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Alameda County  
Environmental Health

April 27, 2011

Alameda County Health Care Services Agency  
Department of Environmental Health Services  
1131 Harbor Bay Parkway  
Alameda, California 94502-6577

Attention: Ms. Barbara Jakub, PG  
Hazardous Materials Specialist

Subject: Cleanup Case No. RO0003010 and GeoTracker Global ID. T10000001613  
U.S. General Services Administration  
Federal Building 2C  
620 Central Avenue  
Alameda, California

Dear Ms. Jakub:

Please find enclosed the report, "Summary of Work Performed to Date and Additional Site Characterization Results."

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Please do not hesitate to call if you have any questions or comments.

Sincerely,  
U.S. GENERAL SERVICES ADMINISTRATION

  
Carolyn A. Cooley  
Assistant Property Manager

Haley & Aldrich, Inc.  
2033 N. Main Street  
Suite 309  
Walnut Creek, CA 94596-7260



Tel: 925.949.1012  
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HaleyAldrich.com

26 April 2011  
File No. 36835

Alameda County Health Care Services Agency  
Department of Environmental Health Services  
1131 Harbor Bay Parkway  
Alameda, California 94502-6577

Attention: Ms. Barbara Jakub, PG  
Hazardous Materials Specialist

Subject: Summary of Work Performed to Date and Additional Site Characterization Results  
U.S. General Services Administration  
Federal Building 2C  
620 Central Avenue  
Alameda, California  
Cleanup Case No. RO0003010 and GeoTracker Global ID. T10000001613

Dear Ms. Jakub:

Haley & Aldrich, Inc. (Haley & Aldrich) is submitting this summary of work performed to date as well as additional Site characterization methods and results associated with the elevator piping leak at Federal Building 2C located at 620 Central Avenue in Alameda, California (Site, Figure 1) on behalf of the General Services Administration (GSA).

The work performed to date includes excavating and identifying the location of the pipeline leak, collecting soil samples for chemical analysis from below the pipeline when the pipeline was exposed during excavation and repair activities, replacing both the old supply and return hydraulic lines with new pipelines within a secondary containment pipeline, and backfilling the excavation. The above work was performed in accordance with the work plan submitted to Alameda County Health Care Services Agency-Department of Environmental Health Services (ACEH) dated 23 September 2009 and approved by the ACEH.

On 14 September 2009 the U.S. General Services Administration (GSA) reported a hydraulic fluid leak to the Office of Emergency Services after having an unanticipated release of the elevator hydraulic fluid at the Site. Based on further investigation it was found that approximately 50 gallons of hydraulic fluid that were stored within the hydraulic fluid storage tank for the elevator had leaked. Tests were performed by others to evaluate which portion of the elevator piping was leaking. By using a combination of pressure testing and isolating various sections of the hydraulic line, it was concluded that the underground hydraulic supply line located beneath the sidewalks and street was leaking and not the elevator piston.

On 16 and 17 January 2010, ENV Environmental International of Benicia, California (EEI) excavated a trench to expose the hydraulic fluid lines for the elevator. The trench was excavated from the elevator

control room to the elevator pit, such that the curb and gutter as well as the elevator lobby could remain intact. The trench was excavated to approximately 3.5 feet below ground surface (bgs) in the deepest location.

Soil samples were collected on 17 January 2010 by ENV America Incorporated (ENV America). Soil samples were collected using a clean slide hammer from immediately below the pipeline to 6 inches below the pipeline at 10-foot intervals starting outside the elevator lobby and going toward the control room (Figure 2). A soil sample was also collected below the pipeline at the location of the hydraulic fluid leak. Samples were collected in brass tubes capped with Teflon® sheets and plastic end caps. Samples were uniquely labeled, placed in sealed plastic bags, and stored in an ice-chilled cooler. Samples were shipped under chain-of-custody to TestAmerica Inc. of Pleasanton, California, a state of California certified laboratory. The samples were analyzed for:

- Total petroleum hydrocarbons (TPH) quantified as hydraulic oil (TPH<sub>ho</sub>) by Environmental Protection Agency (EPA) Method 8015B; and
- Polychlorinated biphenyls (PCBs) by EPA Method 8082.

