

**CONFIDENTIAL INFORMATION**

**DRAFT REPORT ON  
LIMITED PHASE II ENVIRONMENTAL  
SITE ASSESSMENT  
74 SOUTH AUTUMN STREET  
SAN JOSE, CALIFORNIA**

By Haley & Aldrich, Inc.  
Walnut Creek, California

for Trammell Crow Company  
San Francisco, California  
&  
TC Agoge Associates, LLC  
Dallas, Texas

File No. 128730-004  
March 2017



21 March 2017  
File No. 128730-004

CONFIDENTIAL INFORMATION

Trammell Crow Company  
101 California Street, 22nd Floor  
San Francisco, California 94111

Attention: Mr. Tom Jodry  
Senior Vice President

TC Agoge Associates, LLC  
2100 McKinney Avenue, Suite 800  
Dallas, Texas 75201

Attention: Mr. Will Parker  
Senior Vice President

Subject: Limited Phase II Environmental Site Assessment  
74 South Autumn Street  
San Jose, California

Ladies and Gentlemen:

The enclosed report presents the results of a Limited Phase II Environmental Site Assessment (Phase II) conducted at the above-referenced property, located at 74 South Autumn Street, Santa Clara County Assessor Parcel Number (APN) 274-38-113, in San Jose, California, (herein referred to as the "subject site" or "site"; Figure 1). This work was performed by Haley & Aldrich, Inc. (Haley & Aldrich), in accordance with our proposals to Trammell Crow Company (Trammell Crow) and TC Agoge Associates, LLC (TC Agoge), dated 23 February 2017 ("Agreement"). The goal of this Limited Phase II was to identify potential environmental concerns for the site that could affect its future redevelopment.

## Field Investigation

On 3 March 2017, Haley & Aldrich conducted environmental sampling activities in accessible areas of the site to characterize existing subsurface conditions. Prior to conducting subsurface work, the boring locations were marked on the ground using white spray paint and Underground Service Alert (USA) was notified. In addition, drilling locations were scanned by a private utility firm, Coast Wide Utility Locators, to identify subsurface utilities prior to the start of work.

Haley & Aldrich contracted Gregg Drilling and Testing (Gregg) to provide direct push drilling services for the collection of soil and grab groundwater samples at one boring location, HA06<sup>1</sup> (Figure 2). Gregg cored through the existing hardscape (concrete), and a soil sample was collected from the soil directly beneath the concrete pad, at approximately 6 to 12 inches below ground surface (bgs). The boring was then hand augured to a depth of 5 feet bgs in accordance with our Health and Safety Plan. A direct push drill bit was advanced to the total boring depth, with continuous soil cores collected in 4-foot intervals. The soil cores were screened for volatile organic compounds (VOCs) using a photo-ionization detector (PID) approximately every 4 feet, and basic geologic properties and observations were continuously logged (Appendix A). Following sampling, the boring was backfilled with grout and completed with concrete to match surrounding conditions.

The boring (HA06) was located east of the building, in an area identified during the Phase I as a potential underground storage tank location. The boring was drilled to 24 feet bgs. No visible signs of contamination were observed. PID readings ranged from 10.7 to 16.4 parts per million (ppm), with the highest reading at 19 feet bgs. Soils encountered in this boring consisted of clay, with several layers of sand and clayey sand. Groundwater was encountered at 16 feet bgs, and the saturated zone from 16 to 24 feet bgs consisted of clays and sands. Soil samples were collected at 0.5 feet bgs and 15 feet bgs, and a groundwater grab sample was collected using a temporary PVC casing.

Investigation-derived waste (IDW) generated through the drilling activities included one 55-gallon drum of soil cuttings. This drum is labeled and stored in a secure location. Haley & Aldrich collected a waste characterization sample of this IDW and is currently coordinating its waste profiling and offsite transportation and disposal.

## Laboratory Analysis

The two soil samples collected were analyzed for the following:

- total petroleum hydrocarbons as diesel-range organics (TPH-DRO) and as motor oil (TPH-MO) using United States Environmental Protection Agency (USEPA) Method 8015B;
- total petroleum hydrocarbons as gasoline range organics (TPH-GRO) and VOCs using USEPA Method 8260B;
- polynuclear aromatic hydrocarbons (PAHs) using USEPA Method 8270C(SIM); and
- California Title 22 metals using USEPA Method 6010B/7471A.

The one near-surface (1 foot bgs) soil sample was additionally analyzed for the following:

- Polychlorinated biphenyls (PCBs) using USEPA Method 8082;

The groundwater grab sample was analyzed for the following:

<sup>1</sup> Haley & Aldrich anticipated advancing two borings on the site. However, the second boring was not advanced as this site's tenant requested us to limit our onsite presence.

- TPH-DRO and TPH-MO using USEPA Method 8015B;
- TPH-GRO and VOCs using USEPA Method 8260B; and
- California Title 22 metals (dissolved) using USEPA Method 6010B/7470A.

## Analytical Results

Analytical laboratory reports are included in Appendix B. Results of the analysis were evaluated using the San Francisco Bay Regional Water Quality Control Board Tier 1 Environmental Screening Levels (ESLs), dated February 2016 (Revision 3). The ESLs provide a tiered approach to environmental risk assessments. Under Tier 1, sample data are directly compared to ESLs for a more conservative conceptual site model (*e.g.*, residential land use and potable groundwater). The ESLs are considered to be protective for typical San Francisco Bay Area sites. Under most circumstances, and within the limitations described, the presence of a chemical in soil, or groundwater at concentrations below the corresponding Tier 1 ESL can be assumed to not pose a significant threat to human health, water resources, or the environment.

### SOIL SAMPLES

Analytical results for the two soil samples collected during the Limited Phase II investigation are presented in Table 1. Detected analytes exceeding the Tier 1 ESL include the following:

- Benzo(a)pyrene was detected at a concentration of 28 micrograms per kilogram ( $\mu\text{g}/\text{kg}$ ) at a depth of 0.5 feet. The benzo(a)pyrene Tier 1 ESL is 16  $\mu\text{g}/\text{kg}$ .

### GROUNDWATER SAMPLE

Analytical results for the grab groundwater sample collected during the Limited Phase II investigation are presented in Table 2. Detected analytes exceeding the Tier 1 ESL include the following:

- Lead was detected at a concentration of 0.029 milligrams per liter (mg/L), exceeding its Tier 1 ESL of 0.0025 mg/L.
- Nickel was detected at a concentration of 0.025 mg/L, exceeding its Tier 1 ESL of 0.0025 mg/L.

## Discussion of Results

### SOIL

The majority of the soil samples collected during the field investigation were non-detect for the analyzed chemical constituents. The concentrations of one analyte, benzo(a)pyrene, exceeded its Tier 1 ESL, which is based on direct exposure to residential shallow soil. The detected concentration in this surface soil sample does not exceed the ESLs established by the RWQCB for direct exposure to commercial/industrial shallow soil (290  $\mu\text{g}/\text{kg}$ ). Therefore, depending on the site's redevelopment plans, mitigation measures may be warranted.

## GROUNDWATER

The majority of the groundwater results were non-detect for the analyzed parameters. The concentrations of two analytes, lead and nickel, exceeded their respective Tier 1 ESLs. The Tier 1 ESL for lead is based on fresh water ecotoxicity, and the Tier 1 ESL for nickel is based on saltwater ecotoxicity, neither of which are applicable to on-site receptors or activities. The detected lead and nickel concentrations are below the gross contamination level ESLs established by the RWQCB, 50 mg/L for both.<sup>2</sup> Therefore, the groundwater underlying the site does not appear to present an environmental concern to future development.

## Conclusions

The results of the Limited Phase II conducted for the site identified surface soil with minor environmental concerns should residential redevelopment be considered. No environmental concerns were identified for the underlying shallow groundwater as this groundwater is not considered a current or potential future source of drinking water.

We appreciate the opportunity to perform these services for you on this project. Please do not hesitate to call if you have any questions or comments.

Sincerely yours,  
HALEY & ALDRICH, INC.

Edison Ticken, P.E.  
Assistant Project Manager

Voytek Bajsarowicz  
Senior Associate

Enclosures:

- References
- Table 1 – Summary of Soil Analytical Results
- Table 2 – Summary of Groundwater Analytical Results
- Figure 1 – Project Locus
- Figure 2 – Site Plan
- Appendix A – Soil Boring Logs and Field Reports
- Appendix B – Laboratory Reports

\\\WNC\common\128730 - TCC Assemblage\004 TCC Assemblage - Phase II ESAs\74 South Autumn\2017-0321-HAI-TCC-74 South Autumn Street Phase II-D1.docx

<sup>2</sup> The detected lead and nickel concentrations were not compared against their California Maximum Contaminant Level of 0.015 and 0.10 mg/L, respectively, as this shallow groundwater unit is not likely considered a drinking water resource.

## REFERENCES

San Francisco Bay Regional Water Quality Control Board (SFBRWQCB), 2013. User's Guide: Derivation and Application of Environmental Screening Levels, Interim Final. Oakland, CA.

\\\WNC\common\128730 - TCC Assemblage\004 TCC Assemblage - Phase II ESAs\74 South Autumn\2017-0321-HAI-TCC-74 South Autumn Street Phase II-D1.docx



## **TABLES**

**TABLE 1**  
 SUMMARY OF SOIL ANALYTICAL RESULTS  
 74 SOUTH AUTUMN STREET  
 SAN JOSE, CALIFORNIA

Location	Tier 1 Soil ESLs <sup>1</sup>	HA06	HA06
Sample Date		03/03/2017	03/03/2017
Sample Depth (ft bgs)		1.0	15
<b>Metal Compounds (mg/kg)</b>			
Antimony	31	< 0.29 J	< 0.22 J
Arsenic	11 <sup>2</sup>	4.3	< 0.22
Barium	3000	130 J	66 J
Beryllium	42	0.45	0.38
Cadmium	39	< 0.044	< 0.032
Chromium	120000	40	44
Cobalt	23	10	9.5
Copper	3100	27	21
Lead	80	44 J	4.7 J
Mercury	13	0.23	0.036
Molybdenum	390	< 0.22	< 0.17
Nickel	86	56 J	61 J
Selenium	390	< 0.53	< 0.39
Silver	390	< 0.18	< 0.13
Thallium	0.78	< 0.51	< 0.38
Vanadium	390	34	33
Zinc	23000	87	42
<b>Polychlorinated Biphenyls (PCBs) (µg/kg)</b>			
Aroclor-1016 (PCB-1016)	250 <sup>3</sup>	< 1.8	-
Aroclor-1221 (PCB-1221)	250 <sup>3</sup>	< 1.8	-
Aroclor-1232 (PCB-1232)	250 <sup>3</sup>	< 1.8	-
Aroclor-1242 (PCB-1242)	250 <sup>3</sup>	< 1.8	-
Aroclor-1248 (PCB-1248)	250 <sup>3</sup>	< 1.8	-
Aroclor-1254 (PCB-1254)	250 <sup>3</sup>	< 1.8	-
Aroclor-1260 (PCB-1260)	250 <sup>3</sup>	< 5.2	-
<b>Polynuclear Aromatic Hydrocarbons (PAHs) (µg/kg)</b>			
Acenaphthene	16000	< 1.4	< 1.4
Acenaphthylene	13000	< 1.2	< 1.2
Anthracene	2800	< 0.97	< 0.96
Benzo(a)anthracene	160	17	< 0.73
Benzo(a)pyrene	16	28	< 0.91
Benzo(b)fluoranthene	160	38	< 1.1
Benzo(g,h,i)perylene	2500	29	< 2.1
Benzo(k)fluoranthene	1600	14	< 1.0
Chrysene	3800	27	< 0.70
Dibenz(a,h)anthracene	16	6.4	< 1.7
Fluoranthene	60000	39	< 0.70
Fluorene	8900	< 1.1	< 1.1
Indeno(1,2,3-cd)pyrene	160	23	< 2.1
Naphthalene	33	< 1.8	< 1.7
Phenanthrene	11000	26	< 0.91
Pyrene	85000	37	< 0.82
<b>Total Petroleum Hydrocarbons (mg/kg)</b>			
Total Petroleum Hydrocarbons (C10-C28) DRO	230	7.1	1.4
Total Petroleum Hydrocarbons (C24-C36) Motor Oil	5100	< 0.58	< 0.57
<b>Volatile Organic Compounds (VOCs) (µg/kg)</b>			
1,1,1,2-Tetrachloroethane	10	< 0.72	< 0.74
1,1,1-Trichloroethane	7800	< 0.58	< 0.60
1,1,2,2-Tetrachloroethane	18	< 0.71	< 0.73
1,1,2-Trichloroethane	70	< 0.66	< 0.68
1,1-Dichloroethane	200	< 0.64	< 0.66
1,1-Dichloroethene	550	< 0.59	< 0.61
1,1-Dichloropropene	--	< 0.65	< 0.67
1,2,3-Trichlorobenzene	--	< 0.70	< 0.72
1,2,3-Trichloropropane	--	< 0.73	< 0.75
1,2,4-Trichlorobenzene	1500	< 0.67	< 0.69
1,2,4-Trimethylbenzene	--	< 1.6	< 1.6
1,2-Dibromo-3-chloropropane (DBCP)	4.5	< 1.6	< 1.7
1,2-Dibromoethane (Ethylene Dibromide)	0.33	< 1.4	< 1.4
1,2-Dichlorobenzene	1600	< 0.64	< 0.66
1,2-Dichloroethane	4.5	< 0.72	< 0.74
1,2-Dichloropropane	120	< 0.60	< 0.62
1,3,5-Trimethylbenzene	--	< 0.62	< 0.63
1,3-Dichlorobenzene	7400	< 0.68	< 0.70
1,3-Dichloropropane	--	< 0.69	< 0.71
1,4-Dichlorobenzene	590	< 0.67	< 0.69
2,2-Dichloropropane	--	< 1.9	< 2.0
2-Butanone (Methyl Ethyl Ketone)	5100	< 20	< 21
2-Chlorotoluene	--	< 0.62	< 0.63
2-Hexanone	--	< 9.5	< 9.8
2-Phenylbutane (sec-Butylbenzene)	--	< 0.68	< 0.70
4-Chlorotoluene	--	< 0.64	< 0.66

Location	Tier 1 Soil ESLs <sup>1</sup>	HA06	HA06
Sample Date		03/03/2017	03/03/2017
Sample Depth (ft bgs)		1.0	15
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	2800	< 9.5	< 9.8
Acetone	500	< 36	< 37
Benzene	44	< 0.62	< 0.63
Bromobenzene	--	< 0.75	< 0.77
Bromodichloromethane	520	< 0.68	< 0.70
Bromoform	1700	< 1.9	< 2.0
Bromomethane (Methyl Bromide)	300	< 0.75	< 0.77
Carbon disulfide	--	< 1.9	< 2.0
Carbon tetrachloride	48	< 0.59	< 0.61
Chlorobenzene	1500	< 0.65	< 0.67
Chlorobromomethane	--	< 0.68	< 0.70
Chloroethane	1100	< 0.53	< 0.55
Chloroform (Trichloromethane)	68	< 0.62	< 0.64
Chloromethane (Methyl Chloride)	29000	< 0.68	< 0.70
cis-1,2-Dichloroethene	190	< 0.64	< 0.66
cis-1,3-Dichloropropene	--	< 0.65	< 0.67
Cymene (p-Isopropyltoluene)	--	< 2.4	< 2.4
Dibromochloromethane	3800	< 0.67	< 0.69
Dibromomethane	--	< 0.81	< 0.84
Dichlorodifluoromethane (CFC-12)	--	< 0.75	< 0.77
Ethylbenzene	1400	< 0.71	< 0.73
Hexachlorobutadiene	680	< 0.85	< 0.88
Isopropylbenzene (Cumene)	--	< 0.64	< 0.66
Methyl Tert Butyl Ether	23	< 1.1	< 1.2
Methylene chloride	77	< 3.8	< 3.9
Naphthalene	33	< 1.4	< 1.5
n-Butylbenzene	--	< 0.95	< 0.98
n-Propylbenzene	--	< 0.62	< 0.64
Styrene	1500	< 0.60	< 0.62
tert-Butylbenzene	--	< 0.69	< 0.71
Tetrachloroethene	420	< 0.63	< 0.65
Toluene	2900	< 0.67	< 0.69
Total Petroleum Hydrocarbons (C5-C12) GRO	100000	< 95	< 98
trans-1,2-Dichloroethene	670	< 0.71	< 0.73
trans-1,3-Dichloropropene	--	< 0.63	< 0.65
Trichloroethene	460	< 0.60	< 0.62
Trichlorofluoromethane (CFC-11)	--	< 0.53	< 0.55
Trifluorotrichloroethane (Freon 113)	--	< 2.0	< 2.0
Vinyl acetate	--	< 4.7	< 4.9
Vinyl chloride	8.2	< 0.69	< 0.71
Xylene (total)	2300	< 1.2	< 1.2

1. Tier 1 Environmental Screening Level (ESL) established for soil by the San Francisco Bay Regional Water Quality Control Board (RWQCB), dated February 2016 (Rev 3)

2. Arsenic concentrations compared to the regional background level of 11 mg/kg as established by: Duverg , D.J., 2011. Establishing Background Arsenic in Soil of the Urbanized San Francisco

3. PCB Tier 1 ESL is for total PCBs

**Bold** = Concentration exceeds Tier 1 Soil ESL

ft bgs: feet below ground surface

DRO: Diesel Range Organics

GRO: Gasoline Range Organics

mg/kg: milligrams per kilogram

 g/kg: micrograms per kilogram

< X: analyte not detected at a concentration greater than or equal to laboratory reporting limit of X

J: The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

**TABLE 2**  
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
74 SOUTH AUTUMN STREET  
SAN JOSE, CALIFORNIA

CONFIDENTIAL INFORMATION  
Page 1 of 2

Location	Tier 1 Groundwater ESLs <sup>1</sup>	HA06-GW
Sample Date		03/03/2017
<b>Metal Compounds (mg/L)</b>		
Antimony, Dissolved	0.0060	< 0.0041
Arsenic, Dissolved	0.010	< 0.0029
Barium, Dissolved	1.0	0.088
Beryllium, Dissolved	0.0027	< 0.00059
Cadmium, Dissolved	0.00025	< 0.00021
Chromium, Dissolved	0.050	< 0.00070
Cobalt, Dissolved	0.0030	0.0027
Copper, Dissolved	0.0031	< 0.0037
Lead, Dissolved	0.0025	<b>0.029</b>
Mercury, Dissolved	0.000051	< 0.00010
Molybdenum, Dissolved	0.10	< 0.0029
Nickel, Dissolved	0.0082	<b>0.025</b>
Selenium, Dissolved	0.0050	< 0.0046
Silver, Dissolved	0.00019	< 0.0020
Thallium, Dissolved	0.0020	< 0.0035
Vanadium, Dissolved	0.019	< 0.00087
Zinc, Dissolved	0.081	0.028
<b>Total Petroleum Hydrocarbons (µg/L)</b>		
Total Petroleum Hydrocarbons (C10-C28) DRO	100	< 24
Total Petroleum Hydrocarbons (C24-C36) Motor Oil	--	< 46
<b>Volatile Organic Compounds (VOCs) (µg/L)</b>		
1,1,1,2-Tetrachloroethane	0.57	< 0.067 UJ
1,1,1-Trichloroethane	62	< 0.20 UJ
1,1,2,2-Tetrachloroethane	1.0	< 0.074 UJ
1,1,2-Trichloroethane	5.0	< 0.11 UJ
1,1-Dichloroethane	5.0	< 0.11 UJ
1,1-Dichloroethene	3.2	< 0.20 UJ
1,1-Dichloropropene	--	< 0.20 UJ
1,2,3-Trichlorobenzene	--	< 0.21 UJ
1,2,3-Trichloropropane	--	< 0.087 UJ
1,2,4-Trichlorobenzene	--	< 0.13 UJ
1,2,4-Trimethylbenzene	--	< 0.20 UJ
1,2-Dibromo-3-chloropropane (DBCP)	--	< 0.30 UJ
1,2-Dibromoethane (Ethylene Dibromide)	0.20	< 0.075 UJ
1,2-Dichlorobenzene	14	< 0.21 UJ
1,2-Dichloroethane	0.50	< 0.077 UJ
1,2-Dichloropropane	5.0	< 0.20 UJ
1,3,5-Trimethylbenzene	--	< 0.17 UJ
1,3-Dichlorobenzene	65	< 0.20 UJ
1,3-Dichloropropane	--	< 0.17 UJ
1,4-Dichlorobenzene	--	< 0.16 UJ
2,2-Dichloropropane	--	< 0.17 UJ
2-Butanone (Methyl Ethyl Ketone)	5600	< 8.4 UJ
2-Chlorotoluene	--	< 0.20 UJ
2-Hexanone	--	< 3.0 UJ
2-Phenylbutane (sec-Butylbenzene)	--	< 0.17 UJ
4-Chlorotoluene	--	< 0.20 UJ
4-Methyl-2-Pentanone (Methyl Isobutyl Ketone)	120	< 4.5 UJ
Acetone	1500	< 20 UJ
Benzene	1.0	< 0.25 UJ
Bromobenzene	--	< 0.20 UJ
Bromodichloromethane	80	< 0.20 UJ
Bromoform	80	< 0.50 UJ
Bromomethane (Methyl Bromide)	75	< 0.49 UJ
Carbon disulfide	--	< 0.78 UJ
Carbon tetrachloride	0.22	< 0.11 UJ
Chlorobenzene	25	< 0.13 UJ
Chlorobromomethane	--	< 0.25 UJ
Chloroethane	16	< 0.17 UJ
Chloroform (Trichloromethane)	2.3	< 0.40 UJ
Chloromethane (Methyl Chloride)	190	< 0.19 UJ
cis-1,2-Dichloroethene	6.0	< 0.076 UJ
cis-1,3-Dichloropropene	--	< 0.10 UJ
Cymene (p-Isopropyltoluene)	--	< 0.20 UJ
Dibromochloromethane	46	< 0.10 UJ
Dibromomethane	--	< 0.30 UJ
Dichlorodifluoromethane (CFC-12)	--	< 0.10 UJ
Ethylbenzene	13	< 0.13 UJ
Hexachlorobutadiene	0.14	< 0.27 UJ
Isopropylbenzene (Cumene)	--	< 0.20 UJ
Methyl Tert Butyl Ether	5.0	< 0.069 UJ
Methylene chloride	5.0	< 1.5 UJ
Naphthalene	0.17	< 0.22 UJ
n-Butylbenzene	--	< 0.30 UJ
n-Propylbenzene	--	< 0.20 UJ
Styrene	10	< 0.075 UJ

