibenz(a,h)anthracene	15	U	15	6.9	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Dibenzofuran	50	U	50	13	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
3,3'-Dichlorobenzidine	100	U	100	43	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
2,4-Dichlorophenol	150	U	150	44	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Diethyl phthalate	70	U	70	31	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
2,4-Dimethylphenol	150	U	150	40	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Dimethyl phthalate	70	U	70	14	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Di-n-butyl phthalate	70	U	70	22	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
4,6-Dinitro-2-methylphenol	330	U	330	80	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
2,4-Dinitrophenol	330	U	330	140	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
2,4-Dinitrotoluene	200	U	200	62	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
2,6-Dinitrotoluene	200	U	200	56	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Di-n-octyl phthalate	70	U	70	28	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Fluoranthene	15	U	15	4.5	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Fluorene	15	U	15	2.7	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Hexachlorobenzene	15	U	15	2.9	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Hexachlorobutadiene	50	U	50	12	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Hexachlorocyclopentadiene	330	U	330	62	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Hexachloroethane	50	U	50	9.0	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Indeno[1,2,3-cd]pyrene	15	U	15	7.4	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Isophorone	50	U	50	12	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
2-Methylnaphthalene	15	U	15	2.0	ug/Kg		09/23/19 09:06	09/25/19 10:05	1

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 240-401944/23-A
Matrix: Solid
Analysis Batch: 402392

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 401944

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylphenol	200	U	200	31	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
3 & 4 Methylphenol	400	U	400	29	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Naphthalene	15	U	15	2.4	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
2-Nitroaniline	200	U	200	40	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
3-Nitroaniline	200	U	200	49	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
4-Nitroaniline	200	U	200	60	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Nitrobenzene	100	U	100	13	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
2-Nitrophenol	50	U	50	13	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
4-Nitrophenol	330	U	330	94	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
N-Nitrosodi-n-propylamine	50	U	50	11	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
N-Nitrosodiphenylamine	50	U	50	12	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Pentachlorophenol	150	U	150	58	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Phenanthrene	15	U	15	2.2	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Phenol	50	U	50	8.0	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
Pyrene	15	U	15	2.1	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
2,4,5-Trichlorophenol	150	U	150	69	ug/Kg		09/23/19 09:06	09/25/19 10:05	1
2,4,6-Trichlorophenol	150	U	150	64	ug/Kg		09/23/19 09:06	09/25/19 10:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*77*		*32 - 120*	*09/23/19 09:06*	*09/25/19 10:05*	*1*
2-Fluorophenol (Surr)	*67*		*29 - 120*	*09/23/19 09:06*	*09/25/19 10:05*	*1*
Nitrobenzene-d5 (Surr)	*73*		*30 - 120*	*09/23/19 09:06*	*09/25/19 10:05*	*1*
Phenol-d5 (Surr)	*72*		*29 - 120*	*09/23/19 09:06*	*09/25/19 10:05*	*1*
Terphenyl-d14 (Surr)	*86*		*41 - 120*	*09/23/19 09:06*	*09/25/19 10:05*	*1*
2,4,6-Tribromophenol (Surr)	*39*		*10 - 120*	*09/23/19 09:06*	*09/25/19 10:05*	*1*

Lab Sample ID: LCS 240-401944/24-A
Matrix: Solid
Analysis Batch: 402392

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 401944

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	667	522		ug/Kg		78	48 - 120
Acenaphthylene	667	549		ug/Kg		82	46 - 120
Acetophenone	667	561		ug/Kg		84	46 - 120
Anthracene	667	574		ug/Kg		86	51 - 120
Atrazine	1330	1180		ug/Kg		88	57 - 120
Benzaldehyde	1330	1170		ug/Kg		87	48 - 120
Benzo[a]anthracene	667	569		ug/Kg		85	53 - 120
Benzo[a]pyrene	667	571		ug/Kg		86	50 - 120
Benzo[b]fluoranthene	667	557		ug/Kg		84	48 - 120
Benzo[g,h,i]perylene	667	559		ug/Kg		84	50 - 120
Benzo[k]fluoranthene	667	582		ug/Kg		87	51 - 120
1,1'-Biphenyl	667	551		ug/Kg		83	48 - 120
Bis(2-chloroethoxy)methane	667	558		ug/Kg		84	50 - 120
Bis(2-chloroethyl)ether	667	548		ug/Kg		82	48 - 120
bis (2-chloroisopropyl) ether	667	527		ug/Kg		79	37 - 120
Bis(2-ethylhexyl) phthalate	667	676		ug/Kg		101	52 - 120
4-Bromophenyl phenyl ether	667	571		ug/Kg		86	51 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-401944/24-A
Matrix: Solid
Analysis Batch: 402392

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 401944

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Butyl benzyl phthalate	667	634		ug/Kg		95	53 - 120
Caprolactam	1330	1250		ug/Kg		94	59 - 120
Carbazole	667	585		ug/Kg		88	56 - 120
4-Chloroaniline	667	393		ug/Kg		59	37 - 120
4-Chloro-3-methylphenol	667	549		ug/Kg		82	47 - 120
2-Chloronaphthalene	667	553		ug/Kg		83	49 - 120
2-Chlorophenol	667	542		ug/Kg		81	50 - 120
4-Chlorophenyl phenyl ether	667	578		ug/Kg		87	49 - 120
Chrysene	667	580		ug/Kg		87	54 - 120
Dibenz(a,h)anthracene	667	579		ug/Kg		87	48 - 120
Dibenzofuran	667	559		ug/Kg		84	49 - 120
3,3'-Dichlorobenzidine	1330	931		ug/Kg		70	40 - 120
2,4-Dichlorophenol	667	514		ug/Kg		77	48 - 120
Diethyl phthalate	667	591		ug/Kg		89	52 - 120
2,4-Dimethylphenol	667	407		ug/Kg		61	37 - 120
Dimethyl phthalate	667	568		ug/Kg		85	53 - 120
Di-n-butyl phthalate	667	624		ug/Kg		94	56 - 120
4,6-Dinitro-2-methylphenol	1330	791		ug/Kg		59	18 - 120
2,4-Dinitrophenol	1330	388		ug/Kg		29	10 - 120
2,4-Dinitrotoluene	667	624		ug/Kg		94	53 - 120
2,6-Dinitrotoluene	667	605		ug/Kg		91	54 - 120
Di-n-octyl phthalate	667	598		ug/Kg		90	42 - 120
Fluoranthene	667	580		ug/Kg		87	53 - 120
Fluorene	667	558		ug/Kg		84	50 - 120
Hexachlorobenzene	667	578		ug/Kg		87	46 - 120
Hexachlorobutadiene	667	542		ug/Kg		81	44 - 120
Hexachlorocyclopentadiene	667	351		ug/Kg		53	14 - 120
Hexachloroethane	667	507		ug/Kg		76	45 - 120
Indeno[1,2,3-cd]pyrene	667	583		ug/Kg		87	49 - 120
Isophorone	667	563		ug/Kg		84	47 - 120
2-Methylnaphthalene	667	567		ug/Kg		85	49 - 120
2-Methylphenol	667	531		ug/Kg		80	49 - 120
3 & 4 Methylphenol	667	546		ug/Kg		82	50 - 120
Naphthalene	667	541		ug/Kg		81	48 - 120
2-Nitroaniline	667	596		ug/Kg		89	46 - 120
3-Nitroaniline	667	485		ug/Kg		73	48 - 120
4-Nitroaniline	667	572		ug/Kg		86	49 - 120
Nitrobenzene	667	570		ug/Kg		86	48 - 120
2-Nitrophenol	667	554		ug/Kg		83	46 - 120
4-Nitrophenol	1330	960		ug/Kg		72	42 - 120
N-Nitrosodi-n-propylamine	667	521		ug/Kg		78	49 - 120
N-Nitrosodiphenylamine	667	559		ug/Kg		84	53 - 120
Pentachlorophenol	1330	742		ug/Kg		56	14 - 120
Phenanthrene	667	545		ug/Kg		82	52 - 120
Phenol	667	569		ug/Kg		85	49 - 120
Pyrene	667	594		ug/Kg		89	55 - 120
2,4,5-Trichlorophenol	667	456		ug/Kg		68	34 - 120
2,4,6-Trichlorophenol	667	405		ug/Kg		61	19 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 240-401944/24-A
Matrix: Solid
Analysis Batch: 402392

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 401944

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	86		32 - 120
2-Fluorophenol (Surr)	80		29 - 120
Nitrobenzene-d5 (Surr)	81		30 - 120
Phenol-d5 (Surr)	83		29 - 120
Terphenyl-d14 (Surr)	93		41 - 120
2,4,6-Tribromophenol (Surr)	56		10 - 120