Results of the soil sampling indicate that two of the seven soil samples collected, PL-3 (approximately 5 feet south of the source) and PL-7 (source location), have concentrations of TPH<sub>ho</sub> at 12,000 milligrams per kilogram (mg/kg); PCBs were not detected. The remaining five samples, collected at 10-foot intervals below the pipelines within the trench, did not have reported concentrations of TPH<sub>ho</sub> or PCBs above the laboratory detection limit.

In addition to the work described above, Empire Elevator, a state of California licensed elevator company, removed the old supply and return hydraulic lines for the elevator. These lines were replaced with new pipelines contained within a secondary containment pipeline. The supply line is a 2-inch diameter schedule 80 black steel pipe. The return line is ½-inch diameter copper line, and the secondary containment piping consists of 6-inch diameter schedule 80 polyvinyl chloride casing.

Based on the above results Haley & Aldrich, on behalf of ENV America, recommended additional investigation to evaluate the lateral and vertical extent of TPH<sub>ho</sub> in soil and to characterize the groundwater quality. A work plan for the additional investigation dated 22 March 2010 was submitted to ACEH. The work plan was approved by ACEH in a letter dated 12 August 2010. The scope of work below describes what was completed during the additional investigation as well as presents the results of the investigation.

## **Scope of Work for the Additional Investigation**

### **Pre Field Activities**

- A boring permit was obtained from ACEH (W2010-0641);
- The boring locations were marked in white paint and Underground Service Alert (USA) was notified (Ticket # 277409); and
- The site-specific health and safety plan was updated for this work.

### Field Work

On 18 September 2010 seven boring locations were drilled by hand by Penecore Drilling of Woodland, California, a California C-57 licensed drilling company (Figure 3), using a hand auger. Borings were continuously cored to observe lithologic conditions. The recovered soil was logged by a field geologist using the visual-manual procedures of ASTM Standard D-2488-09a for guidance, which is based on the Unified Soil Classification System, and using Munsell Soil Color Chart designations, under the direction of a California Professional Geologist. Down hole equipment was decontaminated prior to starting and between boring locations using a steam cleaner/pressure washer.

Soil samples were collected using a hand auger from above the groundwater table and below the former leaking pipeline at depths ranging from 3.5 to 4.5 feet bgs in clean glass jars provided by the analytical laboratory. Soil analytical results are presented in Table I and on Figure 2. A complete laboratory analytical report is included as Attachment A.

Groundwater samples were collected by installing temporary well points in the hand auger boreholes. One-inch diameter polyvinyl chloride blank casing and well screen were used to construct the well such that the screen interval extended above the groundwater level. Water samples were collected by using a peristaltic pump to transfer groundwater from the well into laboratory supplied sample containers. Groundwater results are presented on Table II and Figure 3. A complete laboratory analytical report is included as Attachment B.

Soil and water samples were uniquely labeled, placed in sealed plastic bags, and stored in ice-chilled coolers until delivered to TestAmerica Laboratories, Inc. of Pleasanton, California, a California certified analytical laboratory under chain-of-custody. The soil and water samples were analyzed for:

- TPH<sub>HO</sub> by EPA Method 8015B.

After soil and groundwater sampling were complete the well casing was removed and the borings were abandoned using Type I/II neat cement mixed in a ratio of one 94-pound bag of cement to approximately 5 to 7 gallons of water. Concrete was used to complete the backfilling of the borings at ground surface. Drill cuttings and equipment wash/purge water were placed in labeled containers and stored on the Site pending analytical results. The soil and water for disposal were analyzed for:

- TPH quantified as gasoline (TPH<sub>G</sub>), and benzene, toluene, ethyl benzene, and xylenes (BTEX) by EPA Method 8260B;
- TPH quantified as diesel and motor oil by EPA Method 8015M; and
- Title 22 metals by EPA Method 6000/7000 series.