Location Sample Date	Tier 1 Groundwater ESLs <sup>1</sup>	HA06-GW
		03/03/2017
tert-Butylbenzene	--	< 0.20 UJ
Tetrachloroethene	3.0	< 0.20 UJ
Toluene	40	< 0.17 UJ
Total Petroleum Hydrocarbons (C5-C12) GRO	100	< 21 UJ
trans-1,2-Dichloroethene	10	< 0.13 UJ
trans-1,3-Dichloropropene	--	< 0.17 UJ
Trichloroethene	5.0	< 0.20 UJ
Trichlorofluoromethane (CFC-11)	--	< 0.30 UJ
Trifluorotrichloroethane (Freon 113)	--	< 0.091 UJ
Vinyl acetate	--	< 0.60 UJ
Vinyl chloride	0.061	< 0.20 UJ
Xylene (total)	20	< 0.40 UJ

**Notes:**

1. Tier 1 Environmental Screening Levels (ESLs) for Groundwater Screening Levels established by the San Francisco Bay Regional Water Quality Control Board (RWQCB), dated February 2016 (Rev 3)

Data qualified with a "J" indicated a low surrogate recovery, and the concentration is estimated.

**Bold** = Exceeds screening level.

DRO: Diesel Range Organics

GRO: Gasoline Range Organics

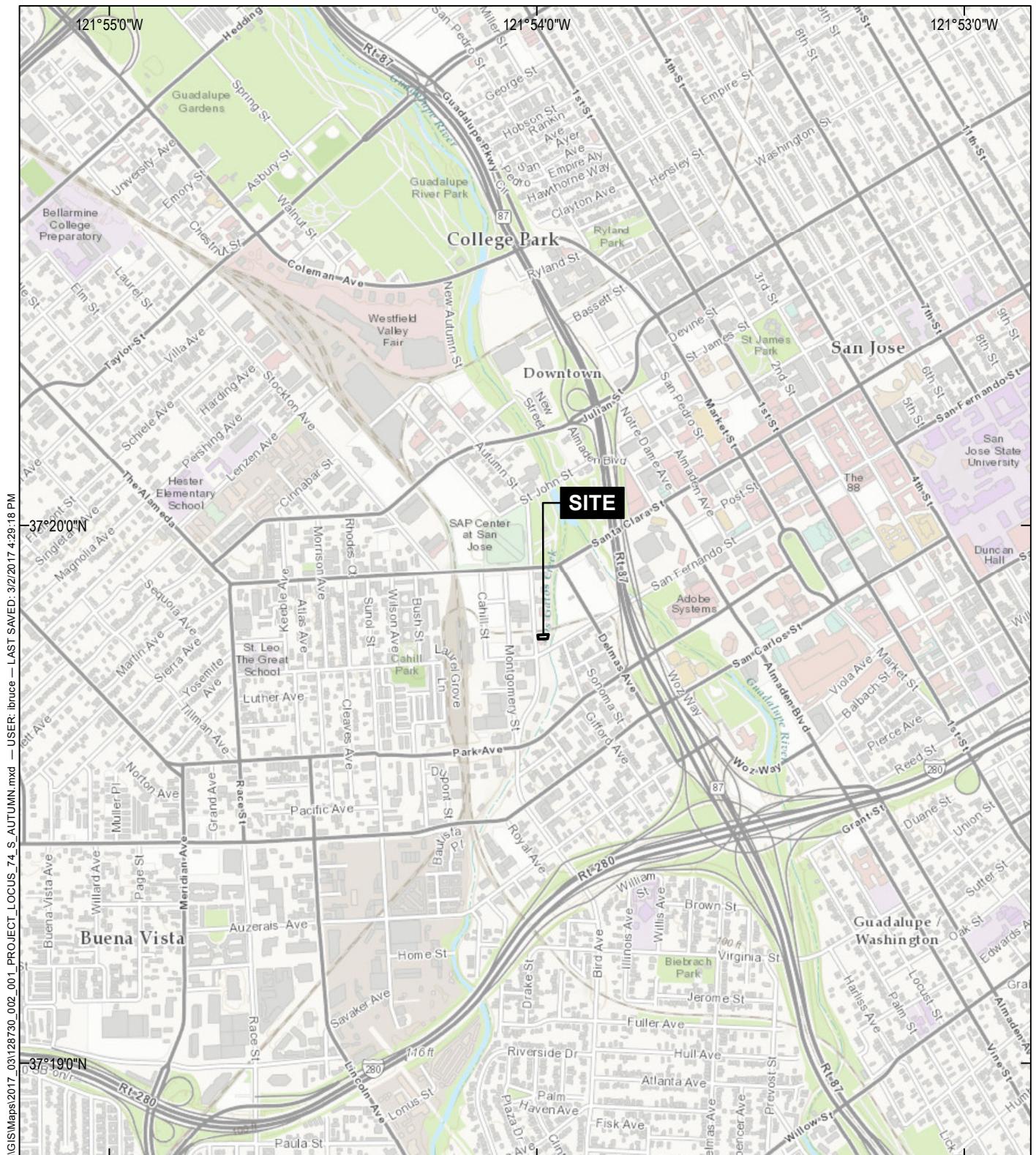
mg/L: milligrams per liter

µg/L: micrograms per liter

< X: analyte not detected at a concentration greater than or equal to laboratory reporting limit of X

UJ: The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

## **FIGURES**



#### CONFIDENTIAL INFORMATION



LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT  
74 SOUTH AUTUMN STREET  
SAN JOSE, CALIFORNIA

#### PROJECT LOCUS

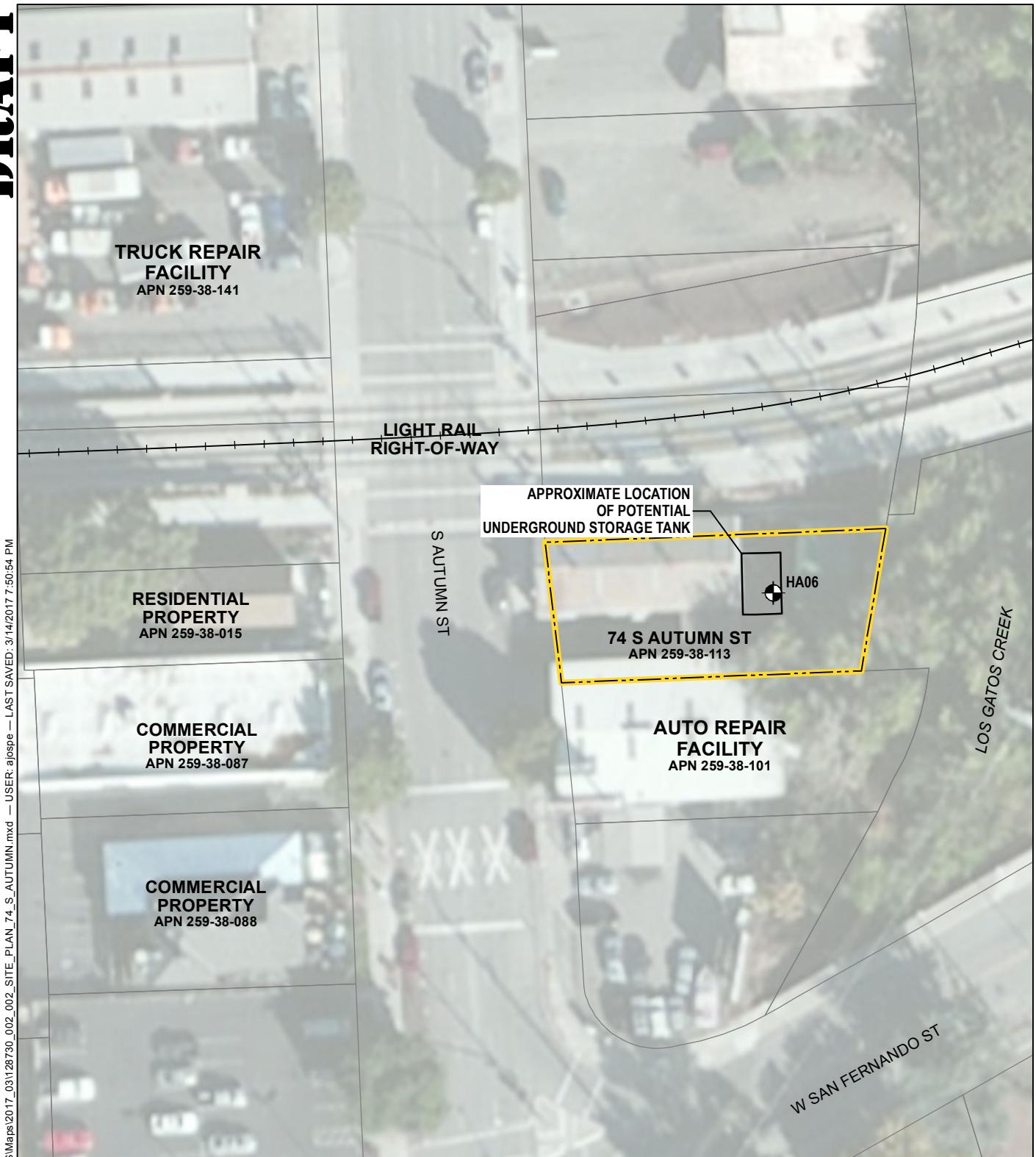
APPROXIMATE SCALE: 1 IN = 2000 FT  
MARCH 2017

FIGURE 1



BASE MAP SOURCE: ESRI  
USGS QUAD: SAN JOSE WEST  
SITE COORDINATES: 37°19'48"N 121°53'59"W

DRAFT



**LEGEND**

- BORING
- LIGHT RAIL
- SITE BOUNDARY
- PARCEL BOUNDARY

**NOTES**

1. AERIAL IMAGERY SOURCE: ESRI
2. PARCEL SOURCE: SANTA CLARA COUNTY

0 25 50  
SCALE IN FEET

**CONFIDENTIAL INFORMATION**

**HALEY ALDRICH**

LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT  
74 SOUTH AUTUMN STREET  
SAN JOSE, CALIFORNIA

**SITE PLAN**

MARCH 2017

**FIGURE 2**

**APPENDIX A**

**Soil Boring Logs and Field Reports**

## TEST BORING REPORT

BORING NO.

HA06

Page 1 of 1

PROJECT	TCC Assemblage - 74 S. Autumn	H&A FILE NO.	128730-004
LOCATION	San Jose, CA	PROJECT MGR.	J. Grant
CLIENT	Trammell Crow Company	FIELD REP.	B. Rumley
CONTRACTOR	Gregg Drilling	DATE STARTED	03/02/17 3/3/17
DRILLER	Leo Santos	DATE FINISHED	03/02/17 3/3/17

Elevation	ft.	Datum	Boring Location	Rig Make & Model		Hammer Type	Drilling Mud	Casing Advance
Item				Type				
Type				<input checked="" type="checkbox"/> Truck	<input type="checkbox"/> Tripod	<input type="checkbox"/> Cat-Head	<input type="checkbox"/> Safety	<input type="checkbox"/> Bentonite
Inside Diameter (in.)				<input type="checkbox"/> ATV	<input checked="" type="checkbox"/> Geoprobe	<input type="checkbox"/> Winch	<input type="checkbox"/> Doughnut	<input type="checkbox"/> Polymer
Hammer Weight (lb.)				<input type="checkbox"/> Track	<input type="checkbox"/> Air Track	<input type="checkbox"/> Roller Bit	<input checked="" type="checkbox"/> Automatic	<input type="checkbox"/> None
Hammer Fall (in.)				<input type="checkbox"/> Skid	<input type="checkbox"/>	<input type="checkbox"/> Cutting Head	Drilling Notes:	

Depth (ft.)	Sample Recovery	Sample No.	PID (ppmv)	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)		% Coarse	% Fine	% Coarse	% Medium	% Fine	% Fines	Field Test			
															Dilatancy	Toughness	Plasticity	Strength
0							concrete ~6"								T	7030		
5					3.5	SC	brown clayey SAND, trace gravel, moist									100		
10		1	10.7			CL	dark brown lean CLAY, moist											
15			15.9		10		J olive brown mottled w/ brown, increased sand									5.95		
20			16.4			SC	brown clayey SAND, moist									55.45		
25							first encountered gw 3 well graded sand lens											
30																		

Water Level Data			Depth in feet to:			Sample ID	Well Diagram	Summary
Date	Time	Elapsed Time (hr.)	Bottom of Casing	Bottom of Hole	Water	O Open End Rod	Riser Pipe	Overburden (Linear ft.)
						T Thin Wall Tube	Screen	Rock Cored (Linear ft.)
						U Undisturbed Sample	Filter Sand	Number of Samples
						S Split Spoon Sample	Cuttings	
						G Geoprobe	Grout	
							Concrete	
							Bentonite Seal	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.

HALEY  
ALDRICH

## DAILY FIELD REPORT

Page 1 of 1

PROJECT	TCC Assemblage - 74 S. Autumn	H&A FILE NO.	128730-004
LOCATION	San Jose, CA	PROJECT MGR.	J. Grant
CLIENT	Trammel Crow Company	REPORT NO.	
CONTRACTOR	Gregg	DATE	3/3/17
WEATHER	Sunny	TEMPERATURE	

0750 meet Gregg @ 59 S Autumn to collect small soil samples  
 0810 collect sample @ HA04  
 0815 collect sample @ HA05  
 0830 walk location @ HA06 (74 S. Autumn)  
 0845 begin drilling through concrete @ HA06  
 0905 collected sample @ 1.0 ft  
 0930 Sample collected @ 15 ft just above encoutered GW @ 10ft  
 will stop drilling @ 24 ft due to encoutered GW and interaction  
 w/ woman working @ 74 S Autumn - wanted us to finish ASAP  
 0945 begin collecting GW sample  
 0955 water recharging slowly  
 1005 finished collecting GW sample w/ missing 2 (1L) bottles  
 (no PAH analysis)  
 1135 gear up baring  
 1140 T.A. pickup  
 1030 collect 1DW sample, drum @ 59 S. Autumn

Field Representative(s)	Time on site	Report/Travel/Other	Total hours

Distribution:

Haley &amp; Aldrich, Inc.

**APPENDIX B**

**Laboratory Reports**

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pleasanton

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-78049-1

Client Project/Site: TCC Assemblages

For:

Haley & Aldrich, Inc.

2033 North Main Street

Suite 309

Walnut Creek, California 94596

Attn: Jason Grant

Authorized for release by:

3/15/2017 12:45:56 PM

Dimple Sharma, Senior Project Manager

(925)484-1919

[dimple.sharma@testamericainc.com](mailto:dimple.sharma@testamericainc.com)

### LINKS

Review your project  
results through

**TotalAccess**

Have a Question?

Ask  
The  
Expert

Visit us at:

[www.testamericainc.com](http://www.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

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Detection Summary . . . . .	5
Client Sample Results . . . . .	6
Surrogate Summary . . . . .	15
QC Sample Results . . . . .	17
QC Association Summary . . . . .	37
Lab Chronicle . . . . .	41
Certification Summary . . . . .	43
Method Summary . . . . .	44
Sample Summary . . . . .	45
Chain of Custody . . . . .	46
Receipt Checklists . . . . .	48

# Definitions/Glossary

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

## Glossary

### Abbreviation **These commonly used abbreviations may or may not be present in this report.**

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15

# Case Narrative

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

## Job ID: 720-78049-1

### Laboratory: TestAmerica Pleasanton

#### Narrative

#### Job Narrative 720-78049-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 3/3/2017 3:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9° C.

#### Receipt Exceptions

Terra Core DI vials are missing the preweight labels HA06-SO-1.5 vial has the preweight label. All three Terra Core vials for HA06-SO-1.0 have their preweight labels. Note both samples Methanol vials have their preweight labels. The lab was instructed to use the jars for VOCs analyses.

The following sample was collected in an improper container for TPH-Diese/Motor Oil HA06-GW. Received poly 1L for the extractable analysis. The client was contacted regarding this issue, and the laboratory was instructed to proceed with analysis from the polys.

#### GC/MS VOA

Method 8260B: The following sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory: HA06-GW (720-78049-3).

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

#### GC/MS Semi VOA

Method 8270C SIM: The following sample was diluted due to the abundance of non-target analytes: (720-78048-D-1-D). 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.

#### GC Semi VOA

Method 8082: The following samples required a tetrabutylammonium sulfite (TBA) clean-up to reduce matrix interferences caused by sulfur: HA06-SO-1.0 (720-78049-1), (LCS 720-219007/2-A) and (MB 720-219007/1-A).

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

#### Metals

Method 3005A: The following samples requested dissolved metals and were not filtered in the field: HA06-GW (720-78049-3), (720-78049-F-3-A MS) and (720-78049-F-3-A MSD). These samples were filtered and preserved upon receipt to the laboratory.

Ref# 218799.

Method 6010B: The following sample was diluted due to the abundance of non-target analytes: HA06-SO-15 (720-78049-2). 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.