Lab Sample ID: 240-119171-1 MS
Matrix: Solid
Analysis Batch: 402392

Client Sample ID: 7082-091919-1500
Prep Type: Total/NA
Prep Batch: 401944

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	23	U	1020	689		ug/Kg	☼	68	36 - 120
Acenaphthylene	23	U	1020	709		ug/Kg	☼	70	35 - 120
Acetophenone	17	J	1020	781		ug/Kg	☼	75	31 - 120
Anthracene	6.6	J	1020	735		ug/Kg	☼	72	42 - 120
Atrazine	310	U	2040	1550		ug/Kg	☼	76	41 - 120
Benzaldehyde	71	J	2040	1590		ug/Kg	☼	74	28 - 120
Benzo[a]anthracene	31		1020	784		ug/Kg	☼	74	35 - 120
Benzo[a]pyrene	39		1020	766		ug/Kg	☼	71	33 - 120
Benzo[b]fluoranthene	61		1020	805		ug/Kg	☼	73	26 - 120
Benzo[g,h,i]perylene	35		1020	674		ug/Kg	☼	63	16 - 120
Benzo[k]fluoranthene	35		1020	755		ug/Kg	☼	71	33 - 120
1,1'-Biphenyl	76	U	1020	731		ug/Kg	☼	72	33 - 120
Bis(2-chloroethoxy)methane	150	U	1020	727		ug/Kg	☼	71	36 - 120
Bis(2-chloroethyl)ether	150	U	1020	769		ug/Kg	☼	75	33 - 120
bis (2-chloroisopropyl) ether	150	U	1020	731		ug/Kg	☼	72	26 - 120
Bis(2-ethylhexyl) phthalate	110	U	1020	962		ug/Kg	☼	94	40 - 120
4-Bromophenyl phenyl ether	76	U	1020	727		ug/Kg	☼	71	44 - 120
Butyl benzyl phthalate	110	U	1020	909		ug/Kg	☼	89	46 - 120
Caprolactam	500	U	2040	1490		ug/Kg	☼	73	33 - 128
Carbazole	76	U	1020	707		ug/Kg	☼	69	35 - 120
4-Chloroaniline	230	U	1020	210	J	ug/Kg	☼	21	15 - 120
4-Chloro-3-methylphenol	230	U	1020	770		ug/Kg	☼	76	31 - 120
2-Chloronaphthalene	76	U	1020	729		ug/Kg	☼	72	35 - 120
2-Chlorophenol	76	U	1020	769		ug/Kg	☼	75	30 - 120
4-Chlorophenyl phenyl ether	76	U	1020	742		ug/Kg	☼	73	41 - 120
Chrysene	46		1020	766		ug/Kg	☼	71	33 - 120
Dibenz(a,h)anthracene	23	U	1020	713		ug/Kg	☼	70	30 - 120
Dibenzofuran	76	U	1020	736		ug/Kg	☼	72	37 - 120
3,3'-Dichlorobenzidine	150	U F1	2040	150	U F1	ug/Kg	☼	0	10 - 120
2,4-Dichlorophenol	230	U	1020	766		ug/Kg	☼	75	32 - 120
Diethyl phthalate	110	U	1020	761		ug/Kg	☼	75	44 - 120
2,4-Dimethylphenol	230	U	1020	834		ug/Kg	☼	82	28 - 120
Dimethyl phthalate	110	U	1020	749		ug/Kg	☼	74	42 - 120
Di-n-butyl phthalate	110	U	1020	809		ug/Kg	☼	79	45 - 120
4,6-Dinitro-2-methylphenol	500	U	2040	1270		ug/Kg	☼	62	10 - 120
2,4-Dinitrophenol	500	U	2040	828		ug/Kg	☼	41	10 - 120

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-119171-1 MS
Matrix: Solid
Analysis Batch: 402392

Client Sample ID: 7082-091919-1500
Prep Type: Total/NA
Prep Batch: 401944

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dinitrotoluene	310	U	1020	792		ug/Kg	☼	78	38 - 120
2,6-Dinitrotoluene	310	U	1020	815		ug/Kg	☼	80	43 - 120
Di-n-octyl phthalate	110	U	1020	857		ug/Kg	☼	84	35 - 120
Fluoranthene	68		1020	757		ug/Kg	☼	68	26 - 121
Fluorene	23	U	1020	729		ug/Kg	☼	72	36 - 120
Hexachlorobenzene	23	U	1020	707		ug/Kg	☼	69	36 - 120
Hexachlorobutadiene	76	U	1020	690		ug/Kg	☼	68	31 - 120
Hexachlorocyclopentadiene	500	U F1	1020	500	U F1	ug/Kg	☼	0	10 - 120
Hexachloroethane	76	U	1020	533		ug/Kg	☼	52	15 - 120
Indeno[1,2,3-cd]pyrene	29		1020	725		ug/Kg	☼	68	24 - 120
Isophorone	76	U	1020	754		ug/Kg	☼	74	34 - 120
2-Methylnaphthalene	19	J	1020	747		ug/Kg	☼	71	31 - 120
2-Methylphenol	310	U	1020	860		ug/Kg	☼	84	31 - 120
3 & 4 Methylphenol	610	U	1020	744		ug/Kg	☼	73	33 - 120
Naphthalene	14	J	1020	737		ug/Kg	☼	71	29 - 120
2-Nitroaniline	310	U	1020	836		ug/Kg	☼	82	29 - 120
3-Nitroaniline	310	U F1	1020	1650	F1	ug/Kg	☼	162	21 - 120
4-Nitroaniline	310	U F1	1020	233	J	ug/Kg	☼	23	23 - 120
Nitrobenzene	150	U	1020	721		ug/Kg	☼	71	33 - 120
2-Nitrophenol	76	U	1020	792		ug/Kg	☼	78	26 - 120
4-Nitrophenol	500	U	2040	1630		ug/Kg	☼	80	32 - 120
N-Nitrosodi-n-propylamine	76	U	1020	771		ug/Kg	☼	76	32 - 120
N-Nitrosodiphenylamine	76	U	1020	750		ug/Kg	☼	74	29 - 120
Pentachlorophenol	230	U	2040	1320		ug/Kg	☼	65	10 - 120
Phenanthrene	39		1020	736		ug/Kg	☼	68	28 - 120
Phenol	92		1020	1060		ug/Kg	☼	95	21 - 120
Pyrene	59		1020	818		ug/Kg	☼	74	28 - 120
2,4,5-Trichlorophenol	230	U	1020	761		ug/Kg	☼	75	20 - 120
2,4,6-Trichlorophenol	230	U	1020	691		ug/Kg	☼	68	19 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*71*		*32 - 120*
2-Fluorophenol (Surr)	*72*		*29 - 120*
Nitrobenzene-d5 (Surr)	*68*		*30 - 120*
Phenol-d5 (Surr)	*77*		*29 - 120*
Terphenyl-d14 (Surr)	*73*		*41 - 120*
2,4,6-Tribromophenol (Surr)	*68*		*10 - 120*

Lab Sample ID: 240-119171-1 MSD
Matrix: Solid
Analysis Batch: 402392

Client Sample ID: 7082-091919-1500
Prep Type: Total/NA
Prep Batch: 401944

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	23	U	1000	650		ug/Kg	☼	65	36 - 120	6	28
Acenaphthylene	23	U	1000	680		ug/Kg	☼	68	35 - 120	4	26
Acetophenone	17	J	1000	655		ug/Kg	☼	63	31 - 120	18	40
Anthracene	6.6	J	1000	665		ug/Kg	☼	66	42 - 120	10	32
Atrazine	310	U	2010	1380		ug/Kg	☼	69	41 - 120	12	26

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-119171-1 MSD
Matrix: Solid
Analysis Batch: 402392

Client Sample ID: 7082-091919-1500
Prep Type: Total/NA
Prep Batch: 401944

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzaldehyde	71	J	2010	1210		ug/Kg	☼	57	28 - 120	27	40
Benzo[a]anthracene	31		1000	663		ug/Kg	☼	63	35 - 120	17	40
Benzo[a]pyrene	39		1000	673		ug/Kg	☼	63	33 - 120	13	40
Benzo[b]fluoranthene	61		1000	723		ug/Kg	☼	66	26 - 120	11	40
Benzo[g,h,i]perylene	35		1000	614		ug/Kg	☼	58	16 - 120	9	40
Benzo[k]fluoranthene	35		1000	630		ug/Kg	☼	59	33 - 120	18	40
1,1'-Biphenyl	76	U	1000	691		ug/Kg	☼	69	33 - 120	6	33
Bis(2-chloroethoxy)methane	150	U	1000	664		ug/Kg	☼	66	36 - 120	9	33
Bis(2-chloroethyl)ether	150	U	1000	583		ug/Kg	☼	58	33 - 120	27	36
bis (2-chloroisopropyl) ether	150	U	1000	598		ug/Kg	☼	60	26 - 120	20	31
Bis(2-ethylhexyl) phthalate	110	U	1000	843		ug/Kg	☼	84	40 - 120	13	28
4-Bromophenyl phenyl ether	76	U	1000	675		ug/Kg	☼	67	44 - 120	7	40
Butyl benzyl phthalate	110	U	1000	784		ug/Kg	☼	78	46 - 120	15	39
Caprolactam	500	U	2010	1570		ug/Kg	☼	78	33 - 128	5	40
Carbazole	76	U	1000	655		ug/Kg	☼	65	35 - 120	8	34
4-Chloroaniline	230	U	1000	232		ug/Kg	☼	23	15 - 120	10	36
4-Chloro-3-methylphenol	230	U	1000	765		ug/Kg	☼	76	31 - 120	1	25
2-Chloronaphthalene	76	U	1000	659		ug/Kg	☼	66	35 - 120	10	30
2-Chlorophenol	76	U	1000	633		ug/Kg	☼	63	30 - 120	19	37
4-Chlorophenyl phenyl ether	76	U	1000	670		ug/Kg	☼	67	41 - 120	10	40
Chrysene	46		1000	690		ug/Kg	☼	64	33 - 120	10	40
Dibenz(a,h)anthracene	23	U	1000	656		ug/Kg	☼	65	30 - 120	8	40
Dibenzofuran	76	U	1000	681		ug/Kg	☼	68	37 - 120	8	28
3,3'-Dichlorobenzidine	150	U F1	2010	150	U F1	ug/Kg	☼	0	10 - 120	NC	40
2,4-Dichlorophenol	230	U	1000	700		ug/Kg	☼	70	32 - 120	9	32
Diethyl phthalate	110	U	1000	721		ug/Kg	☼	72	44 - 120	5	26
2,4-Dimethylphenol	230	U	1000	775		ug/Kg	☼	77	28 - 120	7	35
Dimethyl phthalate	110	U	1000	688		ug/Kg	☼	69	42 - 120	8	35
Di-n-butyl phthalate	110	U	1000	711		ug/Kg	☼	71	45 - 120	13	28
4,6-Dinitro-2-methylphenol	500	U	2010	1230		ug/Kg	☼	61	10 - 120	3	40
2,4-Dinitrophenol	500	U	2010	975		ug/Kg	☼	49	10 - 120	16	40
2,4-Dinitrotoluene	310	U	1000	749		ug/Kg	☼	75	38 - 120	6	27
2,6-Dinitrotoluene	310	U	1000	728		ug/Kg	☼	72	43 - 120	11	31
Di-n-octyl phthalate	110	U	1000	756		ug/Kg	☼	75	35 - 120	12	33
Fluoranthene	68		1000	678		ug/Kg	☼	61	26 - 121	11	40
Fluorene	23	U	1000	682		ug/Kg	☼	68	36 - 120	7	28
Hexachlorobenzene	23	U	1000	654		ug/Kg	☼	65	36 - 120	8	25
Hexachlorobutadiene	76	U	1000	625		ug/Kg	☼	62	31 - 120	10	35
Hexachlorocyclopentadiene	500	U F1	1000	500	U F1	ug/Kg	☼	0	10 - 120	NC	40
Hexachloroethane	76	U	1000	386		ug/Kg	☼	38	15 - 120	32	40
Indeno[1,2,3-cd]pyrene	29		1000	662		ug/Kg	☼	63	24 - 120	9	40
Isophorone	76	U	1000	700		ug/Kg	☼	70	34 - 120	7	32
2-Methylnaphthalene	19	J	1000	706		ug/Kg	☼	68	31 - 120	6	33
2-Methylphenol	310	U	1000	712		ug/Kg	☼	71	31 - 120	19	36
3 & 4 Methylphenol	610	U	1000	634		ug/Kg	☼	63	33 - 120	16	29
Naphthalene	14	J	1000	658		ug/Kg	☼	64	29 - 120	11	34
2-Nitroaniline	310	U	1000	733		ug/Kg	☼	73	29 - 120	13	31
3-Nitroaniline	310	U F1	1000	1210	F1	ug/Kg	☼	121	21 - 120	31	40
4-Nitroaniline	310	U F1	1000	175	J F1	ug/Kg	☼	17	23 - 120	28	40