Once the analytical results were received the soil cuttings and water were disposed of by EEI, a licensed waste hauler, as a non-hazardous waste at Crosby & Overton of Long Beach, California. TPH<sub>G</sub> and BTEX were not detected in the disposal samples collected. A complete laboratory analytical report for the disposal samples collected is included as Attachment C. A copy of the disposal manifest is included as Attachment D.

Cruz Brothers Subsurface Locators of Scotts Valley, California surveyed the utilities at the Site to assess for preferential pathways as requested by ACEH. The depths of the utilities in the pipeline leak location below ground surface are as follow:

- Storm drain – 39 inches bgs;
- Sanitary Sewer – 62 inches bgs; and
- Water – 44 inches bgs;

In addition to checking the depths of the utilities, the lids were pulled on the sanitary sewer and the storm drain to observe flow within the pipelines. No sheen or odors were observed in these utilities.

## Results

The results of the hand auger borings showed that the lithology at the Site consisted of a fill material up to 3 feet thick, consisting primarily of sand with varying amounts of gravel and fines (fill), underlain by a poorly graded sand with shell fragments (native) to the maximum depth drilled (6.5 feet). Groundwater was encountered between 4 and 5 feet bgs in all borings.

Soil sample results showed that TPHho was detected in four of the seven borings at concentrations ranging from 49 mg/kg to 8900 mg/kg. Table I presents the results for the soil sampling. Figure 2 presents the soil sampling results to date. A complete laboratory analytical report is included as Attachment A.

Water sample results showed that TPHho was detected at boring locations B-1, B-2, and B-7 at concentrations ranging from 310 micrograms per liter ( $\mu\text{g/l}$ ) to 1,300  $\mu\text{g/l}$ . Groundwater analytical results are presented in Table II and on Figure 3. A complete laboratory analytical report is included as Attachment B.

## Recommendations

Since the release of the TPHho on 4 September 2009, the source of the leak has been repaired and the hydraulic fluid pipelines have been placed within secondary containment to prevent future leaks to the subsurface. The January investigation identified two locations with concentrations of TPHho within the pipeline trench of 12,000 mg/kg, the actual leak location and 5 feet from the leak location.

A second investigation with a focus of assessing the lateral and vertical extent of TPHho in soil and groundwater was performed on 18 September 2010. A sample collected from the source area on 18 September 2010 showed the concentration of TPHho in soil had a concentration of 8,900 mg/kg. TPHho was detected at a concentration of 12,000 mg/kg in the analysis of the previous sample collected at this location during the January investigation.

TPHho was not detected in groundwater in four of the seven borings located approximately 5 feet south and east from the highest soil concentrations from the first investigation (PL-3 and PL-7). The highest TPHho concentration detected in groundwater was 1,300  $\mu\text{g/l}$  in the analysis of the sample from boring B-7. B-1 and B-2 had detected concentrations of TPHho of 310  $\mu\text{g/l}$  and 460  $\mu\text{g/l}$ , respectively.

Based on the results of the investigations, it does not appear that the TPHho is very mobile and is limited in extent to a small area near the pipeline leak location. The TPHho concentrations in soil seem to be confined to a small area. Soil in the area of high concentrations has been excavated to 3.5 feet bgs. Depth to water in this area is approximately 4 feet bgs.

Haley & Aldrich does not recommend additional investigation in this area. The utilities in the roadway area would make the excavation difficult and require a large area to be excavated to get below the hydraulic lines in secondary containment to remove the remaining 0.5 foot of soil above the water table. No PCBs were detected from the analysis of the samples collected from the January investigation and benzene, TPHg and BTEX were not detected in samples required for disposal. Based on the lack of volatile and carcinogenic compounds and current use of the contaminated area (roadway) human health risk is minimal.