#### General Chemistry

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

#### Organic Prep

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

# Detection Summary

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

## Client Sample ID: HA06-SO-1.0

## Lab Sample ID: 720-78049-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	17		5.0	0.74	ug/Kg	1		8270C SIM	Total/NA
Benzo[a]pyrene	28		5.0	0.92	ug/Kg	1		8270C SIM	Total/NA
Benzo[b]fluoranthene	38		5.0	1.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[g,h,i]perylene	29		5.0	2.1	ug/Kg	1		8270C SIM	Total/NA
Benzo[k]fluoranthene	14		5.0	1.0	ug/Kg	1		8270C SIM	Total/NA
Chrysene	27		5.0	0.70	ug/Kg	1		8270C SIM	Total/NA
Dibenz(a,h)anthracene	6.4		5.0	1.8	ug/Kg	1		8270C SIM	Total/NA
Fluoranthene	39		5.0	0.70	ug/Kg	1		8270C SIM	Total/NA
Indeno[1,2,3-cd]pyrene	23		5.0	2.1	ug/Kg	1		8270C SIM	Total/NA
Phenanthrene	26		5.0	0.91	ug/Kg	1		8270C SIM	Total/NA
Pyrene	37		5.0	0.83	ug/Kg	1		8270C SIM	Total/NA
Diesel Range Organics [C10-C28]	7.1		1.0	0.34	mg/Kg	1		8015B	Total/NA
Arsenic	4.3		3.5	0.30	mg/Kg	4		6010B	Total/NA
Barium	130	F1	1.8	0.25	mg/Kg	4		6010B	Total/NA
Beryllium	0.45		0.35	0.11	mg/Kg	4		6010B	Total/NA
Chromium	40		1.8	0.19	mg/Kg	4		6010B	Total/NA
Cobalt	10		0.70	0.070	mg/Kg	4		6010B	Total/NA
Copper	27		5.3	2.5	mg/Kg	4		6010B	Total/NA
Lead	44	F1	1.8	0.37	mg/Kg	4		6010B	Total/NA
Nickel	56	F1	1.8	0.18	mg/Kg	4		6010B	Total/NA
Vanadium	34		1.8	0.24	mg/Kg	4		6010B	Total/NA
Zinc	87		5.3	2.2	mg/Kg	4		6010B	Total/NA
Mercury	0.23		0.039	0.0085	mg/Kg	1		7471A	Total/NA

## Client Sample ID: HA06-SO-15

## Lab Sample ID: 720-78049-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	1.4		0.99	0.34	mg/Kg	1		8015B	Total/NA
Barium	66		1.3	0.18	mg/Kg	4		6010B	Total/NA
Beryllium	0.38		0.26	0.084	mg/Kg	4		6010B	Total/NA
Chromium	44		1.3	0.14	mg/Kg	4		6010B	Total/NA
Cobalt	9.5		0.52	0.052	mg/Kg	4		6010B	Total/NA
Copper	21		3.9	1.8	mg/Kg	4		6010B	Total/NA
Lead	4.7		1.3	0.27	mg/Kg	4		6010B	Total/NA
Nickel	61		1.3	0.13	mg/Kg	4		6010B	Total/NA
Vanadium	33		1.3	0.18	mg/Kg	4		6010B	Total/NA
Zinc	42		3.9	1.6	mg/Kg	4		6010B	Total/NA
Mercury	0.036		0.035	0.0075	mg/Kg	1		7471A	Total/NA

## Client Sample ID: HA06-GW

## Lab Sample ID: 720-78049-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.088		0.050	0.0016	mg/L	1		6010B	Dissolved
Cobalt	0.0027		0.0020	0.00068	mg/L	1		6010B	Dissolved
Lead	0.029		0.0050	0.0022	mg/L	1		6010B	Dissolved
Nickel	0.025		0.010	0.0010	mg/L	1		6010B	Dissolved
Zinc	0.028		0.020	0.0074	mg/L	1		6010B	Dissolved

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
 Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

**Client Sample ID: HA06-SO-1.0**

Date Collected: 03/03/17 09:05

Date Received: 03/03/17 15:30

**Lab Sample ID: 720-78049-1**

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.7	1.1	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Acetone	ND		47	36	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Benzene	ND		4.7	0.62	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Dichlorobromomethane	ND		4.7	0.68	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Bromobenzene	ND		4.7	0.75	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Chlorobromomethane	ND		19	0.68	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Bromoform	ND		4.7	1.9	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Bromomethane	ND		9.5	0.75	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
2-Butanone (MEK)	ND		47	20	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
n-Butylbenzene	ND		4.7	0.95	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
sec-Butylbenzene	ND		4.7	0.68	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
tert-Butylbenzene	ND		4.7	0.69	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Carbon disulfide	ND		4.7	1.9	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Carbon tetrachloride	ND		4.7	0.59	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Chlorobenzene	ND		4.7	0.65	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Chloroethane	ND		9.5	0.53	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Chloroform	ND		4.7	0.62	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Chloromethane	ND		9.5	0.68	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
2-Chlorotoluene	ND		4.7	0.62	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
4-Chlorotoluene	ND		4.7	0.64	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Chlorodibromomethane	ND		4.7	0.67	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
1,2-Dichlorobenzene	ND		4.7	0.64	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
1,3-Dichlorobenzene	ND		4.7	0.68	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
1,4-Dichlorobenzene	ND		4.7	0.67	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
1,3-Dichloropropane	ND		4.7	0.69	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
1,1-Dichloropropene	ND		4.7	0.65	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
1,2-Dibromo-3-Chloropropane	ND		9.5	1.6	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Ethylene Dibromide	ND		4.7	1.4	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Dibromomethane	ND		9.5	0.81	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Dichlorodifluoromethane	ND		9.5	0.75	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
1,1-Dichloroethane	ND		4.7	0.64	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
1,2-Dichloroethane	ND		4.7	0.72	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
1,1-Dichloroethene	ND		4.7	0.59	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
cis-1,2-Dichloroethene	ND		4.7	0.64	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
trans-1,2-Dichloroethene	ND		4.7	0.71	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
1,2-Dichloropropane	ND		4.7	0.60	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
cis-1,3-Dichloropropene	ND		4.7	0.65	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
trans-1,3-Dichloropropene	ND		4.7	0.63	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Ethylbenzene	ND		4.7	0.71	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Hexachlorobutadiene	ND		4.7	0.85	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
2-Hexanone	ND		47	9.5	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Isopropylbenzene	ND		4.7	0.64	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
4-Isopropyltoluene	ND		4.7	2.4	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Methylene Chloride	ND		9.5	3.8	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
4-Methyl-2-pentanone (MIBK)	ND		47	9.5	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Naphthalene	ND		9.5	1.4	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
N-Propylbenzene	ND		4.7	0.62	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
Styrene	ND		4.7	0.60	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	
1,1,1,2-Tetrachloroethane	ND		4.7	0.72	ug/Kg	03/06/17 20:42	03/11/17 18:53	1	

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

**Client Sample ID: HA06-SO-1.0**

Date Collected: 03/03/17 09:05

Date Received: 03/03/17 15:30

**Lab Sample ID: 720-78049-1**

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.7	0.71	ug/Kg	03/06/17 20:42	03/11/17 18:53		1
Tetrachloroethene	ND		4.7	0.63	ug/Kg	03/06/17 20:42	03/11/17 18:53		1
Toluene	ND		4.7	0.67	ug/Kg	03/06/17 20:42	03/11/17 18:53		1
1,2,3-Trichlorobenzene	ND		4.7	0.70	ug/Kg	03/06/17 20:42	03/11/17 18:53		1
1,2,4-Trichlorobenzene	ND		4.7	0.67	ug/Kg	03/06/17 20:42	03/11/17 18:53		1
1,1,1-Trichloroethane	ND		4.7	0.58	ug/Kg	03/06/17 20:42	03/11/17 18:53		1
1,1,2-Trichloroethane	ND		4.7	0.66	ug/Kg	03/06/17 20:42	03/11/17 18:53		1
Trichloroethene	ND		4.7	0.60	ug/Kg	03/06/17 20:42	03/11/17 18:53		1
Trichlorofluoromethane	ND		4.7	0.53	ug/Kg	03/06/17 20:42	03/11/17 18:53		1
1,2,3-Trichloropropane	ND		4.7	0.73	ug/Kg	03/06/17 20:42	03/11/17 18:53		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7	2.0	ug/Kg	03/06/17 20:42	03/11/17 18:53		1
1,2,4-Trimethylbenzene	ND		4.7	1.6	ug/Kg	03/06/17 20:42	03/11/17 18:53		1
1,3,5-Trimethylbenzene	ND		4.7	0.62	ug/Kg	03/06/17 20:42	03/11/17 18:53		1
Vinyl acetate	ND		19	4.7	ug/Kg	03/06/17 20:42	03/11/17 18:53		1
Vinyl chloride	ND		4.7	0.69	ug/Kg	03/06/17 20:42	03/11/17 18:53		1
Xylenes, Total	ND		9.5	1.2	ug/Kg	03/06/17 20:42	03/11/17 18:53		1
2,2-Dichloropropane	ND		4.7	1.9	ug/Kg	03/06/17 20:42	03/11/17 18:53		1
Gasoline Range Organics (GRO) -C5-C12	ND		240	95	ug/Kg	03/06/17 20:42	03/11/17 18:53		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	102			45 - 131			03/06/17 20:42	03/11/17 18:53	1
1,2-Dichloroethane-d4 (Surr)	121			60 - 140			03/06/17 20:42	03/11/17 18:53	1
Toluene-d8 (Surr)	109			58 - 140			03/06/17 20:42	03/11/17 18:53	1

## Method: 8270C SIM - PAHs by GCMS (SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		5.0	1.4	ug/Kg	03/09/17 10:27	03/09/17 19:12		1
Acenaphthylene	ND		5.0	1.2	ug/Kg	03/09/17 10:27	03/09/17 19:12		1
Anthracene	ND		5.0	0.97	ug/Kg	03/09/17 10:27	03/09/17 19:12		1
<b>Benzo[a]anthracene</b>	<b>17</b>		5.0	0.74	ug/Kg	03/09/17 10:27	03/09/17 19:12		1
<b>Benzo[a]pyrene</b>	<b>28</b>		5.0	0.92	ug/Kg	03/09/17 10:27	03/09/17 19:12		1
<b>Benzo[b]fluoranthene</b>	<b>38</b>		5.0	1.1	ug/Kg	03/09/17 10:27	03/09/17 19:12		1
<b>Benzo[g,h,i]perylene</b>	<b>29</b>		5.0	2.1	ug/Kg	03/09/17 10:27	03/09/17 19:12		1
<b>Benzo[k]fluoranthene</b>	<b>14</b>		5.0	1.0	ug/Kg	03/09/17 10:27	03/09/17 19:12		1
<b>Chrysene</b>	<b>27</b>		5.0	0.70	ug/Kg	03/09/17 10:27	03/09/17 19:12		1
<b>Dibenz(a,h)anthracene</b>	<b>6.4</b>		5.0	1.8	ug/Kg	03/09/17 10:27	03/09/17 19:12		1
<b>Fluoranthene</b>	<b>39</b>		5.0	0.70	ug/Kg	03/09/17 10:27	03/09/17 19:12		1
Fluorene	ND		5.0	1.1	ug/Kg	03/09/17 10:27	03/09/17 19:12		1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>23</b>		5.0	2.1	ug/Kg	03/09/17 10:27	03/09/17 19:12		1
Naphthalene	ND		5.0	1.8	ug/Kg	03/09/17 10:27	03/09/17 19:12		1
<b>Phenanthrene</b>	<b>26</b>		5.0	0.91	ug/Kg	03/09/17 10:27	03/09/17 19:12		1
<b>Pyrene</b>	<b>37</b>		5.0	0.83	ug/Kg	03/09/17 10:27	03/09/17 19:12		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	80			33 - 120			03/09/17 10:27	03/09/17 19:12	1
Terphenyl-d14	82			35 - 146			03/09/17 10:27	03/09/17 19:12	1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	7.1		1.0	0.34	mg/Kg	03/09/17 14:48	03/09/17 23:03		1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

**Client Sample ID: HA06-SO-1.0**

**Lab Sample ID: 720-78049-1**

Date Collected: 03/03/17 09:05

Matrix: Solid

Date Received: 03/03/17 15:30

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C24-C36]	ND		50	0.58	mg/Kg		03/09/17 14:48	03/09/17 23:03	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
p-Terphenyl	43		40 - 130				03/09/17 14:48	03/09/17 23:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		49	1.8	ug/Kg		03/09/17 10:30	03/10/17 02:17	1
PCB-1221	ND		49	1.8	ug/Kg		03/09/17 10:30	03/10/17 02:17	1
PCB-1232	ND		49	1.8	ug/Kg		03/09/17 10:30	03/10/17 02:17	1
PCB-1242	ND		49	1.8	ug/Kg		03/09/17 10:30	03/10/17 02:17	1
PCB-1248	ND		49	1.8	ug/Kg		03/09/17 10:30	03/10/17 02:17	1
PCB-1254	ND		49	1.8	ug/Kg		03/09/17 10:30	03/10/17 02:17	1
PCB-1260	ND		49	5.2	ug/Kg		03/09/17 10:30	03/10/17 02:17	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Tetrachloro-m-xylene	74		45 - 132				03/09/17 10:30	03/10/17 02:17	1
DCB Decachlorobiphenyl	76		42 - 146				03/09/17 10:30	03/10/17 02:17	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND	F1	1.8	0.29	mg/Kg		03/07/17 12:08	03/07/17 22:31	4
Arsenic	4.3		3.5	0.30	mg/Kg		03/07/17 12:08	03/07/17 22:31	4
Barium	130	F1	1.8	0.25	mg/Kg		03/07/17 12:08	03/07/17 22:31	4
Beryllium	0.45		0.35	0.11	mg/Kg		03/07/17 12:08	03/07/17 22:31	4
Cadmium	ND		0.44	0.044	mg/Kg		03/07/17 12:08	03/07/17 22:31	4
Chromium	40		1.8	0.19	mg/Kg		03/07/17 12:08	03/07/17 22:31	4
Cobalt	10		0.70	0.070	mg/Kg		03/07/17 12:08	03/07/17 22:31	4
Copper	27		5.3	2.5	mg/Kg		03/07/17 12:08	03/07/17 22:31	4
Lead	44	F1	1.8	0.37	mg/Kg		03/07/17 12:08	03/07/17 22:31	4
Molybdenum	ND		1.8	0.22	mg/Kg		03/07/17 12:08	03/07/17 22:31	4
Nickel	56	F1	1.8	0.18	mg/Kg		03/07/17 12:08	03/07/17 22:31	4
Selenium	ND		3.5	0.53	mg/Kg		03/07/17 12:08	03/07/17 22:31	4
Silver	ND		0.88	0.18	mg/Kg		03/07/17 12:08	03/07/17 22:31	4
Thallium	ND		1.8	0.51	mg/Kg		03/07/17 12:08	03/07/17 22:31	4
Vanadium	34		1.8	0.24	mg/Kg		03/07/17 12:08	03/08/17 19:12	4
Zinc	87		5.3	2.2	mg/Kg		03/07/17 12:08	03/07/17 22:31	4

## Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.23		0.039	0.0085	mg/Kg		03/09/17 14:50	03/10/17 09:36	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
 Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

**Client Sample ID: HA06-SO-15**

**Date Collected: 03/03/17 09:30**

**Date Received: 03/03/17 15:30**

**Lab Sample ID: 720-78049-2**

**Matrix: Solid**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.9	1.2	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Acetone	ND		49	37	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Benzene	ND		4.9	0.63	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Dichlorobromomethane	ND		4.9	0.70	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Bromobenzene	ND		4.9	0.77	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Chlorobromomethane	ND		20	0.70	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Bromoform	ND		4.9	2.0	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Bromomethane	ND		9.8	0.77	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
2-Butanone (MEK)	ND		49	21	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
n-Butylbenzene	ND		4.9	0.98	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
sec-Butylbenzene	ND		4.9	0.70	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
tert-Butylbenzene	ND		4.9	0.71	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Carbon disulfide	ND		4.9	2.0	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Carbon tetrachloride	ND		4.9	0.61	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Chlorobenzene	ND		4.9	0.67	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Chloroethane	ND		9.8	0.55	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Chloroform	ND		4.9	0.64	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Chloromethane	ND		9.8	0.70	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
2-Chlorotoluene	ND		4.9	0.63	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
4-Chlorotoluene	ND		4.9	0.66	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Chlorodibromomethane	ND		4.9	0.69	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
1,2-Dichlorobenzene	ND		4.9	0.66	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
1,3-Dichlorobenzene	ND		4.9	0.70	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
1,4-Dichlorobenzene	ND		4.9	0.69	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
1,3-Dichloropropane	ND		4.9	0.71	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
1,1-Dichloropropene	ND		4.9	0.67	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
1,2-Dibromo-3-Chloropropane	ND		9.8	1.7	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Ethylene Dibromide	ND		4.9	1.4	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Dibromomethane	ND		9.8	0.84	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Dichlorodifluoromethane	ND		9.8	0.77	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
1,1-Dichloroethane	ND		4.9	0.66	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
1,2-Dichloroethane	ND		4.9	0.74	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
1,1-Dichloroethene	ND		4.9	0.61	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
cis-1,2-Dichloroethene	ND		4.9	0.66	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
trans-1,2-Dichloroethene	ND		4.9	0.73	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
1,2-Dichloropropane	ND		4.9	0.62	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
cis-1,3-Dichloropropene	ND		4.9	0.67	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
trans-1,3-Dichloropropene	ND		4.9	0.65	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Ethylbenzene	ND		4.9	0.73	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Hexachlorobutadiene	ND		4.9	0.88	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
2-Hexanone	ND		49	9.8	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Isopropylbenzene	ND		4.9	0.66	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
4-Isopropyltoluene	ND		4.9	2.4	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Methylene Chloride	ND		9.8	3.9	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
4-Methyl-2-pentanone (MIBK)	ND		49	9.8	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Naphthalene	ND		9.8	1.5	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
N-Propylbenzene	ND		4.9	0.64	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
Styrene	ND		4.9	0.62	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	
1,1,1,2-Tetrachloroethane	ND		4.9	0.74	ug/Kg	03/06/17 20:42	03/11/17 19:21	1	

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

**Client Sample ID: HA06-SO-15**

Date Collected: 03/03/17 09:30

Date Received: 03/03/17 15:30

**Lab Sample ID: 720-78049-2**

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.9	0.73	ug/Kg	03/06/17 20:42	03/11/17 19:21		1
Tetrachloroethene	ND		4.9	0.65	ug/Kg	03/06/17 20:42	03/11/17 19:21		1
Toluene	ND		4.9	0.69	ug/Kg	03/06/17 20:42	03/11/17 19:21		1
1,2,3-Trichlorobenzene	ND		4.9	0.72	ug/Kg	03/06/17 20:42	03/11/17 19:21		1
1,2,4-Trichlorobenzene	ND		4.9	0.69	ug/Kg	03/06/17 20:42	03/11/17 19:21		1
1,1,1-Trichloroethane	ND		4.9	0.60	ug/Kg	03/06/17 20:42	03/11/17 19:21		1
1,1,2-Trichloroethane	ND		4.9	0.68	ug/Kg	03/06/17 20:42	03/11/17 19:21		1
Trichloroethene	ND		4.9	0.62	ug/Kg	03/06/17 20:42	03/11/17 19:21		1
Trichlorofluoromethane	ND		4.9	0.55	ug/Kg	03/06/17 20:42	03/11/17 19:21		1
1,2,3-Trichloropropane	ND		4.9	0.75	ug/Kg	03/06/17 20:42	03/11/17 19:21		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.9	2.0	ug/Kg	03/06/17 20:42	03/11/17 19:21		1
1,2,4-Trimethylbenzene	ND		4.9	1.6	ug/Kg	03/06/17 20:42	03/11/17 19:21		1
1,3,5-Trimethylbenzene	ND		4.9	0.63	ug/Kg	03/06/17 20:42	03/11/17 19:21		1
Vinyl acetate	ND		20	4.9	ug/Kg	03/06/17 20:42	03/11/17 19:21		1
Vinyl chloride	ND		4.9	0.71	ug/Kg	03/06/17 20:42	03/11/17 19:21		1
Xylenes, Total	ND		9.8	1.2	ug/Kg	03/06/17 20:42	03/11/17 19:21		1
2,2-Dichloropropane	ND		4.9	2.0	ug/Kg	03/06/17 20:42	03/11/17 19:21		1
Gasoline Range Organics (GRO) -C5-C12	ND		240	98	ug/Kg	03/06/17 20:42	03/11/17 19:21		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	101			45 - 131			03/06/17 20:42	03/11/17 19:21	1
1,2-Dichloroethane-d4 (Surr)	118			60 - 140			03/06/17 20:42	03/11/17 19:21	1
Toluene-d8 (Surr)	109			58 - 140			03/06/17 20:42	03/11/17 19:21	1

**Method: 8270C SIM - PAHs by GCMS (SIM)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4.9	1.4	ug/Kg	03/09/17 10:27	03/09/17 19:36		1
Acenaphthylene	ND		4.9	1.2	ug/Kg	03/09/17 10:27	03/09/17 19:36		1
Anthracene	ND		4.9	0.96	ug/Kg	03/09/17 10:27	03/09/17 19:36		1
Benzo[a]anthracene	ND		4.9	0.73	ug/Kg	03/09/17 10:27	03/09/17 19:36		1
Benzo[a]pyrene	ND		4.9	0.91	ug/Kg	03/09/17 10:27	03/09/17 19:36		1
Benzo[b]fluoranthene	ND		4.9	1.1	ug/Kg	03/09/17 10:27	03/09/17 19:36		1
Benzo[g,h,i]perylene	ND		4.9	2.1	ug/Kg	03/09/17 10:27	03/09/17 19:36		1
Benzo[k]fluoranthene	ND		4.9	1.0	ug/Kg	03/09/17 10:27	03/09/17 19:36		1
Chrysene	ND		4.9	0.70	ug/Kg	03/09/17 10:27	03/09/17 19:36		1
Dibenz(a,h)anthracene	ND		4.9	1.7	ug/Kg	03/09/17 10:27	03/09/17 19:36		1
Fluoranthene	ND		4.9	0.70	ug/Kg	03/09/17 10:27	03/09/17 19:36		1
Fluorene	ND		4.9	1.1	ug/Kg	03/09/17 10:27	03/09/17 19:36		1
Indeno[1,2,3-cd]pyrene	ND		4.9	2.1	ug/Kg	03/09/17 10:27	03/09/17 19:36		1
Naphthalene	ND		4.9	1.7	ug/Kg	03/09/17 10:27	03/09/17 19:36		1
Phenanthrene	ND		4.9	0.91	ug/Kg	03/09/17 10:27	03/09/17 19:36		1
Pyrene	ND		4.9	0.82	ug/Kg	03/09/17 10:27	03/09/17 19:36		1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	79			33 - 120			03/09/17 10:27	03/09/17 19:36	1
Terphenyl-d14	93			35 - 146			03/09/17 10:27	03/09/17 19:36	1