Method: 8270C - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 240-119171-1 MSD
Matrix: Solid
Analysis Batch: 402392

Client Sample ID: 7082-091919-1500
Prep Type: Total/NA
Prep Batch: 401944

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrobenzene	150	U	1000	687		ug/Kg	☼	68	33 - 120	5	40
2-Nitrophenol	76	U	1000	707		ug/Kg	☼	70	26 - 120	11	38
4-Nitrophenol	500	U	2010	1580		ug/Kg	☼	78	32 - 120	3	31
N-Nitrosodi-n-propylamine	76	U	1000	680		ug/Kg	☼	68	32 - 120	13	32
N-Nitrosodiphenylamine	76	U	1000	647		ug/Kg	☼	64	29 - 120	15	30
Pentachlorophenol	230	U	2010	1050		ug/Kg	☼	52	10 - 120	22	40
Phenanthrene	39		1000	676		ug/Kg	☼	63	28 - 120	9	40
Phenol	92		1000	816		ug/Kg	☼	72	21 - 120	26	40
Pyrene	59		1000	715		ug/Kg	☼	65	28 - 120	13	40
2,4,5-Trichlorophenol	230	U	1000	711		ug/Kg	☼	71	20 - 120	7	38
2,4,6-Trichlorophenol	230	U	1000	659		ug/Kg	☼	66	19 - 120	5	36

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*65*		*32 - 120*
2-Fluorophenol (Surr)	*61*		*29 - 120*
Nitrobenzene-d5 (Surr)	*63*		*30 - 120*
Phenol-d5 (Surr)	*65*		*29 - 120*
Terphenyl-d14 (Surr)	*65*		*41 - 120*
2,4,6-Tribromophenol (Surr)	*59*		*10 - 120*

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 240-401937/23-A
Matrix: Solid
Analysis Batch: 402356

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 401937

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aroclor-1016	50	U	50	22	ug/Kg		09/23/19 07:59	09/25/19 11:29	1
Aroclor-1221	50	U	50	24	ug/Kg		09/23/19 07:59	09/25/19 11:29	1
Aroclor-1232	50	U	50	23	ug/Kg		09/23/19 07:59	09/25/19 11:29	1
Aroclor-1242	50	U	50	19	ug/Kg		09/23/19 07:59	09/25/19 11:29	1
Aroclor-1248	50	U	50	24	ug/Kg		09/23/19 07:59	09/25/19 11:29	1
Aroclor-1254	50	U	50	23	ug/Kg		09/23/19 07:59	09/25/19 11:29	1
Aroclor-1260	50	U	50	22	ug/Kg		09/23/19 07:59	09/25/19 11:29	1
Aroclor-1262	50	U	50	31	ug/Kg		09/23/19 07:59	09/25/19 11:29	1
Aroclor-1268	50	U	50	23	ug/Kg		09/23/19 07:59	09/25/19 11:29	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
DCB Decachlorobiphenyl	*106*		*10 - 132*	*09/23/19 07:59*	*09/25/19 11:29*	*1*
Tetrachloro-m-xylene	*94*		*14 - 128*	*09/23/19 07:59*	*09/25/19 11:29*	*1*

Lab Sample ID: LCS 240-401937/24-A
Matrix: Solid
Analysis Batch: 402356

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 401937

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aroclor-1016	1000	901		ug/Kg		90	47 - 120
Aroclor-1260	1000	1050		ug/Kg		105	46 - 120

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: LCS 240-401937/24-A
Matrix: Solid
Analysis Batch: 402356

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 401937

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
DCB Decachlorobiphenyl	*99*		*10 - 132*
Tetrachloro-m-xylene	*89*		*14 - 128*

Method: 6010B - Metals (ICP)

Lab Sample ID: MB 240-401977/1-A
Matrix: Solid
Analysis Batch: 402400

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 401977

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	20	U	20	5.3	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Antimony	1.0	U	1.0	0.36	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Arsenic	1.0	U	1.0	0.32	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Barium	20	U	20	0.36	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Beryllium	0.50	U	0.50	0.054	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Cadmium	0.20	U	0.20	0.048	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Calcium	500	U	500	36	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Chromium	0.50	U	0.50	0.15	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Cobalt	1.0	U	1.0	0.20	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Copper	2.5	U	2.5	0.24	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Iron	10	U	10	6.9	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Lead	1.0	U	1.0	0.28	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Magnesium	500	U	500	46	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Manganese	1.5	U	1.5	0.31	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Nickel	4.0	U	4.0	0.23	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Potassium	500	U	500	36	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Selenium	1.5	U	1.5	0.47	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Silver	0.50	U	0.50	0.081	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Sodium	500	U	500	63	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Thallium	1.0	U	1.0	0.40	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Vanadium	5.0	U	5.0	0.82	mg/Kg		09/23/19 14:00	09/24/19 10:51	1
Zinc	5.0	U	5.0	1.4	mg/Kg		09/23/19 14:00	09/24/19 10:51	1

Lab Sample ID: LCS 240-401977/2-A
Matrix: Solid
Analysis Batch: 402400

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 401977

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	1000	933		mg/Kg		93	80 - 120
Antimony	100	93.3		mg/Kg		93	80 - 120
Arsenic	200	197		mg/Kg		99	80 - 120
Barium	200	190		mg/Kg		95	80 - 120
Beryllium	100	92.0		mg/Kg		92	80 - 120
Cadmium	100	95.8		mg/Kg		96	80 - 120
Calcium	5000	4730		mg/Kg		95	80 - 120
Chromium	100	99.1		mg/Kg		99	80 - 120
Cobalt	100	97.0		mg/Kg		97	80 - 120
Copper	100	94.7		mg/Kg		95	80 - 120
Iron	1000	985		mg/Kg		99	80 - 120

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

Lab Sample ID: LCS 240-401977/2-A
Matrix: Solid
Analysis Batch: 402400

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 401977

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Lead	100	95.9		mg/Kg		96	80 - 120
Magnesium	5000	4740		mg/Kg		95	80 - 120
Manganese	100	93.7		mg/Kg		94	80 - 120
Nickel	100	96.5		mg/Kg		96	80 - 120
Potassium	5000	4630		mg/Kg		93	80 - 120
Selenium	200	197		mg/Kg		99	80 - 120
Silver	10.0	9.34		mg/Kg		93	80 - 120
Sodium	5000	4650		mg/Kg		93	80 - 120
Thallium	200	194		mg/Kg		97	80 - 120
Vanadium	100	99.1		mg/Kg		99	80 - 120
Zinc	100	95.2		mg/Kg		95	80 - 120

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-402005/1-A
Matrix: Solid
Analysis Batch: 402321

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 402005

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10	U	0.10	0.018	mg/Kg		09/23/19 16:00	09/24/19 17:27	1

Lab Sample ID: LCS 240-402005/2-A
Matrix: Solid
Analysis Batch: 402321

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 402005

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.884		mg/Kg		106	80 - 120

Lab Sample ID: 240-119171-1 MS
Matrix: Solid
Analysis Batch: 402321

Client Sample ID: 7082-091919-1500
Prep Type: Total/NA
Prep Batch: 402005

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.062	J	0.228	0.297		mg/Kg	☼	103	80 - 120

Lab Sample ID: 240-119171-1 MSD
Matrix: Solid
Analysis Batch: 402321

Client Sample ID: 7082-091919-1500
Prep Type: Total/NA
Prep Batch: 402005

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.062	J	0.228	0.287		mg/Kg	☼	99	80 - 120	3	20

GC/MS VOA

Analysis Batch: 401970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-119171-2	7082-091919-0001	Total/NA	Water	8260B	
MB 240-401970/6	Method Blank	Total/NA	Water	8260B	
LCS 240-401970/4	Lab Control Sample	Total/NA	Water	8260B	

Analysis Batch: 401988

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-119171-1	7082-091919-1500	Total/NA	Solid	8260B	402037
MB 240-401988/6	Method Blank	Total/NA	Solid	8260B	
LCS 240-401988/5	Lab Control Sample	Total/NA	Solid	8260B	

Prep Batch: 402037

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-119171-1	7082-091919-1500	Total/NA	Solid	5030A	

GC/MS Semi VOA

Prep Batch: 401944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-119171-1	7082-091919-1500	Total/NA	Solid	3540C	
MB 240-401944/23-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-401944/24-A	Lab Control Sample	Total/NA	Solid	3540C	
240-119171-1 MS	7082-091919-1500	Total/NA	Solid	3540C	
240-119171-1 MSD	7082-091919-1500	Total/NA	Solid	3540C	

Analysis Batch: 402392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-119171-1	7082-091919-1500	Total/NA	Solid	8270C	401944
MB 240-401944/23-A	Method Blank	Total/NA	Solid	8270C	401944
LCS 240-401944/24-A	Lab Control Sample	Total/NA	Solid	8270C	401944
240-119171-1 MS	7082-091919-1500	Total/NA	Solid	8270C	401944
240-119171-1 MSD	7082-091919-1500	Total/NA	Solid	8270C	401944