Based on the limited mobility and extent of TPHho, the difficult excavation in a roadway with utilities, the lack of health risk, and the current use of the property Haley & Aldrich feels this is a low risk case. Haley & Aldrich recommends no further action required for this case.

Please do not hesitate to call if you have any questions or comments.

Sincerely yours,  
HALEY & ALDRICH, INC.



Charles Rome  
Geologist



Allan Atkinson, PG  
Senior Geologist



Enclosures:

Table I – Soil Analytical Results

Table II – Groundwater Analytical Results

Figure 1 – Project Locus Map

Figure 2 – Soil Sample Results

Figure 3 – Groundwater Sample Results

Appendix A – Analytical Laboratory Report and Chain-of-Custody Documentation-Soil

Appendix B – Analytical Laboratory Report and Chain-of-Custody Documentation-Water

Appendix C – Analytical Laboratory Report and Chain-of-Custody Documentation-Disposal Samples

Appendix D – Manifest

## **TABLES**

**TABLE I**  
**SOIL ANALYTICAL RESULTS<sup>1</sup>**  
**ALAMEDA FEDERAL CENTER**  
**620 CENTRAL AVENUE, ALAMEDA, CALIFORNIA**

Page 1 of 1

Sample Identification	Sample Date	Depth <sup>2</sup> (feet)	Hydraulic Oil (mg/Kg) <sup>3</sup>
PL-1	1/17/2010	0.5	<50
PL-2	1/17/2010	0.5	<50
PL-3	1/17/2010	0.5	12,000
PL-4	1/17/2010	0.5	<50
PL-5	1/17/2010	0.5	<49
PL-6	1/17/2010	0.5	<49
PL-7	1/17/2010	0.5	12,000
B-1-3.5	9/18/2010	3.5	8900
B-2-4.0	9/18/2010	4.0	58
B-3-3.5	9/18/2010	3.5	<49
B-4-4.5	9/18/2010	4.5	49
B-5-3.5	9/18/2010	3.5	<49
B-6-3.5	9/18/2010	3.5	<50
B-7-4.0	9/18/2010	4.0	1200

NOTES:

1. Samples collected by Haley & Aldrich, Inc. and analyzed by TestAmerica Laboratories, Inc. of Pleasanton, CA for total petroleum hydrocarbons quantified as hydraulic oil using EPA Method 8015M.
2. Sample depth represents the bottom depth of a 6-inch sample interval (i.e., 3.5 feet is a sample depth of a sample collected between 3 and 3.5 feet). PL-1 through PL-7 collected from 0-6-inches below the pipeline in an open trench.
3. mg/Kg = milligrams per kilogram

**TABLE II**  
GROUNDWATER ANALYTICAL RESULTS  
ALAMEDA FEDERAL CENTER  
620 CENTRAL AVENUE, ALAMEDA, CALIFORNIA

Page 1 of 1

Sample Identification	Sample Date	Hydraulic Oil (ug/L) <sup>2</sup>
B-1	9/18/2010	460
B-2	9/18/2010	310
B-3	9/18/2010	<210 <sup>3</sup>
B-4	9/18/2010	<210
B-5	9/18/2010	<210
B-6	9/18/2010	<210
B-7	9/18/2010	1300