**Method: 8015B - Diesel Range Organics (DRO) (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1.4		0.99	0.34	mg/Kg	03/09/17 14:48	03/10/17 01:20		1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

**Client Sample ID: HA06-SO-15**

Date Collected: 03/03/17 09:30

Date Received: 03/03/17 15:30

**Lab Sample ID: 720-78049-2**

Matrix: Solid

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Motor Oil Range Organics [C24-C36]	ND		49	0.57	mg/Kg		03/09/17 14:48	03/10/17 01:20	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
p-Terphenyl	90		40 - 130				03/09/17 14:48	03/10/17 01:20	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.3	0.22	mg/Kg		03/07/17 12:08	03/07/17 22:36	4
Arsenic	ND		2.6	0.22	mg/Kg		03/07/17 12:08	03/07/17 22:36	4
<b>Barium</b>	<b>66</b>		1.3	0.18	mg/Kg		03/07/17 12:08	03/07/17 22:36	4
<b>Beryllium</b>	<b>0.38</b>		0.26	0.084	mg/Kg		03/07/17 12:08	03/07/17 22:36	4
Cadmium	ND		0.32	0.032	mg/Kg		03/07/17 12:08	03/07/17 22:36	4
<b>Chromium</b>	<b>44</b>		1.3	0.14	mg/Kg		03/07/17 12:08	03/07/17 22:36	4
<b>Cobalt</b>	<b>9.5</b>		0.52	0.052	mg/Kg		03/07/17 12:08	03/07/17 22:36	4
<b>Copper</b>	<b>21</b>		3.9	1.8	mg/Kg		03/07/17 12:08	03/07/17 22:36	4
<b>Lead</b>	<b>4.7</b>		1.3	0.27	mg/Kg		03/07/17 12:08	03/07/17 22:36	4
Molybdenum	ND		1.3	0.17	mg/Kg		03/07/17 12:08	03/07/17 22:36	4
<b>Nickel</b>	<b>61</b>		1.3	0.13	mg/Kg		03/07/17 12:08	03/07/17 22:36	4
Selenium	ND		2.6	0.39	mg/Kg		03/07/17 12:08	03/07/17 22:36	4
Silver	ND		0.65	0.13	mg/Kg		03/07/17 12:08	03/07/17 22:36	4
Thallium	ND		1.3	0.38	mg/Kg		03/07/17 12:08	03/07/17 22:36	4
<b>Vanadium</b>	<b>33</b>		1.3	0.18	mg/Kg		03/07/17 12:08	03/08/17 19:17	4
<b>Zinc</b>	<b>42</b>		3.9	1.6	mg/Kg		03/07/17 12:08	03/07/17 22:36	4

## Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.036</b>		0.035	0.0075	mg/Kg		03/09/17 14:50	03/10/17 09:38	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

**Client Sample ID: HA06-GW**

Date Collected: 03/03/17 09:45

Date Received: 03/03/17 15:30

**Lab Sample ID: 720-78049-3**

Matrix: Water

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50	0.069	ug/L			03/11/17 22:20	1
Acetone	ND		50	20	ug/L			03/11/17 22:20	1
Benzene	ND		0.50	0.25	ug/L			03/11/17 22:20	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			03/11/17 22:20	1
Bromobenzene	ND		1.0	0.20	ug/L			03/11/17 22:20	1
Chlorobromomethane	ND		1.0	0.25	ug/L			03/11/17 22:20	1
Bromoform	ND		1.0	0.50	ug/L			03/11/17 22:20	1
Bromomethane	ND		1.0	0.49	ug/L			03/11/17 22:20	1
2-Butanone (MEK)	ND		50	8.4	ug/L			03/11/17 22:20	1
n-Butylbenzene	ND		1.0	0.30	ug/L			03/11/17 22:20	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			03/11/17 22:20	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			03/11/17 22:20	1
Carbon disulfide	ND		5.0	0.78	ug/L			03/11/17 22:20	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			03/11/17 22:20	1
Chlorobenzene	ND		0.50	0.13	ug/L			03/11/17 22:20	1
Chloroethane	ND		1.0	0.17	ug/L			03/11/17 22:20	1
Chloroform	ND		1.0	0.40	ug/L			03/11/17 22:20	1
Chloromethane	ND		1.0	0.19	ug/L			03/11/17 22:20	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			03/11/17 22:20	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			03/11/17 22:20	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			03/11/17 22:20	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			03/11/17 22:20	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			03/11/17 22:20	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			03/11/17 22:20	1
1,3-Dichloropropane	ND		1.0	0.17	ug/L			03/11/17 22:20	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			03/11/17 22:20	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			03/11/17 22:20	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			03/11/17 22:20	1
Dibromomethane	ND		0.50	0.30	ug/L			03/11/17 22:20	1
Dichlorodifluoromethane	ND		0.50	0.10	ug/L			03/11/17 22:20	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			03/11/17 22:20	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			03/11/17 22:20	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			03/11/17 22:20	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			03/11/17 22:20	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			03/11/17 22:20	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			03/11/17 22:20	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			03/11/17 22:20	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			03/11/17 22:20	1
Ethylbenzene	ND		0.50	0.13	ug/L			03/11/17 22:20	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			03/11/17 22:20	1
2-Hexanone	ND		50	3.0	ug/L			03/11/17 22:20	1
Isopropylbenzene	ND		0.50	0.20	ug/L			03/11/17 22:20	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			03/11/17 22:20	1
Methylene Chloride	ND		5.0	1.5	ug/L			03/11/17 22:20	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			03/11/17 22:20	1
Naphthalene	ND		1.0	0.22	ug/L			03/11/17 22:20	1
N-Propylbenzene	ND		1.0	0.20	ug/L			03/11/17 22:20	1
Styrene	ND		0.50	0.075	ug/L			03/11/17 22:20	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			03/11/17 22:20	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

## Client Sample ID: HA06-GW

Date Collected: 03/03/17 09:45  
Date Received: 03/03/17 15:30

## Lab Sample ID: 720-78049-3

Matrix: Water

### Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			03/11/17 22:20	1
Tetrachloroethene	ND		0.50	0.20	ug/L			03/11/17 22:20	1
Toluene	ND		0.50	0.17	ug/L			03/11/17 22:20	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			03/11/17 22:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			03/11/17 22:20	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			03/11/17 22:20	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			03/11/17 22:20	1
Trichloroethene	ND		0.50	0.20	ug/L			03/11/17 22:20	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			03/11/17 22:20	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			03/11/17 22:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			03/11/17 22:20	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			03/11/17 22:20	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			03/11/17 22:20	1
Vinyl acetate	ND		10	0.60	ug/L			03/11/17 22:20	1
Vinyl chloride	ND		0.50	0.20	ug/L			03/11/17 22:20	1
Xylenes, Total	ND		1.0	0.40	ug/L			03/11/17 22:20	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			03/11/17 22:20	1
Gasoline Range Organics (GRO) -C5-C12	ND		50	21	ug/L			03/11/17 22:20	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene	105		67 - 130					03/11/17 22:20	1
1,2-Dichloroethane-d4 (Surr)	110		72 - 130					03/11/17 22:20	1
Toluene-d8 (Surr)	109		70 - 130					03/11/17 22:20	1

### Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		54	24	ug/L		03/09/17 18:28	03/13/17 11:56	1
Motor Oil Range Organics [C24-C36]	ND		110	46	ug/L		03/09/17 18:28	03/13/17 11:56	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
p-Terphenyl	99		23 - 156				03/09/17 18:28	03/13/17 11:56	1

### Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010	0.0041	mg/L		03/08/17 12:00	03/09/17 12:53	1
Arsenic	ND		0.010	0.0029	mg/L		03/08/17 12:00	03/09/17 12:53	1
<b>Barium</b>	<b>0.088</b>		0.050	0.0016	mg/L		03/08/17 12:00	03/09/17 12:53	1
Beryllium	ND		0.0020	0.00059	mg/L		03/08/17 12:00	03/09/17 12:53	1
Cadmium	ND		0.0020	0.00021	mg/L		03/08/17 12:00	03/09/17 12:53	1
Chromium	ND		0.010	0.00070	mg/L		03/08/17 12:00	03/09/17 12:53	1
<b>Cobalt</b>	<b>0.0027</b>		0.0020	0.00068	mg/L		03/08/17 12:00	03/09/17 12:53	1
Copper	ND		0.020	0.0037	mg/L		03/08/17 12:00	03/09/17 12:53	1
<b>Lead</b>	<b>0.029</b>		0.0050	0.0022	mg/L		03/08/17 12:00	03/09/17 12:53	1
Molybdenum	ND		0.010	0.0029	mg/L		03/08/17 12:00	03/09/17 12:53	1
<b>Nickel</b>	<b>0.025</b>		0.010	0.0010	mg/L		03/08/17 12:00	03/09/17 12:53	1
Selenium	ND		0.020	0.0046	mg/L		03/08/17 12:00	03/09/17 12:53	1
Silver	ND		0.0050	0.0020	mg/L		03/08/17 12:00	03/09/17 12:53	1
Thallium	ND		0.010	0.0035	mg/L		03/08/17 12:00	03/09/17 12:53	1
Vanadium	ND		0.010	0.00087	mg/L		03/08/17 12:00	03/09/17 12:53	1
<b>Zinc</b>	<b>0.028</b>		0.020	0.0074	mg/L		03/08/17 12:00	03/09/17 12:53	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

Method: 7470A - Mercury (CVAA) - Dissolved							1			
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	2
Mercury	ND		0.00020	0.00010	mg/L	D	03/08/17 13:36	03/09/17 09:32	1	3

4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15

TestAmerica Pleasanton

# Surrogate Summary

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (45-131)	12DCE (60-140)	TOL (58-140)
720-78049-1	HA06-SO-1.0	102	121	109
720-78049-2	HA06-SO-15	101	118	109
LCS 720-219162/5	Lab Control Sample	107	113	113
LCS 720-219162/7	Lab Control Sample	108	113	112
LCSD 720-219162/6	Lab Control Sample Dup	106	112	112
LCSD 720-219162/8	Lab Control Sample Dup	108	117	112
MB 720-219162/4	Method Blank	106	114	112

### Surrogate Legend

BFB = 4-Bromofluorobenzene

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		BFB (67-130)	12DCE (72-130)	TOL (70-130)
720-78049-3	HA06-GW	105	110	109
LCS 720-219161/5	Lab Control Sample	105	101	112
LCS 720-219161/7	Lab Control Sample	109	105	113
LCSD 720-219161/6	Lab Control Sample Dup	105	99	112
LCSD 720-219161/8	Lab Control Sample Dup	108	101	113
MB 720-219161/4	Method Blank	107	102	112

### Surrogate Legend

BFB = 4-Bromofluorobenzene

12DCE = 1,2-Dichloroethane-d4 (Surr)

TOL = Toluene-d8 (Surr)

## Method: 8270C SIM - PAHs by GCMS (SIM)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		FBP (33-120)	TPH (35-146)
720-78049-1	HA06-SO-1.0	80	82
720-78049-2	HA06-SO-15	79	93
LCS 720-219006/2-A	Lab Control Sample	88	101
MB 720-219006/1-A	Method Blank	91	109

### Surrogate Legend

FBP = 2-Fluorobiphenyl

TPH = Terphenyl-d14

TestAmerica Pleasanton

# Surrogate Summary

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PTP1 (40-130)
720-78049-1	HA06-SO-1.0	43
720-78049-1 MS	HA06-SO-1.0	69
720-78049-1 MSD	HA06-SO-1.0	71
720-78049-2	HA06-SO-15	90
LCS 720-219035/2-A	Lab Control Sample	103
MB 720-219035/1-A	Method Blank	98

#### Surrogate Legend

PTP = p-Terphenyl

## Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Water

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	PTP1 (23-156)
720-78049-3	HA06-GW	99
LCS 720-219033/2-A	Lab Control Sample	112
LCSD 720-219033/3-A	Lab Control Sample Dup	114
MB 720-219033/1-A	Method Blank	99

#### Surrogate Legend

PTP = p-Terphenyl

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	TCX1 (45-132)	DCB1 (42-146)
720-78049-1	HA06-SO-1.0	74	76
LCS 720-219007/2-A	Lab Control Sample	81	99
MB 720-219007/1-A	Method Blank	83	97

#### Surrogate Legend

TCX = Tetrachloro-m-xylene

DCB = DCB Decachlorobiphenyl

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

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

**Lab Sample ID:** MB 720-219162/4

**Matrix:** Solid

**Analysis Batch:** 219162

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0	1.2	ug/Kg			03/11/17 13:16	1
Acetone	ND		50	38	ug/Kg			03/11/17 13:16	1
Benzene	ND		5.0	0.65	ug/Kg			03/11/17 13:16	1
Dichlorobromomethane	ND		5.0	0.72	ug/Kg			03/11/17 13:16	1
Bromobenzene	ND		5.0	0.79	ug/Kg			03/11/17 13:16	1
Chlorobromomethane	ND		20	0.72	ug/Kg			03/11/17 13:16	1
Bromoform	ND		5.0	2.0	ug/Kg			03/11/17 13:16	1
Bromomethane	ND		10	0.79	ug/Kg			03/11/17 13:16	1
2-Butanone (MEK)	ND		50	21	ug/Kg			03/11/17 13:16	1
n-Butylbenzene	ND		5.0	1.0	ug/Kg			03/11/17 13:16	1
sec-Butylbenzene	ND		5.0	0.72	ug/Kg			03/11/17 13:16	1
tert-Butylbenzene	ND		5.0	0.73	ug/Kg			03/11/17 13:16	1
Carbon disulfide	ND		5.0	2.0	ug/Kg			03/11/17 13:16	1
Carbon tetrachloride	ND		5.0	0.62	ug/Kg			03/11/17 13:16	1
Chlorobenzene	ND		5.0	0.69	ug/Kg			03/11/17 13:16	1
Chloroethane	ND		10	0.56	ug/Kg			03/11/17 13:16	1
Chloroform	ND		5.0	0.66	ug/Kg			03/11/17 13:16	1
Chloromethane	ND		10	0.72	ug/Kg			03/11/17 13:16	1
2-Chlorotoluene	ND		5.0	0.65	ug/Kg			03/11/17 13:16	1
4-Chlorotoluene	ND		5.0	0.68	ug/Kg			03/11/17 13:16	1
Chlorodibromomethane	ND		5.0	0.71	ug/Kg			03/11/17 13:16	1
1,2-Dichlorobenzene	ND		5.0	0.68	ug/Kg			03/11/17 13:16	1
1,3-Dichlorobenzene	ND		5.0	0.72	ug/Kg			03/11/17 13:16	1
1,4-Dichlorobenzene	ND		5.0	0.71	ug/Kg			03/11/17 13:16	1
1,3-Dichloropropane	ND		5.0	0.73	ug/Kg			03/11/17 13:16	1
1,1-Dichloropropene	ND		5.0	0.69	ug/Kg			03/11/17 13:16	1
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/Kg			03/11/17 13:16	1
Ethylene Dibromide	ND		5.0	1.4	ug/Kg			03/11/17 13:16	1
Dibromomethane	ND		10	0.86	ug/Kg			03/11/17 13:16	1
Dichlorodifluoromethane	ND		10	0.79	ug/Kg			03/11/17 13:16	1
1,1-Dichloroethane	ND		5.0	0.68	ug/Kg			03/11/17 13:16	1
1,2-Dichloroethane	ND		5.0	0.76	ug/Kg			03/11/17 13:16	1
1,1-Dichloroethene	ND		5.0	0.62	ug/Kg			03/11/17 13:16	1
cis-1,2-Dichloroethene	ND		5.0	0.68	ug/Kg			03/11/17 13:16	1
trans-1,2-Dichloroethene	ND		5.0	0.75	ug/Kg			03/11/17 13:16	1
1,2-Dichloropropane	ND		5.0	0.63	ug/Kg			03/11/17 13:16	1
cis-1,3-Dichloropropene	ND		5.0	0.69	ug/Kg			03/11/17 13:16	1
trans-1,3-Dichloropropene	ND		5.0	0.67	ug/Kg			03/11/17 13:16	1
Ethylbenzene	ND		5.0	0.75	ug/Kg			03/11/17 13:16	1
Hexachlorobutadiene	ND		5.0	0.90	ug/Kg			03/11/17 13:16	1
2-Hexanone	ND		50	10	ug/Kg			03/11/17 13:16	1
Isopropylbenzene	ND		5.0	0.68	ug/Kg			03/11/17 13:16	1
4-Isopropyltoluene	ND		5.0	2.5	ug/Kg			03/11/17 13:16	1
Methylene Chloride	ND		10	4.0	ug/Kg			03/11/17 13:16	1
4-Methyl-2-pentanone (MIBK)	ND		50	10	ug/Kg			03/11/17 13:16	1
Naphthalene	ND		10	1.5	ug/Kg			03/11/17 13:16	1
N-Propylbenzene	ND		5.0	0.66	ug/Kg			03/11/17 13:16	1
Styrene	ND		5.0	0.63	ug/Kg			03/11/17 13:16	1

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

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

**Lab Sample ID: MB 720-219162/4**

**Matrix: Solid**

**Analysis Batch: 219162**

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

Analyte	MB		Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	MB	MB									
1,1,1,2-Tetrachloroethane	ND				5.0	0.76	ug/Kg			03/11/17 13:16	1
1,1,2,2-Tetrachloroethane	ND				5.0	0.75	ug/Kg			03/11/17 13:16	1
Tetrachloroethene	ND				5.0	0.67	ug/Kg			03/11/17 13:16	1
Toluene	ND				5.0	0.71	ug/Kg			03/11/17 13:16	1
1,2,3-Trichlorobenzene	ND				5.0	0.74	ug/Kg			03/11/17 13:16	1
1,2,4-Trichlorobenzene	ND				5.0	0.71	ug/Kg			03/11/17 13:16	1
1,1,1-Trichloroethane	ND				5.0	0.61	ug/Kg			03/11/17 13:16	1
1,1,2-Trichloroethane	ND				5.0	0.70	ug/Kg			03/11/17 13:16	1
Trichloroethene	ND				5.0	0.63	ug/Kg			03/11/17 13:16	1
Trichlorofluoromethane	ND				5.0	0.56	ug/Kg			03/11/17 13:16	1
1,2,3-Trichloropropane	ND				5.0	0.77	ug/Kg			03/11/17 13:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND				5.0	2.1	ug/Kg			03/11/17 13:16	1
1,2,4-Trimethylbenzene	ND				5.0	1.6	ug/Kg			03/11/17 13:16	1
1,3,5-Trimethylbenzene	ND				5.0	0.65	ug/Kg			03/11/17 13:16	1
Vinyl acetate	ND				20	5.0	ug/Kg			03/11/17 13:16	1
Vinyl chloride	ND				5.0	0.73	ug/Kg			03/11/17 13:16	1
Xylenes, Total	ND				10	1.2	ug/Kg			03/11/17 13:16	1
2,2-Dichloropropane	ND				5.0	2.0	ug/Kg			03/11/17 13:16	1
Gasoline Range Organics (GRO)	ND				250	100	ug/Kg			03/11/17 13:16	1
-C5-C12											

Surrogate	MB		%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	MB	MB						
4-Bromofluorobenzene	106				45 - 131			1
1,2-Dichloroethane-d4 (Surr)	114				60 - 140			1
Toluene-d8 (Surr)	112				58 - 140			1