GC Semi VOA

Prep Batch: 401937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-119171-1	7082-091919-1500	Total/NA	Solid	3540C	
MB 240-401937/23-A	Method Blank	Total/NA	Solid	3540C	
LCS 240-401937/24-A	Lab Control Sample	Total/NA	Solid	3540C	

Analysis Batch: 402356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 240-401937/23-A	Method Blank	Total/NA	Solid	8082A	401937
LCS 240-401937/24-A	Lab Control Sample	Total/NA	Solid	8082A	401937

Analysis Batch: 402806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-119171-1	7082-091919-1500	Total/NA	Solid	8082A	401937

QC Association Summary

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

Job ID: 240-119171-1

Metals

Prep Batch: 401977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-119171-1	7082-091919-1500	Total/NA	Solid	3050B	
MB 240-401977/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 240-401977/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 402005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-119171-1	7082-091919-1500	Total/NA	Solid	7471A	
MB 240-402005/1-A	Method Blank	Total/NA	Solid	7471A	
LCS 240-402005/2-A	Lab Control Sample	Total/NA	Solid	7471A	
240-119171-1 MS	7082-091919-1500	Total/NA	Solid	7471A	
240-119171-1 MSD	7082-091919-1500	Total/NA	Solid	7471A	

Analysis Batch: 402321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-119171-1	7082-091919-1500	Total/NA	Solid	7471A	402005
MB 240-402005/1-A	Method Blank	Total/NA	Solid	7471A	402005
LCS 240-402005/2-A	Lab Control Sample	Total/NA	Solid	7471A	402005
240-119171-1 MS	7082-091919-1500	Total/NA	Solid	7471A	402005
240-119171-1 MSD	7082-091919-1500	Total/NA	Solid	7471A	402005

Analysis Batch: 402400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-119171-1	7082-091919-1500	Total/NA	Solid	6010B	401977
MB 240-401977/1-A	Method Blank	Total/NA	Solid	6010B	401977
LCS 240-401977/2-A	Lab Control Sample	Total/NA	Solid	6010B	401977

General Chemistry

Analysis Batch: 401998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-119171-1	7082-091919-1500	Total/NA	Solid	Moisture	

Lab Chronicle

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

Job ID: 240-119171-1

Client Sample ID: 7082-091919-1500
Date Collected: 09/19/19 15:00
Date Received: 09/20/19 09:20

Lab Sample ID: 240-119171-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	401998	09/23/19 11:32	AMT	TAL CAN

Client Sample ID: 7082-091919-1500
Date Collected: 09/19/19 15:00
Date Received: 09/20/19 09:20

Lab Sample ID: 240-119171-1
Matrix: Solid
Percent Solids: 65.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030A			402037	09/23/19 14:10	SAM	TAL CAN
Total/NA	Analysis	8260B		1	401988	09/23/19 15:49	SAM	TAL CAN
Total/NA	Prep	3540C			401944	09/23/19 09:02	EMB	TAL CAN
Total/NA	Analysis	8270C		1	402392	09/25/19 12:03	JMG	TAL CAN
Total/NA	Prep	3540C			401937	09/23/19 07:59	EMB	TAL CAN
Total/NA	Analysis	8082A		1	402806	09/27/19 09:25	KMG	TAL CAN
Total/NA	Prep	3050B			401977	09/23/19 14:00	DEE	TAL CAN
Total/NA	Analysis	6010B		1	402400	09/24/19 11:37	WKD	TAL CAN
Total/NA	Prep	7471A			402005	09/23/19 16:00	DEE	TAL CAN
Total/NA	Analysis	7471A		1	402321	09/24/19 17:32	SLD	TAL CAN

Client Sample ID: 7082-091919-0001
Date Collected: 09/19/19 00:00
Date Received: 09/20/19 09:20

Lab Sample ID: 240-119171-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	401970	09/23/19 18:58	LEE	TAL CAN

Laboratory References:
TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

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

Job ID: 240-119171-1

Laboratory: Eurofins TestAmerica, Canton

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

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-20
California	State Program	2927	02-23-20
Connecticut	State	PH-0590	12-31-19
Connecticut	State Program	PH-0590	12-31-19
Florida	NELAP	E87225	06-30-20
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-20
Georgia	State Program	N/A	02-23-20
Illinois	NELAP	200004	07-31-20
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-20
Iowa	State Program	421	06-01-21
Kansas	NELAP	E-10336	04-30-20
Kansas	NELAP	E-10336	04-30-20
Kentucky (UST)	State	112225	02-23-20
Kentucky (UST)	State Program	58	02-23-20
Kentucky (WW)	State	KY98016	12-31-19
Kentucky (WW)	State Program	98016	12-31-19
Minnesota	NELAP	039-999-348	12-31-19 *
Minnesota	NELAP	OH00048	12-31-19
Minnesota (Petrofund)	State Program	3506	07-31-21
New Jersey	NELAP	OH001	06-30-20
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-20
New York	NELAP	10975	03-31-20
Ohio VAP	State	CL0024	06-05-21
Ohio VAP	State Program	CL0024	06-05-21
Oregon	NELAP	4062	02-23-20
Oregon	NELAP	4062	02-23-20
Pennsylvania	NELAP	68-00340	08-31-20
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-19-11	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	Federal	P330-16-00404	12-28-19
USDA	US Federal Programs	P330-16-00404	12-28-19
Virginia	NELAP	460175	09-14-20
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-20
Washington	State Program	C971	01-12-20 *
West Virginia DEP	State	210	12-31-19
West Virginia DEP	State Program	210	12-31-19

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

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

3.3/4.0

Chain of Custody Record

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Client Information	Sampler: S. Partyka	Lab PM: Howell, Leslie	Carrier Tracking No(s):	COC No: 240-62415-26516.1
Client Contact: ~~Mr. Travis Bukach~~ Ben Aragona	Phone: 440.610.4604	E-Mail: leslie.howell@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): Standard			
State, Zip: OH, 44131				
Phone: 734-454-4917(Tel) 734-454-1233(Fax)	PO #: 129862-~~000~~ 012			
Email: ~~tsbukach@haleyaldrich.com~~ baragona@haleyald.	WO #:			
Project Name: Racer Elyria	Project #: 24018828			
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)	6010B, 7471A, 8082A, 8260B, 8270C, Moisture	6010B, 7470A	8260B - TCL VOCs- bulk	8260B - TCL VOCs	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	A		
7082-091919-1500	9-19-19	1500	C	Solid			X	X	X	X		
7082-091919-0001	9-19-19			~~Solid~~ Water						X		
				Solid								
				Solid								
				Water								

240-119171 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:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		9-19-19 @ 1830	H+A		9-20-19 920	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:

Ver: 01/16/2019

9/27/2019

Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 149171

Client H&A Site Name

Cooler unpacked by:

Cooler Received on 9-20-19 Opened on 9-20-19

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

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

TestAmerica Cooler # T-1 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-10 (CF +0.7 °C) Observed Cooler Temp. 3.3 °C Corrected Cooler Temp. 4.0 °C
   IR GUN #IR-11 (CF +0.9°C) Observed Cooler Temp. °C Corrected Cooler Temp. °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
   -Were tamper/custody seals intact and uncompromised? Yes No NA
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 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC991818**
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Yes No
16. Was a LL Hg or Me Hg trip blank present? Yes No

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

Contacted PM Date by via Verbal Voice Mail Other

Concerning

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by: MS

18. 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)

19. SAMPLE PRESERVATION

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

VOA Sample Preservation - Date/Time VOAs Frozen:

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ANALYTICAL REPORT

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

Laboratory Job ID: 240-126850-1
Client Project/Site: Racer Elyria

For:
Haley & Aldrich, Inc.
455 E. Eisenhower Parkway
Suite 210
Ann Arbor, Michigan 48108-2280

Attn: Ban Aragona

Leslie A Howell

Authorized for release by:
3/17/2020 1:55:09 PM

Leslie Howell, Project Manager I
(330)966-9266
leslie.howell@testamericainc.com

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Definitions/Glossary

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

Job ID: 240-126850-1

Qualifiers

Subcontract

Qualifier	Qualifier Description
J	Estimated value
U	Analyte was not detected at the value indicated

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)

Sample Summary

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

Job ID: 240-126850-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
1271849	SB01-022720-1145 (240-126850-1)	Soil			
1271850	SB02-022720-1245 (240-126850-2)	Soil			
1271851	7082-022720-0001 (240-126850-3)	Soil			
1271852	SB03-022720-1330 (240-126850-4)	Soil			
1271853	7082-022720-0002 (240-126850-5)	Water			

Detection Summary

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

Job ID: 240-126850-1

Client Sample ID: SB01-022720-1145 (240-126850-1) — Lab Sample ID: 1271849

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Hexavalent Chromium by IC	0.32	J	0.51	0.18	mg/kg	1	☼	Chromium, Hexavalent	Total/NA
Chromium	23.3		1.29	0.154	mg/kg	1	☼	Chromium	Total/NA
Moisture	20.1		0.50	0.50	%	1	☼	Moisture	Total/NA
Trivalent Chromium soils	22.9		1.3	0.18	mg/kg	1	☼	Trivalent Chromium	Total/NA

Client Sample ID: SB02-022720-1245 (240-126850-2) — Lab Sample ID: 1271850

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Hexavalent Chromium by IC	3.8		0.52	0.18	mg/kg	1	☼	Chromium, Hexavalent	Total/NA
Chromium	41.4		1.42	0.170	mg/kg	1	☼	Chromium	Total/NA
Moisture	21.6		0.50	0.50	%	1	☼	Moisture	Total/NA
Trivalent Chromium soils	37.6		1.4	0.18	mg/kg	1	☼	Trivalent Chromium	Total/NA

Client Sample ID: 7082-022720-0001 (240-126850-3) — Lab Sample ID: 1271851

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	28.2		1.28	0.154	mg/kg	1	☼	Chromium	Total/NA
Moisture	18.0		0.50	0.50	%	1	☼	Moisture	Total/NA
Trivalent Chromium soils	28.2		1.3	0.17	mg/kg	1	☼	Trivalent Chromium	Total/NA