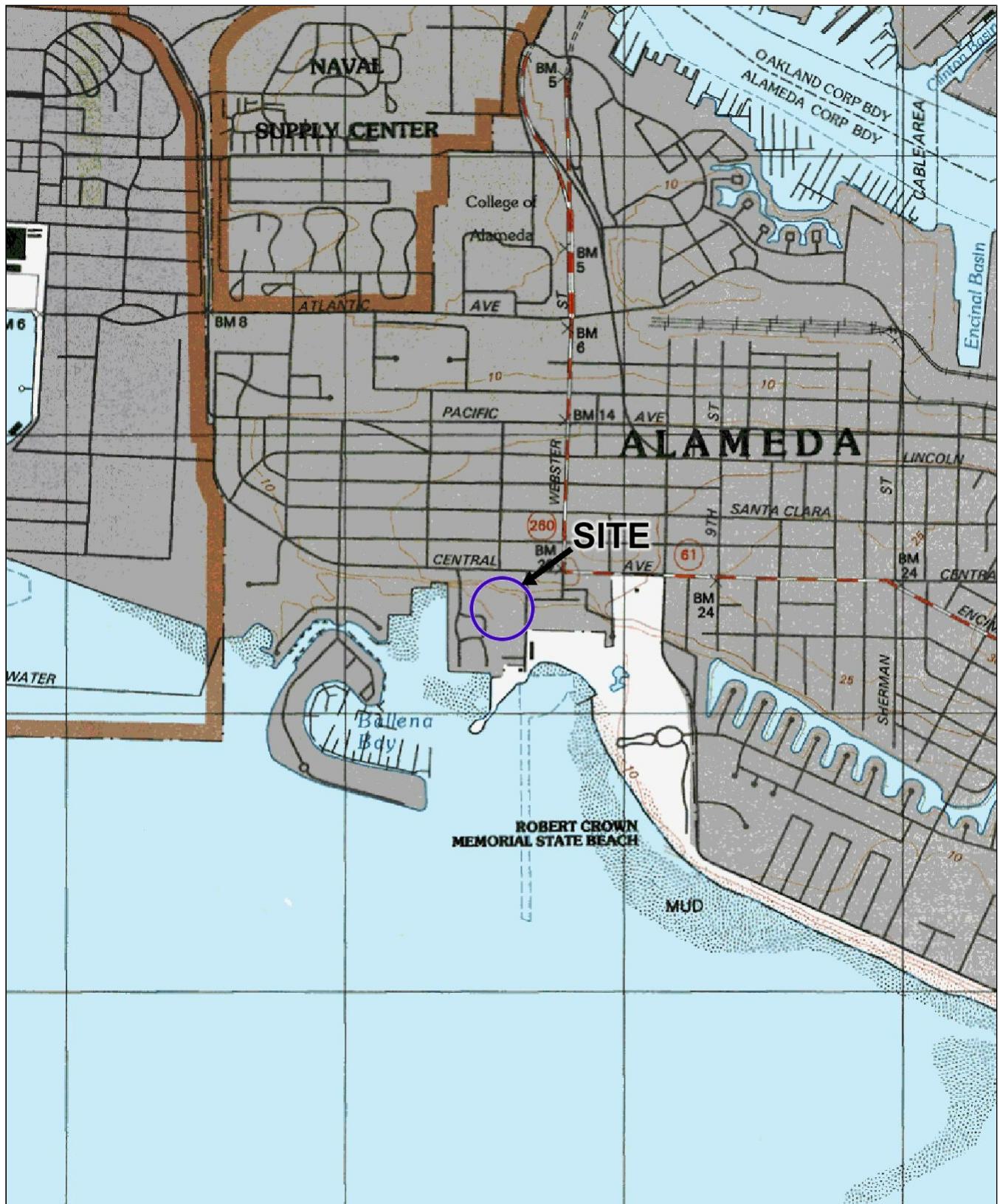
NOTES:

1. Samples collected by Haley & Aldrich, Inc. and analyzed by TestAmerica Laboratories, Inc. of Pleasanton, CA for total petroleum hydrocarbons quantified as hydraulic oil using EPA Method 8015M.