**Lab Sample ID: LCS 720-219162/5**

**Matrix: Solid**

**Analysis Batch: 219162**

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

Analyte	Spike Added	LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Methyl tert-butyl ether	50.0	51.2		ug/Kg		102	70 - 144
Acetone	250	252		ug/Kg		101	30 - 162
Benzene	50.0	53.1		ug/Kg		106	70 - 130
Dichlorobromomethane	50.0	58.5		ug/Kg		117	70 - 140
Bromobenzene	50.0	51.9		ug/Kg		104	70 - 130
Chlorobromomethane	50.0	56.8		ug/Kg		114	70 - 130
Bromoform	50.0	53.1		ug/Kg		106	59 - 158
Bromomethane	50.0	53.6		ug/Kg		107	59 - 132
2-Butanone (MEK)	250	247		ug/Kg		99	59 - 159
n-Butylbenzene	50.0	50.4		ug/Kg		101	70 - 142
sec-Butylbenzene	50.0	50.4		ug/Kg		101	70 - 136
tert-Butylbenzene	50.0	51.5		ug/Kg		103	70 - 130
Carbon disulfide	50.0	45.4		ug/Kg		91	60 - 140
Carbon tetrachloride	50.0	54.0		ug/Kg		108	70 - 142
Chlorobenzene	50.0	52.0		ug/Kg		104	70 - 130
Chloroethane	50.0	54.3		ug/Kg		109	65 - 130
Chloroform	50.0	53.5		ug/Kg		107	77 - 127

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

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

**Lab Sample ID: LCS 720-219162/5**

**Matrix: Solid**

**Analysis Batch: 219162**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Chloromethane	50.0	59.2		ug/Kg		118	55 - 140	
2-Chlorotoluene	50.0	49.7		ug/Kg		99	70 - 138	
4-Chlorotoluene	50.0	50.6		ug/Kg		101	70 - 136	
Chlorodibromomethane	50.0	59.3		ug/Kg		119	70 - 146	
1,2-Dichlorobenzene	50.0	51.5		ug/Kg		103	70 - 130	
1,3-Dichlorobenzene	50.0	51.4		ug/Kg		103	70 - 131	
1,4-Dichlorobenzene	50.0	52.3		ug/Kg		105	70 - 130	
1,3-Dichloropropane	50.0	53.5		ug/Kg		107	70 - 140	
1,1-Dichloropropene	50.0	53.5		ug/Kg		107	70 - 130	
1,2-Dibromo-3-Chloropropane	50.0	45.1		ug/Kg		90	60 - 145	
Ethylene Dibromide	50.0	56.3		ug/Kg		113	70 - 140	
Dibromomethane	50.0	54.9		ug/Kg		110	70 - 139	
Dichlorodifluoromethane	50.0	58.4		ug/Kg		117	37 - 158	
1,1-Dichloroethane	50.0	51.8		ug/Kg		104	70 - 130	
1,2-Dichloroethane	50.0	54.6		ug/Kg		109	70 - 130	
1,1-Dichloroethene	50.0	48.1		ug/Kg		96	74 - 122	
cis-1,2-Dichloroethene	50.0	53.1		ug/Kg		106	70 - 138	
trans-1,2-Dichloroethene	50.0	51.5		ug/Kg		103	67 - 130	
1,2-Dichloropropane	50.0	54.1		ug/Kg		108	73 - 127	
cis-1,3-Dichloropropene	50.0	55.7		ug/Kg		111	68 - 147	
trans-1,3-Dichloropropene	50.0	55.2		ug/Kg		110	70 - 155	
Ethylbenzene	50.0	50.4		ug/Kg		101	80 - 137	
Hexachlorobutadiene	50.0	47.3		ug/Kg		95	70 - 132	
2-Hexanone	250	253		ug/Kg		101	62 - 158	
Isopropylbenzene	50.0	52.1		ug/Kg		104	70 - 130	
4-Isopropyltoluene	50.0	51.0		ug/Kg		102	70 - 133	
Methylene Chloride	50.0	51.7		ug/Kg		103	70 - 134	
4-Methyl-2-pentanone (MIBK)	250	273		ug/Kg		109	60 - 160	
Naphthalene	50.0	43.3		ug/Kg		87	60 - 147	
N-Propylbenzene	50.0	50.5		ug/Kg		101	70 - 130	
Styrene	50.0	54.2		ug/Kg		108	70 - 130	
1,1,1,2-Tetrachloroethane	50.0	56.1		ug/Kg		112	70 - 130	
1,1,2,2-Tetrachloroethane	50.0	46.5		ug/Kg		93	70 - 146	
Tetrachloroethene	50.0	55.4		ug/Kg		111	70 - 132	
Toluene	50.0	50.5		ug/Kg		101	75 - 120	
1,2,3-Trichlorobenzene	50.0	46.0		ug/Kg		92	60 - 140	
1,2,4-Trichlorobenzene	50.0	47.5		ug/Kg		95	60 - 140	
1,1,1-Trichloroethane	50.0	53.0		ug/Kg		106	70 - 130	
1,1,2-Trichloroethane	50.0	55.7		ug/Kg		111	70 - 130	
Trichloroethene	50.0	56.3		ug/Kg		113	70 - 133	
Trichlorofluoromethane	50.0	58.3		ug/Kg		117	60 - 140	
1,2,3-Trichloropropane	50.0	49.6		ug/Kg		99	70 - 146	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.3		ug/Kg		101	60 - 140	
1,2,4-Trimethylbenzene	50.0	51.5		ug/Kg		103	70 - 130	
1,3,5-Trimethylbenzene	50.0	51.9		ug/Kg		104	70 - 131	
Vinyl acetate	50.0	51.4		ug/Kg		103	38 - 176	
Vinyl chloride	50.0	56.3		ug/Kg		113	58 - 125	

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
 Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

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

**Lab Sample ID: LCS 720-219162/5**

**Matrix: Solid**

**Analysis Batch: 219162**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
m-Xylene & p-Xylene	50.0	50.8		ug/Kg		102	70 - 146
o-Xylene	50.0	51.9		ug/Kg		104	70 - 140
2,2-Dichloropropane	50.0	51.1		ug/Kg		102	70 - 162

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	107		45 - 131
1,2-Dichloroethane-d4 (Surr)	113		60 - 140
Toluene-d8 (Surr)	113		58 - 140

**Lab Sample ID: LCS 720-219162/7**

**Matrix: Solid**

**Analysis Batch: 219162**

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
Gasoline Range Organics (GRO)	1000	810		ug/Kg		81	61 - 128
-C5-C12							

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	108		45 - 131
1,2-Dichloroethane-d4 (Surr)	113		60 - 140
Toluene-d8 (Surr)	112		58 - 140

**Lab Sample ID: LCSD 720-219162/6**

**Matrix: Solid**

**Analysis Batch: 219162**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Added	Result	Qualifier						
Methyl tert-butyl ether	50.0	50.6		ug/Kg		101	70 - 144	1	20
Acetone	250	235		ug/Kg		94	30 - 162	7	30
Benzene	50.0	53.1		ug/Kg		106	70 - 130	0	20
Dichlorobromomethane	50.0	57.9		ug/Kg		116	70 - 140	1	20
Bromobenzene	50.0	52.1		ug/Kg		104	70 - 130	0	20
Chlorobromomethane	50.0	56.1		ug/Kg		112	70 - 130	1	20
Bromoform	50.0	52.0		ug/Kg		104	59 - 158	2	20
Bromomethane	50.0	53.3		ug/Kg		107	59 - 132	0	20
2-Butanone (MEK)	250	236		ug/Kg		94	59 - 159	5	20
n-Butylbenzene	50.0	49.9		ug/Kg		100	70 - 142	1	20
sec-Butylbenzene	50.0	50.1		ug/Kg		100	70 - 136	1	20
tert-Butylbenzene	50.0	51.4		ug/Kg		103	70 - 130	0	20
Carbon disulfide	50.0	45.1		ug/Kg		90	60 - 140	1	20
Carbon tetrachloride	50.0	53.3		ug/Kg		107	70 - 142	1	20
Chlorobenzene	50.0	52.0		ug/Kg		104	70 - 130	0	20
Chloroethane	50.0	53.9		ug/Kg		108	65 - 130	1	20
Chloroform	50.0	53.5		ug/Kg		107	77 - 127	0	20
Chloromethane	50.0	59.2		ug/Kg		118	55 - 140	0	20
2-Chlorotoluene	50.0	50.0		ug/Kg		100	70 - 138	1	20
4-Chlorotoluene	50.0	50.2		ug/Kg		100	70 - 136	1	20
Chlorodibromomethane	50.0	58.6		ug/Kg		117	70 - 146	1	20

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

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

**Lab Sample ID: LCSD 720-219162/6**

**Matrix: Solid**

**Analysis Batch: 219162**

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec.	Limits	RPD	RPD Limit
	Added	Result	Qualifier			%Rec			
1,2-Dichlorobenzene	50.0	51.7		ug/Kg		103	70 - 130	0	20
1,3-Dichlorobenzene	50.0	51.0		ug/Kg		102	70 - 131	1	20
1,4-Dichlorobenzene	50.0	51.8		ug/Kg		104	70 - 130	1	20
1,3-Dichloropropane	50.0	53.4		ug/Kg		107	70 - 140	0	20
1,1-Dichloropropene	50.0	53.1		ug/Kg		106	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	43.7		ug/Kg		87	60 - 145	3	20
Ethylene Dibromide	50.0	55.2		ug/Kg		110	70 - 140	2	20
Dibromomethane	50.0	54.3		ug/Kg		109	70 - 139	1	20
Dichlorodifluoromethane	50.0	58.2		ug/Kg		116	37 - 158	0	20
1,1-Dichloroethane	50.0	51.9		ug/Kg		104	70 - 130	0	20
1,2-Dichloroethane	50.0	53.9		ug/Kg		108	70 - 130	1	20
1,1-Dichloroethene	50.0	47.0		ug/Kg		94	74 - 122	2	20
cis-1,2-Dichloroethene	50.0	52.7		ug/Kg		105	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	51.1		ug/Kg		102	67 - 130	1	20
1,2-Dichloropropane	50.0	54.4		ug/Kg		109	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	56.0		ug/Kg		112	68 - 147	1	20
trans-1,3-Dichloropropene	50.0	55.1		ug/Kg		110	70 - 155	0	20
Ethylbenzene	50.0	50.2		ug/Kg		100	80 - 137	0	20
Hexachlorobutadiene	50.0	46.8		ug/Kg		94	70 - 132	1	20
2-Hexanone	250	242		ug/Kg		97	62 - 158	4	20
Isopropylbenzene	50.0	51.8		ug/Kg		104	70 - 130	1	20
4-Isopropyltoluene	50.0	50.7		ug/Kg		101	70 - 133	1	20
Methylene Chloride	50.0	51.8		ug/Kg		104	70 - 134	0	20
4-Methyl-2-pentanone (MIBK)	250	265		ug/Kg		106	60 - 160	3	20
Naphthalene	50.0	42.3		ug/Kg		85	60 - 147	2	20
N-Propylbenzene	50.0	50.2		ug/Kg		100	70 - 130	1	20
Styrene	50.0	54.0		ug/Kg		108	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	55.9		ug/Kg		112	70 - 130	0	20
1,1,2,2-Tetrachloroethane	50.0	45.8		ug/Kg		92	70 - 146	1	20
Tetrachloroethene	50.0	54.9		ug/Kg		110	70 - 132	1	20
Toluene	50.0	50.6		ug/Kg		101	75 - 120	0	20
1,2,3-Trichlorobenzene	50.0	45.2		ug/Kg		90	60 - 140	2	20
1,2,4-Trichlorobenzene	50.0	46.3		ug/Kg		93	60 - 140	3	20
1,1,1-Trichloroethane	50.0	53.0		ug/Kg		106	70 - 130	0	20
1,1,2-Trichloroethane	50.0	55.4		ug/Kg		111	70 - 130	1	20
Trichloroethene	50.0	55.6		ug/Kg		111	70 - 133	1	20
Trichlorofluoromethane	50.0	57.7		ug/Kg		115	60 - 140	1	20
1,2,3-Trichloropropane	50.0	49.1		ug/Kg		98	70 - 146	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	49.2		ug/Kg		98	60 - 140	2	20
1,2,4-Trimethylbenzene	50.0	51.1		ug/Kg		102	70 - 130	1	20
1,3,5-Trimethylbenzene	50.0	51.6		ug/Kg		103	70 - 131	1	20
Vinyl acetate	50.0	50.5		ug/Kg		101	38 - 176	2	20
Vinyl chloride	50.0	56.7		ug/Kg		113	58 - 125	1	20
m-Xylene & p-Xylene	50.0	50.9		ug/Kg		102	70 - 146	0	20
o-Xylene	50.0	51.6		ug/Kg		103	70 - 140	1	20
2,2-Dichloropropane	50.0	51.0		ug/Kg		102	70 - 162	0	20

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

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

Lab Sample ID: LCSD 720-219162/6

Matrix: Solid

Analysis Batch: 219162

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

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	106		45 - 131
1,2-Dichloroethane-d4 (Surr)	112		60 - 140
Toluene-d8 (Surr)	112		58 - 140

Lab Sample ID: LCSD 720-219162/8

Matrix: Solid

Analysis Batch: 219162

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec.	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12	1000	810		ug/Kg	81	61 - 128	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	108		45 - 131
1,2-Dichloroethane-d4 (Surr)	117		60 - 140
Toluene-d8 (Surr)	112		58 - 140

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS

Lab Sample ID: MB 720-219161/4

Matrix: Water

Analysis Batch: 219161

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		0.50	0.069	ug/L			03/11/17 11:58	1
Acetone	ND		50	20	ug/L			03/11/17 11:58	1
Benzene	ND		0.50	0.25	ug/L			03/11/17 11:58	1
Dichlorobromomethane	ND		0.50	0.20	ug/L			03/11/17 11:58	1
Bromobenzene	ND		1.0	0.20	ug/L			03/11/17 11:58	1
Chlorobromomethane	ND		1.0	0.25	ug/L			03/11/17 11:58	1
Bromoform	ND		1.0	0.50	ug/L			03/11/17 11:58	1
Bromomethane	ND		1.0	0.49	ug/L			03/11/17 11:58	1
2-Butanone (MEK)	ND		50	8.4	ug/L			03/11/17 11:58	1
n-Butylbenzene	ND		1.0	0.30	ug/L			03/11/17 11:58	1
sec-Butylbenzene	ND		1.0	0.17	ug/L			03/11/17 11:58	1
tert-Butylbenzene	ND		1.0	0.20	ug/L			03/11/17 11:58	1
Carbon disulfide	ND		5.0	0.78	ug/L			03/11/17 11:58	1
Carbon tetrachloride	ND		0.50	0.11	ug/L			03/11/17 11:58	1
Chlorobenzene	ND		0.50	0.13	ug/L			03/11/17 11:58	1
Chloroethane	ND		1.0	0.17	ug/L			03/11/17 11:58	1
Chloroform	ND		1.0	0.40	ug/L			03/11/17 11:58	1
Chloromethane	ND		1.0	0.19	ug/L			03/11/17 11:58	1
2-Chlorotoluene	ND		0.50	0.20	ug/L			03/11/17 11:58	1
4-Chlorotoluene	ND		0.50	0.20	ug/L			03/11/17 11:58	1
Chlorodibromomethane	ND		0.50	0.10	ug/L			03/11/17 11:58	1
1,2-Dichlorobenzene	ND		0.50	0.21	ug/L			03/11/17 11:58	1
1,3-Dichlorobenzene	ND		0.50	0.20	ug/L			03/11/17 11:58	1
1,4-Dichlorobenzene	ND		0.50	0.16	ug/L			03/11/17 11:58	1

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

Lab Sample ID: MB 720-219161/4

Matrix: Water

Analysis Batch: 219161

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichloropropane	ND		1.0	0.17	ug/L			03/11/17 11:58	1
1,1-Dichloropropene	ND		0.50	0.20	ug/L			03/11/17 11:58	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.30	ug/L			03/11/17 11:58	1
Ethylene Dibromide	ND		0.50	0.075	ug/L			03/11/17 11:58	1
Dibromomethane	ND		0.50	0.30	ug/L			03/11/17 11:58	1
Dichlorodifluoromethane	ND		0.50	0.10	ug/L			03/11/17 11:58	1
1,1-Dichloroethane	ND		0.50	0.11	ug/L			03/11/17 11:58	1
1,2-Dichloroethane	ND		0.50	0.077	ug/L			03/11/17 11:58	1
1,1-Dichloroethene	ND		0.50	0.20	ug/L			03/11/17 11:58	1
cis-1,2-Dichloroethene	ND		0.50	0.076	ug/L			03/11/17 11:58	1
trans-1,2-Dichloroethene	ND		0.50	0.13	ug/L			03/11/17 11:58	1
1,2-Dichloropropane	ND		0.50	0.20	ug/L			03/11/17 11:58	1
cis-1,3-Dichloropropene	ND		0.50	0.10	ug/L			03/11/17 11:58	1
trans-1,3-Dichloropropene	ND		0.50	0.17	ug/L			03/11/17 11:58	1
Ethylbenzene	ND		0.50	0.13	ug/L			03/11/17 11:58	1
Hexachlorobutadiene	ND		1.0	0.27	ug/L			03/11/17 11:58	1
2-Hexanone	ND		50	3.0	ug/L			03/11/17 11:58	1
Isopropylbenzene	ND		0.50	0.20	ug/L			03/11/17 11:58	1
4-Isopropyltoluene	ND		1.0	0.20	ug/L			03/11/17 11:58	1
Methylene Chloride	ND		5.0	1.5	ug/L			03/11/17 11:58	1
4-Methyl-2-pentanone (MIBK)	ND		50	4.5	ug/L			03/11/17 11:58	1
Naphthalene	ND		1.0	0.22	ug/L			03/11/17 11:58	1
N-Propylbenzene	ND		1.0	0.20	ug/L			03/11/17 11:58	1
Styrene	ND		0.50	0.075	ug/L			03/11/17 11:58	1
1,1,1,2-Tetrachloroethane	ND		0.50	0.067	ug/L			03/11/17 11:58	1
1,1,2,2-Tetrachloroethane	ND		0.50	0.074	ug/L			03/11/17 11:58	1
Tetrachloroethene	ND		0.50	0.20	ug/L			03/11/17 11:58	1
Toluene	ND		0.50	0.17	ug/L			03/11/17 11:58	1
1,2,3-Trichlorobenzene	ND		1.0	0.21	ug/L			03/11/17 11:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.13	ug/L			03/11/17 11:58	1
1,1,1-Trichloroethane	ND		0.50	0.20	ug/L			03/11/17 11:58	1
1,1,2-Trichloroethane	ND		0.50	0.11	ug/L			03/11/17 11:58	1
Trichloroethene	ND		0.50	0.20	ug/L			03/11/17 11:58	1
Trichlorofluoromethane	ND		1.0	0.30	ug/L			03/11/17 11:58	1
1,2,3-Trichloropropane	ND		0.50	0.087	ug/L			03/11/17 11:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.50	0.091	ug/L			03/11/17 11:58	1
1,2,4-Trimethylbenzene	ND		0.50	0.20	ug/L			03/11/17 11:58	1
1,3,5-Trimethylbenzene	ND		0.50	0.17	ug/L			03/11/17 11:58	1
Vinyl acetate	ND		10	0.60	ug/L			03/11/17 11:58	1
Vinyl chloride	ND		0.50	0.20	ug/L			03/11/17 11:58	1
Xylenes, Total	ND		1.0	0.40	ug/L			03/11/17 11:58	1
2,2-Dichloropropane	ND		0.50	0.17	ug/L			03/11/17 11:58	1
Gasoline Range Organics (GRO) -C5-C12	ND		50	21	ug/L			03/11/17 11:58	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	107		67 - 130			
1,2-Dichloroethane-d4 (Surr)	102		72 - 130			