Client Sample ID: SB03-022720-1330 (240-126850-4) — Lab Sample ID: 1271852

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Hexavalent Chromium by IC	0.65		0.50	0.18	mg/kg	1	☼	Chromium, Hexavalent	Total/NA
Chromium	32.0		1.61	0.193	mg/kg	1	☼	Chromium	Total/NA
Moisture	19.7		0.50	0.50	%	1	☼	Moisture	Total/NA
Trivalent Chromium soils	31.4		1.6	0.19	mg/kg	1	☼	Trivalent Chromium	Total/NA

Client Sample ID: 7082-022720-0002 (240-126850-5) — Lab Sample ID: 1271853

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 240-126850-1

Client Sample ID: SB01-022720-1145 (240-126850-1)

Lab Sample ID: 1271849

Date Collected:

Matrix: Soil

Date Received:

Percent Solids: 79.9

Method: Chromium, Hexavalent - SW-846 7199

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium by IC	0.32	J	0.51	0.18	mg/kg	☼	03/06/20 08:25	03/06/20 16:46	1

Method: Chromium - SW-846 6010C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	23.3		1.29	0.154	mg/kg	☼	03/05/20 06:05	03/05/20 18:28	1

Method: Moisture - SM 2540 G %Moisture Calc

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Moisture	20.1		0.50	0.50	%	☼	03/05/20 11:08	03/05/20 11:08	1

Method: Trivalent Chromium - SW-846 6010C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trivalent Chromium soils	22.9		1.3	0.18	mg/kg	☼	03/11/20 12:23	03/11/20 12:23	1

Client Sample Results

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

Job ID: 240-126850-1

Client Sample ID: SB02-022720-1245 (240-126850-2)

Lab Sample ID: 1271850

Date Collected:
Date Received:

Matrix: Soil
Percent Solids: 78.4

Method: Chromium, Hexavalent - SW-846 7199

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium by IC	3.8		0.52	0.18	mg/kg	☼	03/06/20 08:25	03/06/20 17:46	1

Method: Chromium - SW-846 6010C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	41.4		1.42	0.170	mg/kg	☼	03/05/20 06:05	03/05/20 18:37	1

Method: Moisture - SM 2540 G %Moisture Calc

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Moisture	21.6		0.50	0.50	%	☼	03/05/20 11:08	03/05/20 11:08	1

Method: Trivalent Chromium - SW-846 6010C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trivalent Chromium soils	37.6		1.4	0.18	mg/kg	☼	03/11/20 12:23	03/11/20 12:23	1

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

Job ID: 240-126850-1

Client Sample ID: 7082-022720-0001 (240-126850-3)
Date Collected:
Date Received:

Lab Sample ID: 1271851
Matrix: Soil
Percent Solids: 82

Method: Chromium, Hexavalent - SW-846 7199

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium by IC	ND	U	0.50	0.17	mg/kg	☼	03/06/20 08:25	03/06/20 18:02	1

Method: Chromium - SW-846 6010C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	28.2		1.28	0.154	mg/kg	☼	03/05/20 06:05	03/05/20 18:41	1

Method: Moisture - SM 2540 G %Moisture Calc

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Moisture	18.0		0.50	0.50	%	☼	03/05/20 11:08	03/05/20 11:08	1

Method: Trivalent Chromium - SW-846 6010C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trivalent Chromium soils	28.2		1.3	0.17	mg/kg	☼	03/11/20 12:23	03/11/20 12:23	1

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

Job ID: 240-126850-1

Client Sample ID: SB03-022720-1330 (240-126850-4)

Lab Sample ID: 1271852

Date Collected:

Matrix: Soil

Date Received:

Percent Solids: 80.3

Method: Chromium, Hexavalent - SW-846 7199

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium by IC	0.65		0.50	0.18	mg/kg	☼	03/06/20 08:25	03/06/20 18:18	1

Method: Chromium - SW-846 6010C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	32.0		1.61	0.193	mg/kg	☼	03/05/20 06:05	03/05/20 18:44	1

Method: Moisture - SM 2540 G %Moisture Calc

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Moisture	19.7		0.50	0.50	%	☼	03/05/20 11:08	03/05/20 11:08	1

Method: Trivalent Chromium - SW-846 6010C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trivalent Chromium soils	31.4		1.6	0.19	mg/kg	☼	03/11/20 12:23	03/11/20 12:23	1

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

Job ID: 240-126850-1

Client Sample ID: 7082-022720-0002 (240-126850-5)
Date Collected:
Date Received:

Lab Sample ID: 1271853
Matrix: Water

Method: Chromium - SW-846 6010C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND	U	0.0150	0.0016	mg/l		03/11/20 03:42	03/11/20 20:24	1

Method: Hexavalent Chromium - SW-846 7199

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium	ND	U	10.0	5.0	ug/l		03/05/20 00:19	03/05/20 00:19	1

Method: Trivalent Chromium - SW-846 6010C

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trivalent Chromium waters	ND	U	0.015	0.0050	mg/l		03/15/20 08:55	03/15/20 08:55	1

Method: Chromium - SW-846 6010C

Lab Sample ID: P06504BBB
Matrix: Soil
Analysis Batch: 200651404902

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 200651404902_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		1.50	0.180	mg/kg		03/05/20 06:05	03/05/20 17:57	1

Lab Sample ID: P06504BQQ
Matrix: Soil
Analysis Batch: 200651404902

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 200651404902_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	3.00	3.01		mg/kg		100	80 - 120

Lab Sample ID: P07004ABB
Matrix: Water
Analysis Batch: 200701404401

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 200701404401_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.0150	0.0016	mg/l		03/11/20 03:42	03/11/20 18:51	1

Lab Sample ID: P07004AQQ
Matrix: Water
Analysis Batch: 200701404401

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 200701404401_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	0.0300	0.0312		mg/l		104	80 - 120

Method: Chromium, Hexavalent - SW-846 7199

Lab Sample ID: P06643ABB
Matrix: Soil
Analysis Batch: 20066243201A

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20066243201A_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium by IC	ND		0.40	0.14	mg/kg		03/06/20 08:25	03/06/20 16:14	1

Lab Sample ID: P06643AQQ
Matrix: Soil
Analysis Batch: 20066243201A

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20066243201A_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Hexavalent Chromium by IC	5.0	4.2		mg/kg		85	80 - 120

Lab Sample ID: P271849R271657A
Matrix: Soil
Analysis Batch: 20066243201A

Client Sample ID: SB01-022720-1145 (240-126850-1) MS
Prep Type: Total/NA
Prep Batch: 20066243201A_P

Analyte	Sample Result	Sample Qualifier	Spike Added	Matrix Spike Result	Matrix Spike Qualifier	Unit	D	%Rec	%Rec. Limits
Hexavalent Chromium by IC	0.26		40.8	35.5		mg/kg		86	75 - 125

Method: Chromium, Hexavalent - SW-846 7199 (Continued)

Lab Sample ID: P271849D271735A
Matrix: Soil
Analysis Batch: 20066243201A

Client Sample ID: SB01-022720-1145 (240-126850-1) DU
Prep Type: Total/NA
Prep Batch: 20066243201A_P

Analyte	Sample Result	Sample Qualifier		Duplicate Result	Duplicate Qualifier	Unit	D			RPD	RPD Limit
Hexavalent Chromium by IC	0.26			0.21		mg/kg				22	20

Method: Hexavalent Chromium - SW-846 7199

Lab Sample ID: P06476RBB
Matrix: Water
Analysis Batch: 20064076118A

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 20064076118A_P

Analyte	Blank Result	Blank Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexavalent Chromium	ND		10.0	5.0	ug/l		03/04/20 22:10	03/04/20 22:10	1

Lab Sample ID: P06476RQQ
Matrix: Water
Analysis Batch: 20064076118A

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20064076118A_P

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Hexavalent Chromium			100	104		ug/l		104	90 - 110		

Method: Moisture - SM 2540 G %Moisture Calc

Lab Sample ID: L06414Q
Matrix: Soil
Analysis Batch: 20064820004A

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 20064820004A_P

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Moisture			89.5	89.5		%		100	99 - 101		

Subcontract

Analysis Batch: 20064076118A

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1271853	7082-022720-0002 (240-126850-5)	Total/NA	Water	Hexavalent Chromium	20064076118 A_P
P06476RBB	Method Blank	Total/NA	Water	Hexavalent Chromium	20064076118 A_P
P06476RQQ	Lab Control Sample	Total/NA	Water	Hexavalent Chromium	20064076118 A_P

Analysis Batch: 20064820004A

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1271849	SB01-022720-1145 (240-126850-1)	Total/NA	Soil	Moisture	20064820004 A_P
1271850	SB02-022720-1245 (240-126850-2)	Total/NA	Soil	Moisture	20064820004 A_P
1271851	7082-022720-0001 (240-126850-3)	Total/NA	Soil	Moisture	20064820004 A_P
1271852	SB03-022720-1330 (240-126850-4)	Total/NA	Soil	Moisture	20064820004 A_P
L06414Q	Lab Control Sample	Total/NA	Soil	Moisture	20064820004 A_P

Analysis Batch: 200651404902

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1271849	SB01-022720-1145 (240-126850-1)	Total/NA	Soil	Chromium	200651404902 _P
1271850	SB02-022720-1245 (240-126850-2)	Total/NA	Soil	Chromium	200651404902 _P
1271851	7082-022720-0001 (240-126850-3)	Total/NA	Soil	Chromium	200651404902 _P
1271852	SB03-022720-1330 (240-126850-4)	Total/NA	Soil	Chromium	200651404902 _P
P06504BBB	Method Blank	Total/NA	Soil	Chromium	200651404902 _P
P06504BQQ	Lab Control Sample	Total/NA	Soil	Chromium	200651404902 _P

Analysis Batch: 20066243201A

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1271849	SB01-022720-1145 (240-126850-1)	Total/NA	Soil	Chromium, Hexavalent	20066243201 A_P
1271850	SB02-022720-1245 (240-126850-2)	Total/NA	Soil	Chromium, Hexavalent	20066243201 A_P
1271851	7082-022720-0001 (240-126850-3)	Total/NA	Soil	Chromium, Hexavalent	20066243201 A_P
1271852	SB03-022720-1330 (240-126850-4)	Total/NA	Soil	Chromium, Hexavalent	20066243201 A_P
P06643ABB	Method Blank	Total/NA	Soil	Chromium, Hexavalent	20066243201 A_P
P06643AQQ	Lab Control Sample	Total/NA	Soil	Chromium, Hexavalent	20066243201 A_P
P271849R271657A	SB01-022720-1145 (240-126850-1) MS	Total/NA	Soil	Chromium, Hexavalent	20066243201 A_P
P271849D271735A	SB01-022720-1145 (240-126850-1) DU	Total/NA	Soil	Chromium, Hexavalent	20066243201 A_P

Subcontract

Analysis Batch: 200701404401

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1271853	7082-022720-0002 (240-126850-5)	Total/NA	Water	Chromium	200701404401_P
P07004ABB	Method Blank	Total/NA	Water	Chromium	200701404401_P
P07004AQQ	Lab Control Sample	Total/NA	Water	Chromium	200701404401_P

Analysis Batch: 200710282901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1271849	SB01-022720-1145 (240-126850-1)	Total/NA	Soil	Trivalent Chromium	200710282901_P
1271850	SB02-022720-1245 (240-126850-2)	Total/NA	Soil	Trivalent Chromium	200710282901_P
1271851	7082-022720-0001 (240-126850-3)	Total/NA	Soil	Trivalent Chromium	200710282901_P
1271852	SB03-022720-1330 (240-126850-4)	Total/NA	Soil	Trivalent Chromium	200710282901_P

Analysis Batch: 200750282801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1271853	7082-022720-0002 (240-126850-5)	Total/NA	Water	Trivalent Chromium	200750282801_P

Prep Batch: 20064076118A_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1271853	7082-022720-0002 (240-126850-5)	Total/NA	Water	General Preparation	
P06476RBB	Method Blank	Total/NA	Water	General Preparation	
P06476RQQ	Lab Control Sample	Total/NA	Water	General Preparation	

Prep Batch: 20064820004A_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1271849	SB01-022720-1145 (240-126850-1)	Total/NA	Soil	General Preparation	
1271850	SB02-022720-1245 (240-126850-2)	Total/NA	Soil	General Preparation	
1271851	7082-022720-0001 (240-126850-3)	Total/NA	Soil	General Preparation	
1271852	SB03-022720-1330 (240-126850-4)	Total/NA	Soil	General Preparation	
L06414Q	Lab Control Sample	Total/NA	Soil	General Preparation	

Prep Batch: 200651404902_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1271849	SB01-022720-1145 (240-126850-1)	Total/NA	Soil	SW-846 3050B	
1271850	SB02-022720-1245 (240-126850-2)	Total/NA	Soil	SW-846 3050B	
1271851	7082-022720-0001 (240-126850-3)	Total/NA	Soil	SW-846 3050B	
1271852	SB03-022720-1330 (240-126850-4)	Total/NA	Soil	SW-846 3050B	
P06504BBB	Method Blank	Total/NA	Soil	SW-846 3050B	
P06504BQQ	Lab Control Sample	Total/NA	Soil	SW-846 3050B	

Subcontract

Prep Batch: 20066243201A_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1271849	SB01-022720-1145 (240-126850-1)	Total/NA	Soil	SW-846 3060A	
1271850	SB02-022720-1245 (240-126850-2)	Total/NA	Soil	SW-846 3060A	
1271851	7082-022720-0001 (240-126850-3)	Total/NA	Soil	SW-846 3060A	
1271852	SB03-022720-1330 (240-126850-4)	Total/NA	Soil	SW-846 3060A	
P06643ABB	Method Blank	Total/NA	Soil	SW-846 3060A	
P06643AQQ	Lab Control Sample	Total/NA	Soil	SW-846 3060A	
P271849R271657A	SB01-022720-1145 (240-126850-1) MS	Total/NA	Soil	SW-846 3060A	
P271849D271735A	SB01-022720-1145 (240-126850-1) DU	Total/NA	Soil	SW-846 3060A	

Prep Batch: 200701404401_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1271853	7082-022720-0002 (240-126850-5)	Total/NA	Water	SW-846 3005A	
P07004ABB	Method Blank	Total/NA	Water	SW-846 3005A	
P07004AQQ	Lab Control Sample	Total/NA	Water	SW-846 3005A	

Prep Batch: 200710282901_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1271849	SB01-022720-1145 (240-126850-1)	Total/NA	Soil	General Preparation	
1271850	SB02-022720-1245 (240-126850-2)	Total/NA	Soil	General Preparation	
1271851	7082-022720-0001 (240-126850-3)	Total/NA	Soil	General Preparation	
1271852	SB03-022720-1330 (240-126850-4)	Total/NA	Soil	General Preparation	

Prep Batch: 200750282801_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
1271853	7082-022720-0002 (240-126850-5)	Total/NA	Water	General Preparation	

Accreditation/Certification Summary

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

Job ID: 240-126850-1

Laboratory: Eurofins TestAmerica, Canton

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

Authority	Program	Identification Number	Expiration Date
California	State	2927	02-23-21
Connecticut	State	PH-0590	12-31-19 *
Florida	NELAP	E87225	06-30-20
Georgia	State	4062	02-23-20 *
Illinois	NELAP	004498	07-31-20
Iowa	State	421	06-01-21
Kansas	NELAP	E-10336	04-30-20
Kentucky (WW)	State	KY98016	12-31-20
Minnesota	NELAP	OH00048	12-31-20
Minnesota (Petrofund)	State	3506	08-01-21
New Jersey	NELAP	OH001	06-30-20
New York	NELAP	10975	03-31-20
Ohio VAP	State	CL0024	06-05-21
Oregon	NELAP	4062	02-24-21
Pennsylvania	NELAP	68-00340	08-31-20
Texas	NELAP	T104704517-18-10	08-31-20
USDA	US Federal Programs	P330-16-00404	12-28-19 *
Virginia	NELAP	010101	09-14-20
Washington	State	C971	01-12-21
West Virginia DEP	State	210	12-31-20

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

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ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

TestAmerica North Canton
4101 Shuffel Street NW
North Canton OH 44720

Report Date: March 15, 2020 09:30

Project: Racer Elyria

Account #: 01042
Group Number: 2090532
State of Sample Origin: OH

Electronic Copy To TestAmerica Attn: Leslie Howell

Respectfully Submitted,

Kay Hower

(717) 556-7364

To view our laboratory's current scopes of accreditation please go to https://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/certifications-and-accreditations-eurofins-lancaster-laboratories-environmental/ . Historical copies may be requested through your project manager.

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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
SB01-022720-1145 (240-126850-1) Soil	02/27/2020 11:45	1271849
SB02-022720-1245 (240-126850-2) Soil	02/27/2020 12:45	1271850
7082-022720-0001 (240-126850-3) Soil	02/27/2020	1271851
SB03-022720-1330 (240-126850-4) Soil	02/27/2020 13:30	1271852
7082-022720-0002 (240-126850-5) Water	02/27/2020 13:50	1271853

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Sample Description: SB01-022720-1145 (240-126850-1) Soil
240-126850-1

Project Name: Racer Elyria

Submittal Date/Time: 03/04/2020 10:18
Collection Date/Time: 02/27/2020 11:45

TestAmerica North Canton
ELLE Sample #: SW 1271849
ELLE Group #: 2090532
Matrix: Soil

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06951	Chromium	7440-47-3	23.3	0.154	1.29	1
02829	Trivalent Chromium soils	16065-83-1	22.9	0.18	1.3	1
	The Trivalent Chromium result is calculated by subtracting Hexavalent Chromium from Total Chromium.					
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	Hexavalent Chromium by IC	18540-29-9	0.32 J	0.18	0.51	1
Wet Chemistry	**SM 2540 G-2011 %Moisture Calc**		**%**	**%**	**%**	
00111	Moisture	n.a.	20.1	0.50	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06951	Chromium	SW-846 6010C	1	200651404902	03/05/2020 18:28	Elaine F Stoltzfus	1
02829	Trivalent Chromium soils	SW-846 6010C	1	200710282901	03/11/2020 12:23	Parker D Lindstrom	1
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	200651404902	03/05/2020 06:05	Annamaria Kuhns	1
05892	Hexavalent Chromium by IC	SW-846 7199	1	20066243201A	03/06/2020 16:46	Niyati Desai	1
02432	Hexavalent Cr Extraction - IC	SW-846 3060A	1	20066243201A	03/06/2020 08:25	Reece Himmelreich	1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	20064820004A	03/05/2020 11:08	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

Sample Description: SB02-022720-1245 (240-126850-2) Soil
240-126850-1

Project Name: Racer Elyria

Submittal Date/Time: 03/04/2020 10:18
Collection Date/Time: 02/27/2020 12:45

TestAmerica North Canton
ELLE Sample #: SW 1271850
ELLE Group #: 2090532
Matrix: Soil

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06951	Chromium	7440-47-3	41.4	0.170	1.42	1
02829	Trivalent Chromium soils	16065-83-1	37.6	0.18	1.4	1
	The Trivalent Chromium result is calculated by subtracting Hexavalent Chromium from Total Chromium.					
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	Hexavalent Chromium by IC	18540-29-9	3.8	0.18	0.52	1
Wet Chemistry	**SM 2540 G-2011 %Moisture Calc**		**%**	**%**	**%**	
00111	Moisture	n.a.	21.6	0.50	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06951	Chromium	SW-846 6010C	1	200651404902	03/05/2020 18:37	Elaine F Stoltzfus	1
02829	Trivalent Chromium soils	SW-846 6010C	1	200710282901	03/11/2020 12:23	Parker D Lindstrom	1
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	200651404902	03/05/2020 06:05	Annamaria Kuhns	1
05892	Hexavalent Chromium by IC	SW-846 7199	2	20066243201A	03/06/2020 17:46	Niyati Desai	1
02432	Hexavalent Cr Extraction - IC	SW-846 3060A	1	20066243201A	03/06/2020 08:25	Reece Himmelreich	1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	20064820004A	03/05/2020 11:08	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

Sample Description: 7082-022720-0001 (240-126850-3) Soil
240-126850-1

Project Name: Racer Elyria

Submittal Date/Time: 03/04/2020 10:18
Collection Date/Time: 02/27/2020

TestAmerica North Canton
ELLE Sample #: SW 1271851
ELLE Group #: 2090532
Matrix: Soil