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: MB 720-219161/4**

**Matrix: Water**

**Analysis Batch: 219161**

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Toluene-d8 (Sur)	112						

**Lab Sample ID: LCS 720-219161/5**

**Matrix: Water**

**Analysis Batch: 219161**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Methyl tert-butyl ether	25.0	26.5		ug/L		106	62 - 130	
Acetone	125	150		ug/L		120	26 - 180	
Benzene	25.0	26.4		ug/L		106	79 - 130	
Dichlorobromomethane	25.0	26.6		ug/L		106	70 - 130	
Bromobenzene	25.0	25.4		ug/L		102	70 - 130	
Chlorobromomethane	25.0	25.6		ug/L		102	70 - 130	
Bromoform	25.0	23.8		ug/L		95	68 - 136	
Bromomethane	25.0	26.1		ug/L		104	43 - 151	
2-Butanone (MEK)	125	147		ug/L		117	54 - 153	
n-Butylbenzene	25.0	26.1		ug/L		104	70 - 142	
sec-Butylbenzene	25.0	25.6		ug/L		102	70 - 134	
tert-Butylbenzene	25.0	25.3		ug/L		101	70 - 135	
Carbon disulfide	25.0	22.2		ug/L		89	68 - 146	
Carbon tetrachloride	25.0	25.7		ug/L		103	70 - 146	
Chlorobenzene	25.0	25.3		ug/L		101	70 - 130	
Chloroethane	25.0	26.2		ug/L		105	62 - 138	
Chloroform	25.0	25.7		ug/L		103	70 - 130	
Chloromethane	25.0	29.0		ug/L		116	52 - 175	
2-Chlorotoluene	25.0	24.9		ug/L		99	70 - 130	
4-Chlorotoluene	25.0	25.5		ug/L		102	70 - 130	
Chlorodibromomethane	25.0	25.2		ug/L		101	70 - 145	
1,2-Dichlorobenzene	25.0	25.7		ug/L		103	70 - 130	
1,3-Dichlorobenzene	25.0	25.4		ug/L		102	70 - 130	
1,4-Dichlorobenzene	25.0	25.8		ug/L		103	70 - 130	
1,3-Dichloropropane	25.0	25.8		ug/L		103	70 - 130	
1,1-Dichloropropene	25.0	26.4		ug/L		106	70 - 130	
1,2-Dibromo-3-Chloropropane	25.0	24.7		ug/L		99	70 - 136	
Ethylene Dibromide	25.0	26.0		ug/L		104	70 - 130	
Dibromomethane	25.0	25.4		ug/L		102	70 - 130	
Dichlorodifluoromethane	25.0	31.5		ug/L		126	32 - 158	
1,1-Dichloroethane	25.0	25.0		ug/L		100	70 - 130	
1,2-Dichloroethane	25.0	24.9		ug/L		100	61 - 132	
1,1-Dichloroethene	25.0	23.1		ug/L		92	64 - 128	
cis-1,2-Dichloroethene	25.0	25.4		ug/L		102	70 - 130	
trans-1,2-Dichloroethene	25.0	25.1		ug/L		100	68 - 130	
1,2-Dichloropropane	25.0	26.2		ug/L		105	70 - 130	
cis-1,3-Dichloropropene	25.0	26.9		ug/L		107	70 - 130	
trans-1,3-Dichloropropene	25.0	25.8		ug/L		103	70 - 140	
Ethylbenzene	25.0	25.4		ug/L		102	80 - 120	
Hexachlorobutadiene	25.0	27.4		ug/L		110	70 - 130	
2-Hexanone	125	146		ug/L		117	60 - 164	

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCS 720-219161/5**

**Matrix: Water**

**Analysis Batch: 219161**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Isopropylbenzene	25.0	25.8		ug/L		103	70 - 130	
4-Isopropyltoluene	25.0	25.6		ug/L		102	70 - 130	
Methylene Chloride	25.0	25.0		ug/L		100	70 - 147	
4-Methyl-2-pentanone (MIBK)	125	145		ug/L		116	50 - 155	
Naphthalene	25.0	26.3		ug/L		105	50 - 130	
N-Propylbenzene	25.0	25.7		ug/L		103	70 - 130	
Styrene	25.0	25.9		ug/L		104	70 - 130	
1,1,1,2-Tetrachloroethane	25.0	26.6		ug/L		106	70 - 130	
1,1,2,2-Tetrachloroethane	25.0	26.0		ug/L		104	70 - 130	
Tetrachloroethene	25.0	26.7		ug/L		107	70 - 130	
Toluene	25.0	24.9		ug/L		99	78 - 120	
1,2,3-Trichlorobenzene	25.0	26.8		ug/L		107	70 - 130	
1,2,4-Trichlorobenzene	25.0	26.9		ug/L		108	70 - 130	
1,1,1-Trichloroethane	25.0	25.7		ug/L		103	70 - 130	
1,1,2-Trichloroethane	25.0	26.7		ug/L		107	70 - 130	
Trichloroethene	25.0	26.1		ug/L		105	70 - 130	
Trichlorofluoromethane	25.0	26.9		ug/L		107	66 - 132	
1,2,3-Trichloropropane	25.0	26.0		ug/L		104	70 - 130	
1,1,2-Trichloro-1,2,2-trifluoroetha ne	25.0	23.9		ug/L		95	42 - 162	
1,2,4-Trimethylbenzene	25.0	25.5		ug/L		102	70 - 132	
1,3,5-Trimethylbenzene	25.0	25.5		ug/L		102	70 - 130	
Vinyl acetate	25.0	25.9		ug/L		104	43 - 163	
Vinyl chloride	25.0	29.0		ug/L		116	54 - 135	
m-Xylene & p-Xylene	25.0	25.3		ug/L		101	70 - 142	
o-Xylene	25.0	26.0		ug/L		104	70 - 130	
2,2-Dichloropropane	25.0	27.5		ug/L		110	70 - 140	

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	105		67 - 130
1,2-Dichloroethane-d4 (Surr)	101		72 - 130
Toluene-d8 (Surr)	112		70 - 130

**Lab Sample ID: LCS 720-219161/7**

**Matrix: Water**

**Analysis Batch: 219161**

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	Limits
Gasoline Range Organics (GRO) -C5-C12	500	496		ug/L		99	71 - 125	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
4-Bromofluorobenzene	109		67 - 130					
1,2-Dichloroethane-d4 (Surr)	105		72 - 130					
Toluene-d8 (Surr)	113		70 - 130					

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID: LCSD 720-219161/6**

**Matrix: Water**

**Analysis Batch: 219161**

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	25.0	25.5		ug/L	102	62 - 130	4	20	
Acetone	125	136		ug/L	109	26 - 180	10	30	
Benzene	25.0	26.3		ug/L	105	79 - 130	1	20	
Dichlorobromomethane	25.0	26.1		ug/L	105	70 - 130	2	20	
Bromobenzene	25.0	25.5		ug/L	102	70 - 130	0	20	8
Chlorobromomethane	25.0	24.9		ug/L	100	70 - 130	3	20	
Bromoform	25.0	24.0		ug/L	96	68 - 136	1	20	9
Bromomethane	25.0	26.2		ug/L	105	43 - 151	0	20	
2-Butanone (MEK)	125	140		ug/L	112	54 - 153	5	20	10
n-Butylbenzene	25.0	25.9		ug/L	104	70 - 142	1	20	
sec-Butylbenzene	25.0	26.0		ug/L	104	70 - 134	1	20	11
tert-Butylbenzene	25.0	25.6		ug/L	102	70 - 135	1	20	
Carbon disulfide	25.0	22.3		ug/L	89	68 - 146	0	20	12
Carbon tetrachloride	25.0	25.6		ug/L	102	70 - 146	0	20	
Chlorobenzene	25.0	25.1		ug/L	101	70 - 130	1	20	13
Chloroethane	25.0	26.6		ug/L	106	62 - 138	1	20	
Chloroform	25.0	25.3		ug/L	101	70 - 130	1	20	14
Chloromethane	25.0	29.6		ug/L	119	52 - 175	2	20	
2-Chlorotoluene	25.0	25.2		ug/L	101	70 - 130	1	20	
4-Chlorotoluene	25.0	25.5		ug/L	102	70 - 130	0	20	
Chlorodibromomethane	25.0	24.7		ug/L	99	70 - 145	2	20	
1,2-Dichlorobenzene	25.0	25.3		ug/L	101	70 - 130	1	20	
1,3-Dichlorobenzene	25.0	25.1		ug/L	101	70 - 130	1	20	
1,4-Dichlorobenzene	25.0	25.7		ug/L	103	70 - 130	0	20	
1,3-Dichloropropane	25.0	25.2		ug/L	101	70 - 130	2	20	
1,1-Dichloropropene	25.0	26.3		ug/L	105	70 - 130	1	20	
1,2-Dibromo-3-Chloropropane	25.0	23.8		ug/L	95	70 - 136	4	20	
Ethylene Dibromide	25.0	25.5		ug/L	102	70 - 130	2	20	
Dibromomethane	25.0	24.7		ug/L	99	70 - 130	3	20	
Dichlorodifluoromethane	25.0	30.6		ug/L	123	32 - 158	3	20	
1,1-Dichloroethane	25.0	24.8		ug/L	99	70 - 130	1	20	
1,2-Dichloroethane	25.0	24.3		ug/L	97	61 - 132	2	20	
1,1-Dichloroethene	25.0	22.9		ug/L	92	64 - 128	1	20	
cis-1,2-Dichloroethene	25.0	25.2		ug/L	101	70 - 130	1	20	
trans-1,2-Dichloroethene	25.0	25.0		ug/L	100	68 - 130	0	20	
1,2-Dichloropropane	25.0	25.7		ug/L	103	70 - 130	2	20	
cis-1,3-Dichloropropene	25.0	26.3		ug/L	105	70 - 130	2	20	
trans-1,3-Dichloropropene	25.0	25.2		ug/L	101	70 - 140	2	20	
Ethylbenzene	25.0	25.4		ug/L	102	80 - 120	0	20	
Hexachlorobutadiene	25.0	27.6		ug/L	110	70 - 130	1	20	
2-Hexanone	125	139		ug/L	112	60 - 164	5	20	
Isopropylbenzene	25.0	26.0		ug/L	104	70 - 130	1	20	
4-Isopropyltoluene	25.0	25.8		ug/L	103	70 - 130	1	20	
Methylene Chloride	25.0	25.0		ug/L	100	70 - 147	0	20	
4-Methyl-2-pentanone (MIBK)	125	139		ug/L	111	50 - 155	4	20	
Naphthalene	25.0	25.9		ug/L	103	50 - 130	2	20	
N-Propylbenzene	25.0	26.0		ug/L	104	70 - 130	1	20	
Styrene	25.0	25.9		ug/L	104	70 - 130	0	20	

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

## Method: 8260B/CA\_LUFTMS - 8260B / CA LUFT MS (Continued)

**Lab Sample ID:** LCSD 720-219161/6

**Matrix:** Water

**Analysis Batch:** 219161

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

Analyte	Spike	LCSD		Unit	D	%Rec.		RPD	Limit
	Added	Result	Qualifier			%Rec	Limits		
1,1,1,2-Tetrachloroethane	25.0	26.2		ug/L	105	70 - 130		1	20
1,1,2,2-Tetrachloroethane	25.0	25.3		ug/L	101	70 - 130		3	20
Tetrachloroethene	25.0	26.7		ug/L	107	70 - 130		0	20
Toluene	25.0	24.6		ug/L	99	78 - 120		1	20
1,2,3-Trichlorobenzene	25.0	26.8		ug/L	107	70 - 130		0	20
1,2,4-Trichlorobenzene	25.0	26.4		ug/L	106	70 - 130		2	20
1,1,1-Trichloroethane	25.0	25.5		ug/L	102	70 - 130		1	20
1,1,2-Trichloroethane	25.0	25.9		ug/L	104	70 - 130		3	20
Trichloroethene	25.0	25.9		ug/L	104	70 - 130		1	20
Trichlorofluoromethane	25.0	26.8		ug/L	107	66 - 132		0	20
1,2,3-Trichloropropane	25.0	25.4		ug/L	102	70 - 130		2	20
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.1		ug/L	96	42 - 162		1	20
ne									
1,2,4-Trimethylbenzene	25.0	25.7		ug/L	103	70 - 132		1	20
1,3,5-Trimethylbenzene	25.0	25.8		ug/L	103	70 - 130		1	20
Vinyl acetate	25.0	25.2		ug/L	101	43 - 163		3	20
Vinyl chloride	25.0	29.4		ug/L	118	54 - 135		2	20
m-Xylene & p-Xylene	25.0	25.3		ug/L	101	70 - 142		0	20
o-Xylene	25.0	25.8		ug/L	103	70 - 130		1	20
2,2-Dichloropropane	25.0	28.1		ug/L	113	70 - 140		2	20

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	105		67 - 130
1,2-Dichloroethane-d4 (Surr)	99		72 - 130
Toluene-d8 (Surr)	112		70 - 130

**Lab Sample ID:** LCSD 720-219161/8

**Matrix:** Water

**Analysis Batch:** 219161

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

Analyte	Spike	LCSD		Unit	D	%Rec.		RPD	Limit
	Added	Result	Qualifier			%Rec	Limits		
Gasoline Range Organics (GRO) -C5-C12	500	507		ug/L	101	71 - 125		2	20
Surrogate	LCSD	LCSD	Limits						
	%Recovery	Qualifier							
4-Bromofluorobenzene	108		67 - 130						
1,2-Dichloroethane-d4 (Surr)	101		72 - 130						
Toluene-d8 (Surr)	113		70 - 130						

## Method: 8270C SIM - PAHs by GCMS (SIM)

**Lab Sample ID:** MB 720-219006/1-A

**Matrix:** Solid

**Analysis Batch:** 219057

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 219006

Analyte	MB	MB	RL	MDL	Unit	D	Prepared		Analyzed	Dil Fac
	Result	Qualifier					%	Date		
Acenaphthene	ND		5.0	1.4	ug/Kg		03/09/17 10:27	03/09/17 18:49		1
Acenaphthylene	ND		5.0	1.2	ug/Kg		03/09/17 10:27	03/09/17 18:49		1

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

## Method: 8270C SIM - PAHs by GCMS (SIM) (Continued)

**Lab Sample ID: MB 720-219006/1-A**

**Matrix: Solid**

**Analysis Batch: 219057**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 219006**

Analyte	MB		RL	MDL	Unit	D	Prepared		Dil Fac
	Result	Qualifier					Prepared	Analyzed	
Anthracene	ND		5.0	0.98	ug/Kg	03/09/17 10:27	03/09/17 18:49	1	
Benzo[a]anthracene	ND		5.0	0.74	ug/Kg	03/09/17 10:27	03/09/17 18:49	1	
Benzo[a]pyrene	ND		5.0	0.93	ug/Kg	03/09/17 10:27	03/09/17 18:49	1	
Benzo[b]fluoranthene	ND		5.0	1.1	ug/Kg	03/09/17 10:27	03/09/17 18:49	1	
Benzo[g,h,i]perylene	ND		5.0	2.1	ug/Kg	03/09/17 10:27	03/09/17 18:49	1	
Benzo[k]fluoranthene	ND		5.0	1.0	ug/Kg	03/09/17 10:27	03/09/17 18:49	1	
Chrysene	ND		5.0	0.71	ug/Kg	03/09/17 10:27	03/09/17 18:49	1	
Dibenz(a,h)anthracene	ND		5.0	1.8	ug/Kg	03/09/17 10:27	03/09/17 18:49	1	
Fluoranthene	ND		5.0	0.71	ug/Kg	03/09/17 10:27	03/09/17 18:49	1	
Fluorene	ND		5.0	1.1	ug/Kg	03/09/17 10:27	03/09/17 18:49	1	
Indeno[1,2,3-cd]pyrene	ND		5.0	2.1	ug/Kg	03/09/17 10:27	03/09/17 18:49	1	
Naphthalene	ND		5.0	1.8	ug/Kg	03/09/17 10:27	03/09/17 18:49	1	
Phenanthrene	ND		5.0	0.92	ug/Kg	03/09/17 10:27	03/09/17 18:49	1	
Pyrene	ND		5.0	0.83	ug/Kg	03/09/17 10:27	03/09/17 18:49	1	

**MB MB**

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
2-Fluorobiphenyl	91		33 - 120	03/09/17 10:27	03/09/17 18:49	1
Terphenyl-d14	109		35 - 146	03/09/17 10:27	03/09/17 18:49	1

**Lab Sample ID: LCS 720-219006/2-A**

**Matrix: Solid**

**Analysis Batch: 219057**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 219006**

Analyte	Spike		Result	LCS	LCS	Unit	D	%Rec	Limits
	Added	Qualifier							
Acenaphthene	333		310			ug/Kg		93	43 - 120
Acenaphthylene	333		299			ug/Kg		90	46 - 120
Anthracene	333		315			ug/Kg		94	55 - 120
Benzo[a]anthracene	333		292			ug/Kg		88	65 - 120
Benzo[a]pyrene	333		317			ug/Kg		95	62 - 120
Benzo[b]fluoranthene	333		292			ug/Kg		88	60 - 120
Benzo[g,h,i]perylene	333		317			ug/Kg		95	42 - 120
Benzo[k]fluoranthene	333		333			ug/Kg		100	63 - 120
Chrysene	333		301			ug/Kg		90	54 - 120
Dibenz(a,h)anthracene	333		316			ug/Kg		95	51 - 120
Fluoranthene	333		313			ug/Kg		94	59 - 120
Fluorene	333		306			ug/Kg		92	47 - 120
Indeno[1,2,3-cd]pyrene	333		320			ug/Kg		96	50 - 120
Naphthalene	333		267			ug/Kg		80	42 - 120
Phenanthrene	333		280			ug/Kg		84	51 - 120
Pyrene	333		308			ug/Kg		92	58 - 120

Surrogate	Spike		Result	LCS	LCS	Unit	D	%Rec	Limits
	%Recovery	Qualifier							
2-Fluorobiphenyl	88		33	120					
Terphenyl-d14	101		35	146					

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

## Method: 8015B - Diesel Range Organics (DRO) (GC)

**Lab Sample ID:** MB 720-219033/1-A

**Matrix:** Water

**Analysis Batch:** 219076

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics [C10-C28]	ND		50	22	ug/L		03/09/17 14:24	03/10/17 17:14	1
Motor Oil Range Organics [C24-C36]	ND		99	42	ug/L		03/09/17 14:24	03/10/17 17:14	1
<b>Surrogate</b>									
p-Terphenyl	MB	MB	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
			99		23 - 156		03/09/17 14:24	03/10/17 17:14	1

**Lab Sample ID:** LCS 720-219033/2-A

**Matrix:** Water

**Analysis Batch:** 219076

Analyte	Spike Added	LC	LC	Unit	D	%Rec.	Limits
		Result	Qualifier				
Diesel Range Organics [C10-C28]	2500	1990		ug/L		80	34 - 115
<b>Surrogate</b>							
p-Terphenyl	LC	LC	%Recovery	Qualifier	Limits		
			112		23 - 156		

**Lab Sample ID:** LCSD 720-219033/3-A

**Matrix:** Water

**Analysis Batch:** 219076

Analyte	Spike Added	LC	LC	Unit	D	%Rec.	RPD
		Result	Qualifier				
Diesel Range Organics [C10-C28]	2500	2120		ug/L		85	34 - 115
<b>Surrogate</b>							
p-Terphenyl	LC	LC	%Recovery	Qualifier	Limits		
			114		23 - 156		

**Lab Sample ID:** MB 720-219035/1-A

**Matrix:** Solid

**Analysis Batch:** 218993

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics [C10-C28]	ND		1.0	0.34	mg/Kg		03/09/17 14:48	03/09/17 22:34	1
Motor Oil Range Organics [C24-C36]	ND		50	0.58	mg/Kg		03/09/17 14:48	03/09/17 22:34	1
<b>Surrogate</b>									
p-Terphenyl	MB	MB	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
			98		40 - 130		03/09/17 14:48	03/09/17 22:34	1

**Lab Sample ID:** LCS 720-219035/2-A

**Matrix:** Solid

**Analysis Batch:** 218993

Analyte	Spike Added	LC	LC	Unit	D	%Rec.	Limits
		Result	Qualifier				
Diesel Range Organics [C10-C28]	83.3	75.3		mg/Kg		90	50 - 150

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 219035

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 219035

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

## Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

**Lab Sample ID:** LCS 720-219035/2-A

**Matrix:** Solid

**Analysis Batch:** 218993

**Client Sample ID:** Lab Control Sample

**Prep Type:** Total/NA

**Prep Batch:** 219035

Surrogate	LCS %Recovery	LCS Qualifier	Limits
p-Terphenyl	103		40 - 130

**Lab Sample ID:** 720-78049-1 MS

**Matrix:** Solid

**Analysis Batch:** 218995

**Client Sample ID:** HA06-SO-1.0

**Prep Type:** Total/NA

**Prep Batch:** 219035

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec.	Limits
Diesel Range Organics [C10-C28]	7.1		83.1	61.4		mg/Kg	65	50 - 150	
Surrogate	MS %Recovery	MS Qualifier	Limits						
p-Terphenyl	69		40 - 130						

**Lab Sample ID:** 720-78049-1 MSD

**Matrix:** Solid

**Analysis Batch:** 218995

**Client Sample ID:** HA06-SO-1.0

**Prep Type:** Total/NA

**Prep Batch:** 219035

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec.	RPD
Diesel Range Organics [C10-C28]	7.1		83.2	60.8		mg/Kg	65	50 - 150	RPD
Surrogate	MSD %Recovery	MSD Qualifier	Limits						Limit
p-Terphenyl	71		40 - 130						1

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

**Lab Sample ID:** MB 720-219007/1-A

**Matrix:** Solid

**Analysis Batch:** 218999

**Client Sample ID:** Method Blank

**Prep Type:** Total/NA

**Prep Batch:** 219007

Analyst	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50	1.8	ug/Kg	03/09/17 10:30	03/09/17 22:57		1
PCB-1221	ND		50	1.8	ug/Kg	03/09/17 10:30	03/09/17 22:57		1
PCB-1232	ND		50	1.8	ug/Kg	03/09/17 10:30	03/09/17 22:57		1
PCB-1242	ND		50	1.8	ug/Kg	03/09/17 10:30	03/09/17 22:57		1
PCB-1248	ND		50	1.8	ug/Kg	03/09/17 10:30	03/09/17 22:57		1
PCB-1254	ND		50	1.8	ug/Kg	03/09/17 10:30	03/09/17 22:57		1
PCB-1260	ND		50	5.3	ug/Kg	03/09/17 10:30	03/09/17 22:57		1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	83		45 - 132	03/09/17 10:30	03/09/17 22:57	1
DCB Decachlorobiphenyl	97		42 - 146	03/09/17 10:30	03/09/17 22:57	1

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

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

**Lab Sample ID: LCS 720-219007/2-A**

**Matrix: Solid**

**Analysis Batch: 218999**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 219007**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
PCB-1016	133	114		ug/Kg		86	65 - 121
PCB-1260	133	122		ug/Kg		91	68 - 127
Surrogate	%Recovery	LCS Qualifier	Limits				Limits
Tetrachloro-m-xylene	81		45 - 132				
DCB Decachlorobiphenyl	99		42 - 146				

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 720-218864/1-A**

**Matrix: Solid**

**Analysis Batch: 218951**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 218864**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50	0.083	mg/Kg		03/07/17 12:08	03/07/17 21:51	1
Arsenic	ND		1.0	0.085	mg/Kg		03/07/17 12:08	03/07/17 21:51	1
Barium	ND		0.50	0.071	mg/Kg		03/07/17 12:08	03/07/17 21:51	1
Beryllium	ND		0.10	0.033	mg/Kg		03/07/17 12:08	03/07/17 21:51	1
Cadmium	ND		0.13	0.012	mg/Kg		03/07/17 12:08	03/07/17 21:51	1
Chromium	ND		0.50	0.053	mg/Kg		03/07/17 12:08	03/07/17 21:51	1
Cobalt	ND		0.20	0.020	mg/Kg		03/07/17 12:08	03/07/17 21:51	1
Copper	ND		1.5	0.71	mg/Kg		03/07/17 12:08	03/07/17 21:51	1
Lead	ND		0.50	0.11	mg/Kg		03/07/17 12:08	03/07/17 21:51	1
Molybdenum	ND		0.50	0.064	mg/Kg		03/07/17 12:08	03/07/17 21:51	1
Nickel	ND		0.50	0.051	mg/Kg		03/07/17 12:08	03/07/17 21:51	1
Selenium	ND		1.0	0.15	mg/Kg		03/07/17 12:08	03/07/17 21:51	1
Silver	ND		0.25	0.051	mg/Kg		03/07/17 12:08	03/07/17 21:51	1
Thallium	ND		0.50	0.15	mg/Kg		03/07/17 12:08	03/07/17 21:51	1
Zinc	ND		1.5	0.64	mg/Kg		03/07/17 12:08	03/07/17 21:51	1

**Lab Sample ID: MB 720-218864/1-A**

**Matrix: Solid**

**Analysis Batch: 218989**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 218864**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	ND		0.50	0.068	mg/Kg		03/07/17 12:08	03/08/17 18:43	1

**Lab Sample ID: LCS 720-218864/2-A**

**Matrix: Solid**

**Analysis Batch: 218951**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 218864**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Antimony	50.0	43.2		mg/Kg		86	80 - 120
Arsenic	50.0	44.2		mg/Kg		88	80 - 120
Barium	50.0	45.1		mg/Kg		90	80 - 120
Beryllium	50.0	45.2		mg/Kg		90	80 - 120
Cadmium	50.0	44.1		mg/Kg		88	80 - 120
Chromium	50.0	44.5		mg/Kg		89	80 - 120

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

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

**Lab Sample ID: LCS 720-218864/2-A**

**Matrix: Solid**

**Analysis Batch: 218951**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 218864**

**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cobalt	50.0	45.4		mg/Kg	91	80 - 120	
Copper	50.0	45.6		mg/Kg	91	80 - 120	
Lead	50.0	45.6		mg/Kg	91	80 - 120	
Molybdenum	50.0	45.2		mg/Kg	90	80 - 120	
Nickel	50.0	45.1		mg/Kg	90	80 - 120	
Selenium	50.0	43.4		mg/Kg	87	80 - 120	
Silver	25.0	22.1		mg/Kg	88	80 - 120	
Thallium	50.0	45.5		mg/Kg	91	80 - 120	
Zinc	50.0	44.3		mg/Kg	89	80 - 120	

**Lab Sample ID: LCS 720-218864/2-A**

**Matrix: Solid**

**Analysis Batch: 218989**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 218864**

**%Rec.**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Vanadium	50.0	43.3		mg/Kg	87	80 - 120	

**Lab Sample ID: 720-78049-1 MS**

**Matrix: Solid**

**Analysis Batch: 218951**

**Client Sample ID: HA06-SO-1.0**

**Prep Type: Total/NA**

**Prep Batch: 218864**

**%Rec.**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	ND	F1	34.0	9.18	F1	mg/Kg	25	75 - 125	
Arsenic	4.3		34.0	34.9		mg/Kg	90	75 - 125	
Barium	130	F1	34.0	157	F1	mg/Kg	67	75 - 125	
Beryllium	0.45		34.0	31.5		mg/Kg	91	75 - 125	
Cadmium	ND		34.0	30.8		mg/Kg	90	75 - 125	
Chromium	40		34.0	69.4		mg/Kg	86	75 - 125	
Cobalt	10		34.0	39.7		mg/Kg	87	75 - 125	
Copper	27		34.0	56.7		mg/Kg	86	75 - 125	
Lead	44	F1	34.0	92.1	F1	mg/Kg	141	75 - 125	
Molybdenum	ND		34.0	28.9		mg/Kg	83	75 - 125	
Nickel	56	F1	34.0	81.1	F1	mg/Kg	74	75 - 125	
Selenium	ND		34.0	29.1		mg/Kg	82	75 - 125	
Silver	ND		17.0	15.8		mg/Kg	93	75 - 125	
Thallium	ND		34.0	29.9		mg/Kg	88	75 - 125	
Zinc	87		34.0	126		mg/Kg	116	75 - 125	

**Lab Sample ID: 720-78049-1 MS**

**Matrix: Solid**

**Analysis Batch: 218989**

**Client Sample ID: HA06-SO-1.0**

**Prep Type: Total/NA**

**Prep Batch: 218864**

**%Rec.**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Vanadium	34		34.0	61.9		mg/Kg	82	75 - 125	

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

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

**Lab Sample ID: 720-78049-1 MSD**

**Matrix: Solid**

**Analysis Batch: 218951**

**Client Sample ID: HA06-SO-1.0**

**Prep Type: Total/NA**

**Prep Batch: 218864**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Antimony	ND	F1	37.9	10.9	F1	mg/Kg	27	75 - 125	17	20	6
Arsenic	4.3		37.9	38.4		mg/Kg	90	75 - 125	10	20	7
Barium	130	F1	37.9	165		mg/Kg	80	75 - 125	5	20	8
Beryllium	0.45		37.9	36.3		mg/Kg	95	75 - 125	14	20	9
Cadmium	ND		37.9	35.9		mg/Kg	94	75 - 125	15	20	10
Chromium	40		37.9	77.3		mg/Kg	98	75 - 125	11	20	11
Cobalt	10		37.9	44.1		mg/Kg	90	75 - 125	11	20	12
Copper	27		37.9	64.5		mg/Kg	98	75 - 125	13	20	13
Lead	44	F1	37.9	82.6		mg/Kg	102	75 - 125	11	20	14
Molybdenum	ND		37.9	32.5		mg/Kg	84	75 - 125	12	20	15
Nickel	56	F1	37.9	88.5		mg/Kg	86	75 - 125	9	20	16
Selenium	ND		37.9	34.0		mg/Kg	87	75 - 125	16	20	17
Silver	ND		18.9	18.2		mg/Kg	96	75 - 125	14	20	18
Thallium	ND		37.9	34.5		mg/Kg	91	75 - 125	14	20	19
Zinc	87		37.9	126		mg/Kg	103	75 - 125	0	20	20

**Lab Sample ID: 720-78049-1 MSD**

**Matrix: Solid**

**Analysis Batch: 218989**

**Client Sample ID: HA06-SO-1.0**

**Prep Type: Total/NA**

**Prep Batch: 218864**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec.	Limits	RPD	RPD Limit
	Result	Qualifier	Added	Result	Qualifier						
Vanadium	34		37.9	69.7		mg/Kg	94	75 - 125	12	20	

**Lab Sample ID: MB 720-218940/1-A**

**Matrix: Water**

**Analysis Batch: 219026**

**Client Sample ID: Method Blank**

**Prep Type: Total Recoverable**

**Prep Batch: 218940**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	ND		0.010	0.0041	mg/L		03/08/17 12:00	03/09/17 12:18	1
Arsenic	ND		0.010	0.0029	mg/L		03/08/17 12:00	03/09/17 12:18	1
Barium	ND		0.050	0.0016	mg/L		03/08/17 12:00	03/09/17 12:18	1
Beryllium	ND		0.0020	0.00059	mg/L		03/08/17 12:00	03/09/17 12:18	1
Cadmium	ND		0.0020	0.00021	mg/L		03/08/17 12:00	03/09/17 12:18	1
Chromium	ND		0.010	0.00070	mg/L		03/08/17 12:00	03/09/17 12:18	1
Cobalt	ND		0.0020	0.00068	mg/L		03/08/17 12:00	03/09/17 12:18	1
Copper	ND		0.020	0.0037	mg/L		03/08/17 12:00	03/09/17 12:18	1
Lead	ND		0.0050	0.0022	mg/L		03/08/17 12:00	03/09/17 12:18	1
Molybdenum	ND		0.010	0.0029	mg/L		03/08/17 12:00	03/09/17 12:18	1
Nickel	ND		0.010	0.0010	mg/L		03/08/17 12:00	03/09/17 12:18	1
Selenium	ND		0.020	0.0046	mg/L		03/08/17 12:00	03/09/17 12:18	1
Silver	ND		0.0050	0.0020	mg/L		03/08/17 12:00	03/09/17 12:18	1
Thallium	ND		0.010	0.0035	mg/L		03/08/17 12:00	03/09/17 12:18	1
Vanadium	ND		0.010	0.00087	mg/L		03/08/17 12:00	03/09/17 12:18	1
Zinc	ND		0.020	0.0074	mg/L		03/08/17 12:00	03/09/17 12:18	1

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

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

**Lab Sample ID: LCS 720-218940/2-A**

**Matrix: Water**

**Analysis Batch: 219026**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total Recoverable**

**Prep Batch: 218940**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	1.00	0.947		mg/L	95	80 - 120	
Arsenic	1.00	0.906		mg/L	91	80 - 120	
Barium	1.00	0.924		mg/L	92	80 - 120	
Beryllium	1.00	0.997		mg/L	100	80 - 120	
Cadmium	1.00	0.959		mg/L	96	80 - 120	
Chromium	1.00	0.970		mg/L	97	80 - 120	
Cobalt	1.00	0.882		mg/L	88	80 - 120	
Copper	1.00	0.961		mg/L	96	80 - 120	
Lead	1.00	0.921		mg/L	92	80 - 120	
Molybdenum	1.00	0.898		mg/L	90	80 - 120	
Nickel	1.00	0.987		mg/L	99	80 - 120	
Selenium	1.00	0.906		mg/L	91	80 - 120	
Silver	0.500	0.483		mg/L	97	80 - 120	
Thallium	1.00	0.920		mg/L	92	80 - 120	
Vanadium	1.00	0.901		mg/L	90	80 - 120	
Zinc	1.00	0.930		mg/L	93	80 - 120	

**Lab Sample ID: MB 720-218799/1-B**

**Matrix: Water**

**Analysis Batch: 219026**

**Client Sample ID: Method Blank**

**Prep Type: Dissolved**

**Prep Batch: 218940**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	ND		0.010	0.0041	mg/L		03/08/17 12:00	03/09/17 12:23	1
Arsenic	ND		0.010	0.0029	mg/L		03/08/17 12:00	03/09/17 12:23	1
Barium	ND		0.050	0.0016	mg/L		03/08/17 12:00	03/09/17 12:23	1
Beryllium	ND		0.0020	0.00059	mg/L		03/08/17 12:00	03/09/17 12:23	1
Cadmium	ND		0.0020	0.00021	mg/L		03/08/17 12:00	03/09/17 12:23	1
Chromium	ND		0.010	0.00070	mg/L		03/08/17 12:00	03/09/17 12:23	1
Cobalt	ND		0.0020	0.00068	mg/L		03/08/17 12:00	03/09/17 12:23	1
Copper	ND		0.020	0.0037	mg/L		03/08/17 12:00	03/09/17 12:23	1
Lead	ND		0.0050	0.0022	mg/L		03/08/17 12:00	03/09/17 12:23	1
Molybdenum	ND		0.010	0.0029	mg/L		03/08/17 12:00	03/09/17 12:23	1
Nickel	ND		0.010	0.0010	mg/L		03/08/17 12:00	03/09/17 12:23	1
Selenium	ND		0.020	0.0046	mg/L		03/08/17 12:00	03/09/17 12:23	1
Silver	ND		0.0050	0.0020	mg/L		03/08/17 12:00	03/09/17 12:23	1
Thallium	ND		0.010	0.0035	mg/L		03/08/17 12:00	03/09/17 12:23	1
Vanadium	ND		0.010	0.00087	mg/L		03/08/17 12:00	03/09/17 12:23	1
Zinc	ND		0.020	0.0074	mg/L		03/08/17 12:00	03/09/17 12:23	1

**Lab Sample ID: 720-78049-3 MS**

**Matrix: Water**

**Analysis Batch: 219026**

**Client Sample ID: HA06-GW**

**Prep Type: Dissolved**

**Prep Batch: 218940**

Analyte	Sample	Sample	Spike	MS Result	MS Qualifier	Unit	D	%Rec	Limits
	Result	Qualifier	Added						
Antimony	ND		1.00	0.994		mg/L		99	75 - 125
Arsenic	ND		1.00	0.989		mg/L		99	75 - 125
Barium	0.088		1.00	1.01		mg/L		92	75 - 125
Beryllium	ND		1.00	0.998		mg/L		100	75 - 125

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

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

**Lab Sample ID: 720-78049-3 MS**

**Matrix: Water**

**Analysis Batch: 219026**

**Client Sample ID: HA06-GW**

**Prep Type: Dissolved**

**Prep Batch: 218940**

**%Rec.**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	
	Result	Qualifier	Added	Result	Qualifier					
Cadmium	ND		1.00	0.946		mg/L		95	75 - 125	
Chromium	ND		1.00	0.969		mg/L		97	75 - 125	
Cobalt	0.0027		1.00	0.841		mg/L		84	75 - 125	
Copper	ND		1.00	0.958		mg/L		95	75 - 125	
Lead	0.029		1.00	0.899		mg/L		87	75 - 125	
Molybdenum	ND		1.00	0.936		mg/L		93	75 - 125	
Nickel	0.025		1.00	0.963		mg/L		94	75 - 125	
Selenium	ND		1.00	0.966		mg/L		95	75 - 125	
Silver	ND		0.500	0.504		mg/L		101	75 - 125	
Thallium	ND		1.00	0.815		mg/L		82	75 - 125	
Vanadium	ND		1.00	0.936		mg/L		94	75 - 125	
Zinc	0.028		1.00	0.946		mg/L		92	75 - 125	

**Lab Sample ID: 720-78049-3 MSD**

**Matrix: Water**

**Analysis Batch: 219026**

**Client Sample ID: HA06-GW**

**Prep Type: Dissolved**

**Prep Batch: 218940**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Antimony	ND		1.00	0.967		mg/L		97	75 - 125	3	20
Arsenic	ND		1.00	0.958		mg/L		96	75 - 125	3	20
Barium	0.088		1.00	0.992		mg/L		90	75 - 125	2	20
Beryllium	ND		1.00	0.980		mg/L		98	75 - 125	2	20
Cadmium	ND		1.00	0.924		mg/L		92	75 - 125	2	20
Chromium	ND		1.00	0.948		mg/L		95	75 - 125	2	20
Cobalt	0.0027		1.00	0.816		mg/L		81	75 - 125	3	20
Copper	ND		1.00	0.936		mg/L		93	75 - 125	2	20
Lead	0.029		1.00	0.875		mg/L		85	75 - 125	3	20
Molybdenum	ND		1.00	0.910		mg/L		90	75 - 125	3	20
Nickel	0.025		1.00	0.941		mg/L		92	75 - 125	2	20
Selenium	ND		1.00	0.939		mg/L		92	75 - 125	3	20
Silver	ND		0.500	0.492		mg/L		98	75 - 125	2	20
Thallium	ND		1.00	0.790		mg/L		79	75 - 125	3	20
Vanadium	ND		1.00	0.913		mg/L		91	75 - 125	2	20
Zinc	0.028		1.00	0.927		mg/L		90	75 - 125	2	20

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID: MB 320-153931/11-A**

**Matrix: Water**

**Analysis Batch: 154137**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 153931**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.00020	0.00010	mg/L		03/08/17 13:36	03/09/17 08:03	1

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

## Method: 7470A - Mercury (CVAA) (Continued)

**Lab Sample ID: LCS 320-153931/12-A**

**Matrix: Water**

**Analysis Batch: 154137**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 153931**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Mercury	0.00100	0.00102		mg/L	102	82 - 113	

**Lab Sample ID: 720-78049-3 MS**

**Matrix: Water**

**Analysis Batch: 154137**

**Client Sample ID: HA06-GW**

**Prep Type: Dissolved**

**Prep Batch: 153931**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.
Mercury	ND		0.00100	0.000928		mg/L	93	82 - 113	

**Lab Sample ID: 720-78049-3 MSD**

**Matrix: Water**

**Analysis Batch: 154137**

**Client Sample ID: HA06-GW**

**Prep Type: Dissolved**

**Prep Batch: 153931**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	RPD
Mercury	ND		0.00100	0.000928		mg/L	93	82 - 113		0 17

## Method: 7471A - Mercury (CVAA)

**Lab Sample ID: MB 320-154141/11-A**

**Matrix: Solid**

**Analysis Batch: 154344**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 154141**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.040	0.0086	mg/Kg	03/09/17 14:50	03/10/17 08:57		1

**Lab Sample ID: LCS 320-154141/12-A**

**Matrix: Solid**

**Analysis Batch: 154344**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 154141**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
Mercury	0.167	0.169		mg/Kg	101	86 - 114	

TestAmerica Pleasanton

# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

## GC/MS VOA

### Prep Batch: 218842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-1	HA06-SO-1.0	Total/NA	Solid	5030B	
720-78049-2	HA06-SO-15	Total/NA	Solid	5030B	

### Analysis Batch: 219161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-3	HA06-GW	Total/NA	Water	8260B/CA_LUFT	
MB 720-219161/4	Method Blank	Total/NA	Water	MS	
LCS 720-219161/5	Lab Control Sample	Total/NA	Water	8260B/CA_LUFT	
LCS 720-219161/7	Lab Control Sample	Total/NA	Water	MS	
LCSD 720-219161/6	Lab Control Sample Dup	Total/NA	Water	8260B/CA_LUFT	
LCSD 720-219161/8	Lab Control Sample Dup	Total/NA	Water	MS	
				8260B/CA_LUFT	
				MS	
				8260B/CA_LUFT	
				MS	
				8260B/CA_LUFT	
				MS	
				8260B/CA_LUFT	
				MS	

### Analysis Batch: 219162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-1	HA06-SO-1.0	Total/NA	Solid	8260B	218842
720-78049-2	HA06-SO-15	Total/NA	Solid	8260B	218842
MB 720-219162/4	Method Blank	Total/NA	Solid	8260B	
LCS 720-219162/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-219162/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-219162/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-219162/8	Lab Control Sample Dup	Total/NA	Solid	8260B	

## GC/MS Semi VOA

### Prep Batch: 219006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-1	HA06-SO-1.0	Total/NA	Solid	3546	
720-78049-2	HA06-SO-15	Total/NA	Solid	3546	
MB 720-219006/1-A	Method Blank	Total/NA	Solid	3546	
LCS 720-219006/2-A	Lab Control Sample	Total/NA	Solid	3546	