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06951	Chromium	7440-47-3	28.2	0.154	1.28	1
02829	Trivalent Chromium soils	16065-83-1	28.2	0.17	1.3	1
	The Trivalent Chromium result is calculated by subtracting Hexavalent Chromium from Total Chromium.					
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	Hexavalent Chromium by IC	18540-29-9	N.D.	0.17	0.50	1
Wet Chemistry	**SM 2540 G-2011 %Moisture Calc**		**%**	**%**	**%**	
00111	Moisture	n.a.	18.0	0.50	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06951	Chromium	SW-846 6010C	1	200651404902	03/05/2020 18:41	Elaine F Stoltzfus	1
02829	Trivalent Chromium soils	SW-846 6010C	1	200710282901	03/11/2020 12:23	Parker D Lindstrom	1
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	200651404902	03/05/2020 06:05	Annamaria Kuhns	1
05892	Hexavalent Chromium by IC	SW-846 7199	1	20066243201A	03/06/2020 18:02	Niyati Desai	1
02432	Hexavalent Cr Extraction - IC	SW-846 3060A	1	20066243201A	03/06/2020 08:25	Reece Himmelreich	1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	20064820004A	03/05/2020 11:08	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

Sample Description: SB03-022720-1330 (240-126850-4) Soil
240-126850-1

Project Name: Racer Elyria

Submittal Date/Time: 03/04/2020 10:18
Collection Date/Time: 02/27/2020 13:30

TestAmerica North Canton
ELLE Sample #: SW 1271852
ELLE Group #: 2090532
Matrix: Soil

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit*	Dry Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010C**		**mg/kg**	**mg/kg**	**mg/kg**	
06951	Chromium	7440-47-3	32.0	0.193	1.61	1
02829	Trivalent Chromium soils	16065-83-1	31.4	0.19	1.6	1
	The Trivalent Chromium result is calculated by subtracting Hexavalent Chromium from Total Chromium.					
Wet Chemistry	**SW-846 7199**		**mg/kg**	**mg/kg**	**mg/kg**	
05892	Hexavalent Chromium by IC	18540-29-9	0.65	0.18	0.50	1
Wet Chemistry	**SM 2540 G-2011 %Moisture Calc**		**%**	**%**	**%**	
00111	Moisture	n.a.	19.7	0.50	0.50	1
	Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
06951	Chromium	SW-846 6010C	1	200651404902	03/05/2020 18:44	Elaine F Stoltzfus	1
02829	Trivalent Chromium soils	SW-846 6010C	1	200710282901	03/11/2020 12:23	Parker D Lindstrom	1
14049	ICP/ICPMS-SW, 3050B - U345	SW-846 3050B	1	200651404902	03/05/2020 06:05	Annamaria Kuhns	1
05892	Hexavalent Chromium by IC	SW-846 7199	2	20066243201A	03/06/2020 18:18	Niyati Desai	1
02432	Hexavalent Cr Extraction - IC	SW-846 3060A	1	20066243201A	03/06/2020 08:25	Reece Himmelreich	1
00111	Moisture	SM 2540 G-2011 %Moisture Calc	1	20064820004A	03/05/2020 11:08	Larry E Bevins	1

*=This limit was used in the evaluation of the final result

Sample Description: 7082-022720-0002 (240-126850-5) Water
240-126850-1

Project Name: Racer Elyria

Submittal Date/Time: 03/04/2020 10:18
Collection Date/Time: 02/27/2020 13:50

TestAmerica North Canton
ELLE Sample #: WW 1271853
ELLE Group #: 2090532
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
Metals	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
07051	Chromium	7440-47-3	N.D.	0.0016	0.0150	1
02828	Trivalent Chromium waters	16065-83-1	N.D.	0.0050	0.015	1
	The Trivalent Chromium result is calculated by subtracting Hexavalent Chromium from Total Chromium.					
Wet Chemistry	**SW-846 7199**		**ug/l**	**ug/l**	**ug/l**	
06467	Hexavalent Chromium	18540-29-9	N.D.	5.0	10.0	1
	The holding time was not met. The sample was submitted to the laboratory outside of the holding time.					

Sample Comments

State of Washington Lab Certification No. C457

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07051	Chromium	SW-846 6010C	1	200701404401	03/11/2020 20:24	Elaine F Stoltzfus	1
02828	Trivalent Chromium waters	SW-846 6010C	1	200750282801	03/15/2020 08:55	Tshina Alamos	1
14044	ICP-WW, 3005A (tot rec) - U345	SW-846 3005A	1	200701404401	03/11/2020 03:42	James L Mertz	1
06467	Hexavalent Chromium	SW-846 7199	1	20064076118A	03/05/2020 00:19	Niyati Desai	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: TestAmerica North Canton
Reported: 03/15/2020 09:30

Group Number: 2090532

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL**	LOQ
	mg/kg	mg/kg	mg/kg
Batch number: 200651404902	Sample number(s): 1271849-1271852		
Chromium	N.D.	0.180	1.50
	mg/l	mg/l	mg/l
Batch number: 200701404401	Sample number(s): 1271853		
Chromium	N.D.	0.0016	0.0150
	mg/kg	mg/kg	mg/kg
Batch number: 20066243201A	Sample number(s): 1271849-1271852		
Hexavalent Chromium by IC	N.D.	0.14	0.40
	ug/l	ug/l	ug/l
Batch number: 20064076118A	Sample number(s): 1271853		
Hexavalent Chromium	N.D.	5.0	10.0

LCS/LCSD

Analysis Name	LCS Spike Added mg/kg	LCS Conc mg/kg	LCSD Spike Added mg/kg	LCSD Conc mg/kg	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 200651404902	Sample number(s): 1271849-1271852								
Chromium	3.00	3.01			100		80-120		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 200701404401	Sample number(s): 1271853								
Chromium	0.0300	0.0312			104		80-120		
	mg/kg	mg/kg	mg/kg	mg/kg					
Batch number: 20066243201A	Sample number(s): 1271849-1271852								
Hexavalent Chromium by IC	5.00	4.25			85		80-120		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 20064076118A	Sample number(s): 1271853								
Hexavalent Chromium	100	103.68			104		90-110		
	%	%	%	%					
Batch number: 20064820004A	Sample number(s): 1271849-1271852								

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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Quality Control Summary

Client Name: TestAmerica North Canton
Reported: 03/15/2020 09:30

Group Number: 2090532

LCS/LCSD (continued)

Analysis Name	LCS Spike Added %	LCS Conc %	LCSD Spike Added %	LCSD Conc %	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Moisture	89.5	89.46			100		99-101		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/kg	MS Spike Added mg/kg	MS Conc mg/kg	MSD Spike Added mg/kg	MSD Conc mg/kg	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 20066243201A	Sample number(s): 1271849-1271852 UNSPK: 1271849									
Hexavalent Chromium by IC	0.256	40.82	35.45			86		75-125		

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/kg	DUP Conc mg/kg	DUP RPD	DUP RPD Max
Batch number: 20066243201A	Sample number(s): 1271849-1271852 BKG: 1271849			
Hexavalent Chromium by IC	0.256	0.206	22* (1)	20

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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Phone: 330-497-9396 Fax: 330-497-0772

~~H200 2090574 127776675~~
1042 2090532 1271849-53
3/4/20 [handwritten initials] 3/4/20

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Howell, Leslie	Carrier Tracking No(s):	COC No: 240-118023.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: leslie.howell@testamericainc.com	State of Origin: Ohio	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Env LLC		Accreditations Required (See note):		Job #: 240-126850-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 3/4/2020	**Analysis Requested**		**Preservation Codes:**
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Racer Elyria	Project #: 24018828			
Site:	SSOW#:			Other:

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)

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)	7199_CR3	7199_ORGFM/3060A	7199_ORGFM	Total Number of containers	Special Instructions/Note:
			Preservation Code:								
SB01-022720-1145 (240-126850-1)	2/27/20	11:45 Eastern		Solid			X	X		1	
SB02-022720-1245 (240-126850-2)	2/27/20	12:45 Eastern		Solid			X	X		1	
7082-022720-0001 (240-126850-3)	2/27/20	Eastern		Solid			X	X		1	
SB03-022720-1330 (240-126850-4)	2/27/20	13:30 Eastern		Solid			X	X		1	
7082-022720-0002 (240-126850-5)	2/27/20	13:50 Eastern		Water			X		X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica 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 Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

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: 3/2/20 1600	Company: ELLPLS	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: [signature]	Date/Time: 3/4/20 1018	Company: EIE
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 1.1		

Ver: 01/16/2019

3/17/2020

Sample Administration Receipt Documentation Log

Doc Log ID: 277680

Group Number(s): 2090532

Client: TestAmerica

Delivery and Receipt Information

Delivery Method:	Fed Ex	Arrival Date:	03/04/2020
Number of Packages:	1	Number of Projects:	1

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	Total Trip Blank Qty:	0
Samples Chilled:	Yes	Air Quality Samples Present:	No
Paperwork Enclosed:	Yes		
Samples Intact:	Yes		
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Tamara Lugardo

Samples Chilled Details

Thermometer Types: *DT = Digital (Temp. Bottle)* *IR = Infrared (Surface Temp)* *All Temperatures in °C.*

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT42-01	1.1	DT	Wet	Y	Loose	N

2425 New Holland Pike
Lancaster, PA 17605-2425

T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mL**	milliliter(s)
C	degrees Celsius	**MPN**	Most Probable Number
cfu	colony forming units	**N.D.**	non-detect
CP Units	cobalt-chloroplatinate units	**ng**	nanogram(s)
F	degrees Fahrenheit	**NTU**	nephelometric turbidity units
g	gram(s)	**pg/L**	picogram/liter
IU	International Units	**RL**	Reporting Limit
kg	kilogram(s)	**TNTC**	Too Numerous To Count
L	liter(s)	**µg**	microgram(s)
lb.	pound(s)	**µL**	microliter(s)
m3	cubic meter(s)	**umhos/cm**	micromhos/cm
meq	milliequivalents	**MCL**	Maximum Contamination Limit
mg	milligram(s)		

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
P^	Concentration difference between the primary and confirmation column > 40%. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

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

3.1/3.8

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information			
Sampler: S. PARTYKA	Lab PM: Howell, Leslie	Carrier Tracking No(s):	COC No: 240-69878-28572.1
Client Contact: Lloyd Ross	Phone: 440.610.4604	E-Mail: leslie.howell@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 #: 129862-010		
Email: lross@haleyaldrich.com / baragona@haleyaldrich	WO #:		
Project Name: Racer Elyria - Chromium	Project #: 24018828		
Site:	SSOW#:		

Analysis Requested: Field Filtered Sample (Yes or No); Perform MS/MSD (Yes or No); 6010B, ~~7196A~~ Total Chromium / Total HexCr 7199; 6010B - Chromium Only; ~~7196A~~ 7199 - Local Method; Total Number of containers

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:

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	Perform MS/MSD	6010B, Total Chromium / Total HexCr	6010B - Chromium Only	7199 - Local Method	Total Number of containers	Special Instructions/Note:
				Preservation Code:			N	D	N		
SB01 - 022720 - 1145	2-27-20	1145	G	Solid			X				
SB02 - 022720 - 1245	2-27-20	1245	G	Solid			X				
7082 - 022720 - 0001	2-27-20		G	Solid			X				Dup.
SB03 - 022720 - 1330	2-27-20	1330	G	Solid			X				
7082 - 022720 - 0002	2-27-20	1350	G	Water				X	X		E.B.

PLEASE ALSO CALCULATE & REPORT TRIVALENT CHROMIUM

240-126850 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:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: [signature]	Date/Time: 2-27-20 / 1420	Company: H&A	Received by: [signature]	Date/Time: 2-27-20 1420	Company: ETA
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:

Ver: 01/16/2019

Eurofins TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 126850

Client Haley & Aldrich Inc Site Name _____

Cooler Received on 2-27-20 Opened on 2-27-20

Cooler unpacked by:

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

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

TestAmerica Cooler # 14 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-10 (CF +0.7 °C) Observed Cooler Temp. 3.1 °C Corrected Cooler Temp. 3.8 °C

IR GUN #IR-11 (CF +0.9°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity_____	Yes	~~No~~
-Were the seals on the outside of the cooler(s) signed & dated?	Yes No	~~NA~~
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)?	Yes	~~No~~
-Were tamper/custody seals intact and uncompromised?	Yes No	~~NA~~
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 12-16 have been checked at the originating laboratory.		
12. Were all preserved sample(s) at the correct pH upon receipt?	~~Yes~~ No NA	pH Strip Lot# **HC995364**
13. Were VOAs on the COC?	Yes	~~No~~
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this.	Yes	~~No~~ NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot #_____	Yes	~~No~~
16. Was a LL Hg or Me Hg trip blank present? _____	Yes	~~No~~

Tests that are not checked for pH by Receiving:

VOAs
Oil and Grease
TOC

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

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

18. 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)

19. SAMPLE PRESERVATION

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

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

VOA Sample Preservation - Date/Time VOAs Frozen: _____

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Container Temp	Preservative Added (mls)	Lot #
7082-022720-0002	240-126850-B-5	Plastic 500ml - with Nitric Acid	<2	____	_____	_____

ATTACHMENT 2

Boring Logs

HALEY & ALDRICH

TEST BORING REPORT

BORING NO. SB01

Page 1 of

PROJECT	FMR DEBRIS PILE CONF. SAMPLES	H&A FILE NO.	120362
LOCATION	ELYRIA, OH	PROJECT MGR.	S. RAKUSKA
CLIENT	RACER	FIELD REP.	B. ARAGONA
CONTRACTOR	NA	DATE STARTED	2-27-20
DRILLER		DATE FINISHED	2-27-20

Elevation ft. Datum Boring Location

Item	Casing	Sampler	Core Barrel
Type			
Inside Diameter (in.)			
Hammer Weight (lb.)			
Hammer Fall (in.)			

Rig Make & Model: ☐ Truck ☐ ATV ☐ Track ☐ Skid ☐ Tripod ☐ Geoprobe ☐ Air Track ☐ Cat-Head ☐ Winch ☐ Roller Bit ☐ Cutting Head

Hammer Type: ☐ Safety ☐ Doughnut ☐ Automatic

Drilling Mud: ☐ Bentonite ☐ Polymer ☑ None

Casing Advance — Type Method Depth: HAND AUGER

Drilling Notes:

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0		HA1	0				02 Leaf Litter										
							Sadt, Brown, CLAY, CH, mps 1mm, tr. SAND, no odor, Yellow brown - gray mottling, moist				5	5	90				
		24/24															
2			2				EOE @ 2'										

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth in feet to: Bottom of Casing	Bottom of Hole	Water

Sample ID

O Open End Rod
T Thin Wall Tube
U Undisturbed Sample
S Split Spoon Sample
G Geoprobe

Well Diagram

Riser Pipe
Screen
Filter Sand
Cuttings
Grout
Concrete
Bentonite Seal

Summary

Overburden (Linear ft.) _____
Rock Cored (Linear ft.) _____
Number of Samples _____

BORING NO.

Field Tests Dilatancy: R - Rapid S - Slow N - None Plasticity: N - Nonplastic L - Low M - Medium H - High
Toughness: L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Haley & Aldrich, Inc.

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TEST BORING REPORT

HALEY & ALDRICH

BORING NO. SB02

Page 1 of 1

PROJECT	Fmr. Debris Pile Conf Samples	H&A FILE NO.	09862
LOCATION	ELYRIA, OH	PROJECT MGR.	B. ALAGONA
CLIENT	RACER	FIELD REP.	S. PARTYKA
CONTRACTOR	NA	DATE STARTED	2-27-20
DRILLER		DATE FINISHED	2-27-20

Elevation ft. | Datum | Boring Location

Item	Casing	Sampler	Core Barrel
Type			
Inside Diameter (in.)			
Hammer Weight (lb.)			
Hammer Fall (in.)			

Rig Make & Model: ☐ Truck ☐ Tripod ☐ Cat-Head ☐ ATV ☐ Geoprobe ☐ Winch ☐ Track ☐ Air Track ☐ Roller Bit ☐ Skid ☐ ☐ Cutting Head

Hammer Type: ☐ Safety ☐ Doughnut ☐ Automatic

Drilling Mud: ☐ Bentonite ☐ Polymer ☐ None

Casing Advance: Type Method Depth — HAND AUGER

Drilling Notes:

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Toughness	Plasticity	Strength
0		HA1 24/24	B				0.2 Leaf Litter Soft, brown CLAY CH mps 1mm tr. sand, no odor, rust-gray mottling, moist.				5	5	90				
2		2					BOE @ 2'										

Water Level Data

Date	Time	Elapsed Time (hr.)	Depth in feet to: Bottom of Casing	Bottom of Hole	Water

Sample ID: O Open End Rod; T Thin Wall Tube; U Undisturbed Sample; S Split Spoon Sample; G Geoprobe

Well Diagram: Riser Pipe; Screen; Filter Sand; Cuttings; Grout; Concrete; Bentonite Seal

Summary: Overburden (Linear ft.) ____ Rock Cored (Linear ft.) ____ Number of Samples ____

BORING NO.

Field Tests — Dilatancy: R - Rapid S - Slow N - None; Plasticity: N - Nonplastic L - Low M - Medium H - High; Toughness: L - Low M - Medium H - High; Dry Strength: N - None L - Low M - Medium H - High V - Very High

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Haley & Aldrich, Inc.

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HALEY & ALDRICH

TEST BORING REPORT

BORING NO. SB03

Page 1 of 1

PROJECT	Final Debris Pile Conf. Samples	H&A FILE NO.	129862
LOCATION	ELYRIA, OH	PROJECT MGR.	B. GRAGOUS
CLIENT	RACER	FIELD REP.	S. PARTYKA
CONTRACTOR	N/A	DATE STARTED	2-27-20
DRILLER		DATE FINISHED	2-27-20

Elevation ft. Datum

Boring Location

Item	Casing	Sampler	Core Barrel
Type			
Inside Diameter (in.)			
Hammer Weight (lb.)			
Hammer Fall (in.)			

Rig Make & Model: ☐ Truck ☐ ATV ☐ Track ☐ Skid ☐ Tripod ☐ Geoprobe ☐ Air Track ☐ ____ ☐ Cat-Head ☐ Winch ☐ Roller Bit ☐ Cutting Head

Hammer Type: ☐ Safety ☐ Doughnut ☐ Automatic

Drilling Mud: ☐ Bentonite ☐ Polymer ☐ None

Casing Advance: Type Method Depth — HAND AUGER

Drilling Notes:

Depth (ft.)	Sampler Blows per 6 in.	Sample No. & Recovery (in.)	Sample Depth (ft.)	Well Diagram	Stratum Change (ft.)	USCS Symbol	Visual-Manual Identification & Description (density/consistency, color, GROUP NAME & SYMBOL, maximum particle size*, structure, odor, moisture, optional descriptions, geologic interpretation)	Gravel % Coarse	Gravel % Fine	Sand % Coarse	Sand % Medium	Sand % Fine	% Fines	Field Test Dilatancy	Field Test Toughness	Field Test Plasticity	Field Test Strength
0							0.2' Leaf Litter										
		HA1	0				soft, brown, CLAY CH mps 1mm, fr. Sand, no odor, rust-Gray mottling, moist				5	3	98				
		24/24															
2			2				BOE @ 2'										

Water Level Data					
Date	Time	Elapsed Time (hr.)	Depth in feet to: Bottom of Casing	Bottom of Hole	Water

Sample ID: O Open End Rod; T Thin Wall Tube; U Undisturbed Sample; S Split Spoon Sample; G Geoprobe

Well Diagram: Riser Pipe; Screen; Filter Sand; Cuttings; Grout; Concrete; Bentonite Seal

Summary: Overburden (Linear ft.) ____ Rock Cored (Linear ft.) ____ Number of Samples ____

BORING NO.

Field Tests Dilatancy: R - Rapid S - Slow N - None Toughness: L - Low M - Medium H - High Plasticity: N - Nonplastic L - Low M - Medium H - High Dry Strength: N - None L - Low M - Medium H - High V - Very High

*NOTE: Maximum Particle Size is determined by direct observation within the limitations of sampler size.

NOTE: Soil identifications based on visual-manual methods of the USCS system as practiced by Haley & Aldrich, Inc.

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