### Analysis Batch: 219057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-1	HA06-SO-1.0	Total/NA	Solid	8270C SIM	219006
720-78049-2	HA06-SO-15	Total/NA	Solid	8270C SIM	219006
MB 720-219006/1-A	Method Blank	Total/NA	Solid	8270C SIM	219006
LCS 720-219006/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	219006

## GC Semi VOA

### Analysis Batch: 218993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-219035/1-A	Method Blank	Total/NA	Solid	8015B	219035
LCS 720-219035/2-A	Lab Control Sample	Total/NA	Solid	8015B	219035

TestAmerica Pleasanton

# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

## GC Semi VOA (Continued)

### Analysis Batch: 218995

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-1	HA06-SO-1.0	Total/NA	Solid	8015B	219035
720-78049-1 MS	HA06-SO-1.0	Total/NA	Solid	8015B	219035
720-78049-1 MSD	HA06-SO-1.0	Total/NA	Solid	8015B	219035

### Analysis Batch: 218997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-2	HA06-SO-15	Total/NA	Solid	8015B	219035

### Analysis Batch: 218999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-1	HA06-SO-1.0	Total/NA	Solid	8082	219007
MB 720-219007/1-A	Method Blank	Total/NA	Solid	8082	219007
LCS 720-219007/2-A	Lab Control Sample	Total/NA	Solid	8082	219007

### Prep Batch: 219007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-1	HA06-SO-1.0	Total/NA	Solid	3546	219007
MB 720-219007/1-A	Method Blank	Total/NA	Solid	3546	219007
LCS 720-219007/2-A	Lab Control Sample	Total/NA	Solid	3546	219007

### Prep Batch: 219033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-3	HA06-GW	Total/NA	Water	3510C	219033
MB 720-219033/1-A	Method Blank	Total/NA	Water	3510C	219033
LCS 720-219033/2-A	Lab Control Sample	Total/NA	Water	3510C	219033
LCSD 720-219033/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	219033

### Prep Batch: 219035

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-1	HA06-SO-1.0	Total/NA	Solid	3546	219035
720-78049-2	HA06-SO-15	Total/NA	Solid	3546	219035
MB 720-219035/1-A	Method Blank	Total/NA	Solid	3546	219035
LCS 720-219035/2-A	Lab Control Sample	Total/NA	Solid	3546	219035
720-78049-1 MS	HA06-SO-1.0	Total/NA	Solid	3546	219035
720-78049-1 MSD	HA06-SO-1.0	Total/NA	Solid	3546	219035

### Analysis Batch: 219076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-219033/1-A	Method Blank	Total/NA	Water	8015B	219033
LCS 720-219033/2-A	Lab Control Sample	Total/NA	Water	8015B	219033
LCSD 720-219033/3-A	Lab Control Sample Dup	Total/NA	Water	8015B	219033

### Analysis Batch: 219173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-3	HA06-GW	Total/NA	Water	8015B	219033

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

TestAmerica Pleasanton

# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

## Metals

### Filtration Batch: 153814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-3	HA06-GW	Dissolved	Water	Filtration	218799
720-78049-3 MS	HA06-GW	Dissolved	Water	Filtration	218799
720-78049-3 MSD	HA06-GW	Dissolved	Water	Filtration	218799

### Prep Batch: 153931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-3	HA06-GW	Dissolved	Water	7470A	153814
MB 320-153931/11-A	Method Blank	Total/NA	Water	7470A	
LCS 320-153931/12-A	Lab Control Sample	Total/NA	Water	7470A	
720-78049-3 MS	HA06-GW	Dissolved	Water	7470A	153814
720-78049-3 MSD	HA06-GW	Dissolved	Water	7470A	153814

### Analysis Batch: 154137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-3	HA06-GW	Dissolved	Water	7470A	153931
MB 320-153931/11-A	Method Blank	Total/NA	Water	7470A	153931
LCS 320-153931/12-A	Lab Control Sample	Total/NA	Water	7470A	153931
720-78049-3 MS	HA06-GW	Dissolved	Water	7470A	153931
720-78049-3 MSD	HA06-GW	Dissolved	Water	7470A	153931

### Prep Batch: 154141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-1	HA06-SO-1.0	Total/NA	Solid	7471A	
720-78049-2	HA06-SO-15	Total/NA	Solid	7471A	
MB 320-154141/11-A	Method Blank	Total/NA	Solid	7471A	
LCS 320-154141/12-A	Lab Control Sample	Total/NA	Solid	7471A	

### Analysis Batch: 154344

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-1	HA06-SO-1.0	Total/NA	Solid	7471A	154141
720-78049-2	HA06-SO-15	Total/NA	Solid	7471A	154141
MB 320-154141/11-A	Method Blank	Total/NA	Solid	7471A	154141
LCS 320-154141/12-A	Lab Control Sample	Total/NA	Solid	7471A	154141

### Filtration Batch: 218799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-3	HA06-GW	Dissolved	Water	FILTRATION	
MB 720-218799/1-B	Method Blank	Dissolved	Water	FILTRATION	
720-78049-3 MS	HA06-GW	Dissolved	Water	FILTRATION	
720-78049-3 MSD	HA06-GW	Dissolved	Water	FILTRATION	

### Prep Batch: 218864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-1	HA06-SO-1.0	Total/NA	Solid	3050B	
720-78049-2	HA06-SO-15	Total/NA	Solid	3050B	
MB 720-218864/1-A	Method Blank	Total/NA	Solid	3050B	
LCS 720-218864/2-A	Lab Control Sample	Total/NA	Solid	3050B	
720-78049-1 MS	HA06-SO-1.0	Total/NA	Solid	3050B	
720-78049-1 MSD	HA06-SO-1.0	Total/NA	Solid	3050B	

TestAmerica Pleasanton

# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

## Metals (Continued)

### Prep Batch: 218940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-3	HA06-GW	Dissolved	Water	3005A	218799
MB 720-218799/1-B	Method Blank	Dissolved	Water	3005A	218799
MB 720-218940/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 720-218940/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
720-78049-3 MS	HA06-GW	Dissolved	Water	3005A	218799
720-78049-3 MSD	HA06-GW	Dissolved	Water	3005A	218799

### Analysis Batch: 218951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-1	HA06-SO-1.0	Total/NA	Solid	6010B	218864
720-78049-2	HA06-SO-15	Total/NA	Solid	6010B	218864
MB 720-218864/1-A	Method Blank	Total/NA	Solid	6010B	218864
LCS 720-218864/2-A	Lab Control Sample	Total/NA	Solid	6010B	218864
720-78049-1 MS	HA06-SO-1.0	Total/NA	Solid	6010B	218864
720-78049-1 MSD	HA06-SO-1.0	Total/NA	Solid	6010B	218864

### Analysis Batch: 218989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-1	HA06-SO-1.0	Total/NA	Solid	6010B	218864
720-78049-2	HA06-SO-15	Total/NA	Solid	6010B	218864
MB 720-218864/1-A	Method Blank	Total/NA	Solid	6010B	218864
LCS 720-218864/2-A	Lab Control Sample	Total/NA	Solid	6010B	218864
720-78049-1 MS	HA06-SO-1.0	Total/NA	Solid	6010B	218864
720-78049-1 MSD	HA06-SO-1.0	Total/NA	Solid	6010B	218864

### Analysis Batch: 219026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-78049-3	HA06-GW	Dissolved	Water	6010B	218940
MB 720-218799/1-B	Method Blank	Dissolved	Water	6010B	218940
MB 720-218940/1-A	Method Blank	Total Recoverable	Water	6010B	218940
LCS 720-218940/2-A	Lab Control Sample	Total Recoverable	Water	6010B	218940
720-78049-3 MS	HA06-GW	Dissolved	Water	6010B	218940
720-78049-3 MSD	HA06-GW	Dissolved	Water	6010B	218940

# Lab Chronicle

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

**Client Sample ID: HA06-SO-1.0**

Date Collected: 03/03/17 09:05

Date Received: 03/03/17 15:30

**Lab Sample ID: 720-78049-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			218842	03/06/17 20:42	CTD	TAL PLS
Total/NA	Analysis	8260B		1	219162	03/11/17 18:53	JRM	TAL PLS
Total/NA	Prep	3546			219006	03/09/17 10:27	RAC	TAL PLS
Total/NA	Analysis	8270C SIM		1	219057	03/09/17 19:12	MQL	TAL PLS
Total/NA	Prep	3546			219035	03/09/17 14:48	NAW	TAL PLS
Total/NA	Analysis	8015B		1	218995	03/09/17 23:03	JXL	TAL PLS
Total/NA	Prep	3546			219007	03/09/17 10:30	JEV	TAL PLS
Total/NA	Analysis	8082		1	218999	03/10/17 02:17	DCH	TAL PLS
Total/NA	Prep	3050B			218864	03/07/17 12:08	BRB	TAL PLS
Total/NA	Analysis	6010B		4	218951	03/07/17 22:31	ASB	TAL PLS
Total/NA	Prep	3050B			218864	03/07/17 12:08	BRB	TAL PLS
Total/NA	Analysis	6010B		4	218989	03/08/17 19:12	ASB	TAL PLS
Total/NA	Prep	7471A			154141	03/09/17 14:50	GSH	TAL SAC
Total/NA	Analysis	7471A		1	154344	03/10/17 09:36	GSH	TAL SAC

**Client Sample ID: HA06-SO-15**

Date Collected: 03/03/17 09:30

Date Received: 03/03/17 15:30

**Lab Sample ID: 720-78049-2**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			218842	03/06/17 20:42	CTD	TAL PLS
Total/NA	Analysis	8260B		1	219162	03/11/17 19:21	JRM	TAL PLS
Total/NA	Prep	3546			219006	03/09/17 10:27	RAC	TAL PLS
Total/NA	Analysis	8270C SIM		1	219057	03/09/17 19:36	MQL	TAL PLS
Total/NA	Prep	3546			219035	03/09/17 14:48	NAW	TAL PLS
Total/NA	Analysis	8015B		1	218997	03/10/17 01:20	JXL	TAL PLS
Total/NA	Prep	3050B			218864	03/07/17 12:08	BRB	TAL PLS
Total/NA	Analysis	6010B		4	218951	03/07/17 22:36	ASB	TAL PLS
Total/NA	Prep	3050B			218864	03/07/17 12:08	BRB	TAL PLS
Total/NA	Analysis	6010B		4	218989	03/08/17 19:17	ASB	TAL PLS
Total/NA	Prep	7471A			154141	03/09/17 14:50	GSH	TAL SAC
Total/NA	Analysis	7471A		1	154344	03/10/17 09:38	GSH	TAL SAC

**Client Sample ID: HA06-GW**

Date Collected: 03/03/17 09:45

Date Received: 03/03/17 15:30

**Lab Sample ID: 720-78049-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B/CA_LUFTMS		1	219161	03/11/17 22:20	CAM	TAL PLS
Total/NA	Prep	3510C			219033	03/09/17 18:28	BRR	TAL PLS
Total/NA	Analysis	8015B		1	219173	03/13/17 11:56	JXL	TAL PLS
Dissolved	Filtration	FILTRATION			218799	03/06/17 09:15	JNG	TAL PLS
Dissolved	Prep	3005A			218940	03/08/17 12:00	JNG	TAL PLS

TestAmerica Pleasanton

# Lab Chronicle

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

**Client Sample ID: HA06-GW**

Date Collected: 03/03/17 09:45

Date Received: 03/03/17 15:30

**Lab Sample ID: 720-78049-3**

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Analysis	6010B		1	219026	03/09/17 12:53	ASB	TAL PLS
Dissolved	Filtration	FILTRATION			218799	03/06/17 09:15	JNG	TAL SAC
Dissolved	Filtration	Filtration			153814	03/08/17 09:08	GSH	TAL SAC
Dissolved	Prep	7470A			153931	03/08/17 13:36	GSH	TAL SAC
Dissolved	Analysis	7470A		1	154137	03/09/17 09:32	GSH	TAL SAC

**Laboratory References:**

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

# Certification Summary

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

## Laboratory: TestAmerica Pleasanton

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

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-18

## Laboratory: TestAmerica Sacramento

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-055	12-18-17
Arizona	State Program	9	AZ0708	08-11-17
Arkansas DEQ	State Program	6	88-0691	06-17-17
California	State Program	9	2897	01-31-18
Colorado	State Program	8	CA00044	08-31-17
Connecticut	State Program	1	PH-0691	06-30-17
Florida	NELAP	4	E87570	06-30-17
Hawaii	State Program	9	N/A	01-29-18
Illinois	NELAP	5	200060	03-17-18
Kansas	NELAP	7	E-10375	10-31-17
L-A-B	DoD ELAP		L2468	01-20-18
Louisiana	NELAP	6	30612	06-30-17
Maine	State Program	1	CA0004	04-18-18
Michigan	State Program	5	9947	01-31-18
Nevada	State Program	9	CA00044	07-31-17
New Jersey	NELAP	2	CA005	06-30-17
New York	NELAP	2	11666	04-01-17
Oregon	NELAP	10	4040	01-28-18
Pennsylvania	NELAP	3	68-01272	03-31-17
Texas	NELAP	6	T104704399	07-31-17
US Fish & Wildlife	Federal		LE148388-0	10-31-17
USDA	Federal		P330-11-00436	12-30-17
USEPA UCMR	Federal	1	CA00044	11-06-18
Utah	NELAP	8	CA00044	02-28-17 *
Virginia	NELAP	3	460278	03-14-18
Washington	State Program	10	C581	05-05-17
West Virginia (DW)	State Program	3	9930C	12-31-17
Wyoming	State Program	8	8TMS-L	01-29-17 *

\* Certification renewal pending - certification considered valid.

# Method Summary

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8260B/CA_LUFTM S	8260B / CA LUFT MS	SW846	TAL PLS
8270C SIM	PAHs by GCMS (SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7470A	Mercury (CVAA)	SW846	TAL SAC
7471A	Mercury (CVAA)	SW846	TAL SAC

## Protocol References:

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

## Laboratory References:

TAL PLS = TestAmerica Pleasanton, 1220 Quarry Lane, Pleasanton, CA 94566, TEL (925)484-1919

TAL SAC = TestAmerica Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

## Sample Summary

Client: Haley & Aldrich, Inc.  
Project/Site: TCC Assemblages

TestAmerica Job ID: 720-78049-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-78049-1	HA06-SO-1.0	Solid	03/03/17 09:05	03/03/17 15:30
720-78049-2	HA06-SO-15	Solid	03/03/17 09:30	03/03/17 15:30
720-78049-3	HA06-GW	Water	03/03/17 09:45	03/03/17 15:30

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15

TestAmerica Pleasanton

Pleasanton, CA 94566-4756  
phone 925.484.1919 fax 925.600.3002

TestAmerica's services under this CoC shall be performed in accordance with the T&Cs within Blanket Service Agreement# 2015-18-TestAmerica by and between Haley & Aldrich, Inc. its subsidiaries and affiliates, and TestAmerica Laboratories Inc...

# 720-78049

174477

THE LEADER IN ENVIRONMENTAL TESTING  
5/5

TestAmerica Laboratories, Inc.

Regulatory Program:  DW  NPDES  RORA  Other

46

Page 46 of 49

<b>Client Contact</b>	H&A Project Manager: J. Grant	<b>H&amp;A Site Contact:</b> B. Rumley	Date: 3/3/17
Haley & Aldrich	Tel/Fax: 925-949-4412	Lab Contact: D. Sharma	COC No:
2033 N. Main St. Suite #309	<b>Analysis Turnaround Time</b>	Carrier:	1 of 1 COCs
Walnut Creek, CA 94596	<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS	Sampler:	
(925) 949-4412	TAT if different from Below — 5 DAY —	For Lab Use Only:	
	<input type="checkbox"/> 2 weeks	Walk-in Client:	
	<input type="checkbox"/> 1 week	Lab Sampling:	
	<input type="checkbox"/> 2 days	Job / SDG No.:	
	<input type="checkbox"/> 1 day		

Sample Identification	Sample Date	Sample Time	Sample Type (=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample ( Y / N )
HAG6-SO-1.0	3/3/17	0905	G	SOL	4	X X X X
HAG6-SO-1.5		0930	G	SOL	4	X X X X
HAG6-GW		0945	G	W	6	X X X X



720-78049 Chain of Custody

**Preservation Used:** 1= Ice, 2= HCl, 3= H<sub>2</sub>SO<sub>4</sub>; 4=HNO<sub>3</sub>; 5=NaOH; 6= Other

#### Sample Disposal

**Possible Hazard Identification:**  
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown

Return to Client  Disposal by Lab  Archive for Months

#### Special Instructions/QC Requirements & Comments:

Custody Seals Intact:  Yes  No Custody Seal No.: Cooler Temp. (°C): Obs'd: Cont'd: Therm ID No.:

Relinquished by: Company: HAA Date/Time: 3/3/17 1140 Received by: Company: TA Date/Time: 3/3/17 1140

Relinquished by: Company: TH Date/Time: 23P Received by: Company: TA Date/Time: 3/3/17 1530 Received in Laboratory by:

**TestAmerica Pleasanton**

 1220 Quarry Lane  
 Pleasanton, CA 94566  
 Phone (925) 484-1919 Fax: (925) 600-3002

**Chain of Custody Record**

**TestAmerica**

THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information (Sub Contract Lab)</b>		Sampler:		Lab P.M: Sharma, Dimple		Carrier Tracking No(s): 720-32893.1		COC No: 720-32893.1			
Client Contact:	Phone:	E-Mail:	dimple.sharma@testamericanainc.com <th colspan="2">State of Origin: California</th> <th colspan="2">Page: 1 of 1</th> <th colspan="2">Page:</th>	State of Origin: California		Page: 1 of 1		Page:			
Shipping/Receiving Company:	Accreditations Required (See note): Job #: 7720-78049-1								Job #:		
TestAmerica Laboratories, Inc.	Address:	Due Date Requested:	TAT Requested (days):	Analysis Requested						Preservation Codes:	
880 Riverside Parkway, City: West Sacramento	State, Zip: CA, 95605	PO #:	916-373-5600(Tel) 916-372-1059(Fax)	Total Number of Containers						A - HCl B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - Na2CO3 G - Ammonium H - Ascorbic Acid I - Ice J - Di Water K - EDTA L - EDA Z - other (specify) Other:	
Email:	WO #:	Project #:	72012469	7471A/7471A-Prep Mercury Only 7471A/7471A-Prep Mercury Only Perform MS/MSD (Yes or No)						M - Hexane N - None O - AsNaO2 P - Na2OIS Q - Na2SO3 R - Na2CO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCA W - pH 4-5	
Project Name:	TCC Assemblies	Site:	SSOW#:	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, T=tissue, A=air)	Preservation Code:	Special Instructions/Note:		
				3/3/17	09:05	Solid	X		X		
HA06-SO-1.0 (720-78049-1)				3/3/17	09:30	Solid	X		1		
HA06-SO-15 (720-78049-2)				3/3/17	09:45	Water	X		1		
HA06-GW (720-78049-3)				3/3/17	Pacific				1		
Sample Identification - Client ID (Lab ID)											
Field Filtered Sample (Yes or No)											
7471A/7471A-Prep Mercury Only 7471A/7471A-Prep Mercury Only Perform MS/MSD (Yes or No)											
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our 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/testmatrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.											
<b>Possible Hazard Identification</b> <input type="checkbox"/> Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)											
<b>Empty Kit Relinquished by:</b> Relinquished by: <i>L</i> Date/Time: 3/6/17 Relinquished by: Date/Time:											
<b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b> <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab Special Instructions/QC Requirements: Primary Deliverable Rank: 2											
Date: <i>1825</i> Time: <i>18:25</i> Method of Shipment: Received by: <i>John Monzon</i> Date/Time: 3/06/17 Received by: Date/Time:											
Date/Time: <i>18:25</i> Company: <i>TA</i> Received by: <i>John Monzon</i> Date/Time: 3/06/17 Received by: Date/Time:											
Date/Time: <i>18:25</i> Company: <i>TA</i> Received by: <i>John Monzon</i> Date/Time: 3/06/17 Received by: Date/Time:											
Cooler Temperature(s) °C and Other Remarks: -4°C Not frozen Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No											

 1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 13  
 14  
 15

## Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 720-78049-1

**Login Number:** 78049

**List Source:** TestAmerica Pleasanton

**List Number:** 1

**Creator:** Bullock, Tracy

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

## Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 720-78049-1

**Login Number: 78049**

**List Number: 2**

**Creator: Edman, Connor M**

**List Source: TestAmerica Sacramento**

**List Creation: 03/07/17 10:44 AM**

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