2. ug/L = micrograms per liter

3. <520 = sample not detected above the laboratory reporting limit shown

## **FIGURES**



SITE COORDINATES: 37°46'13"N 122°16'46"W

**HALEY & ALDRICH**

FEDERAL BUILDING 2C  
620 CENTRAL AVENUE  
ALAMEDA, CALIFORNIA

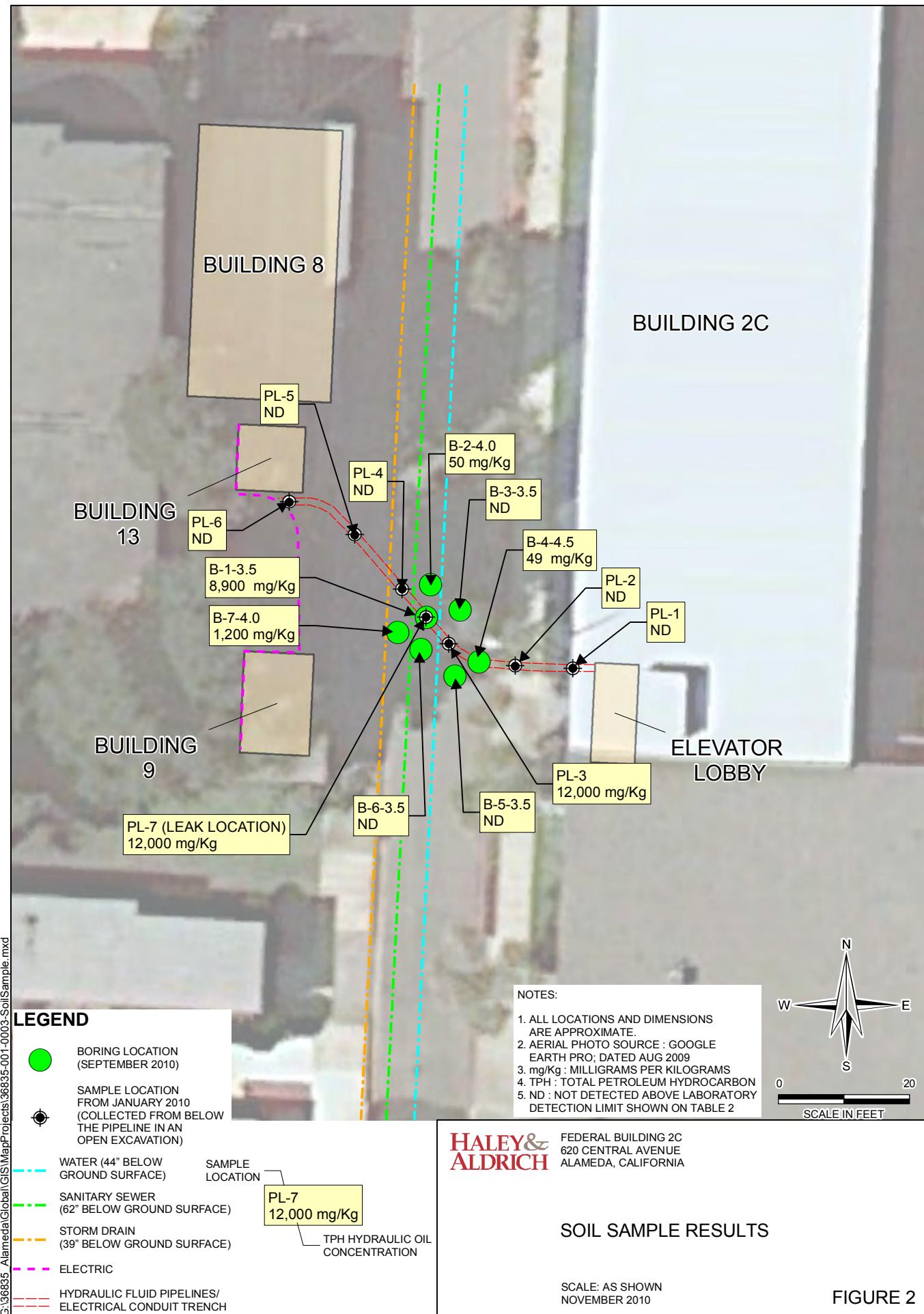
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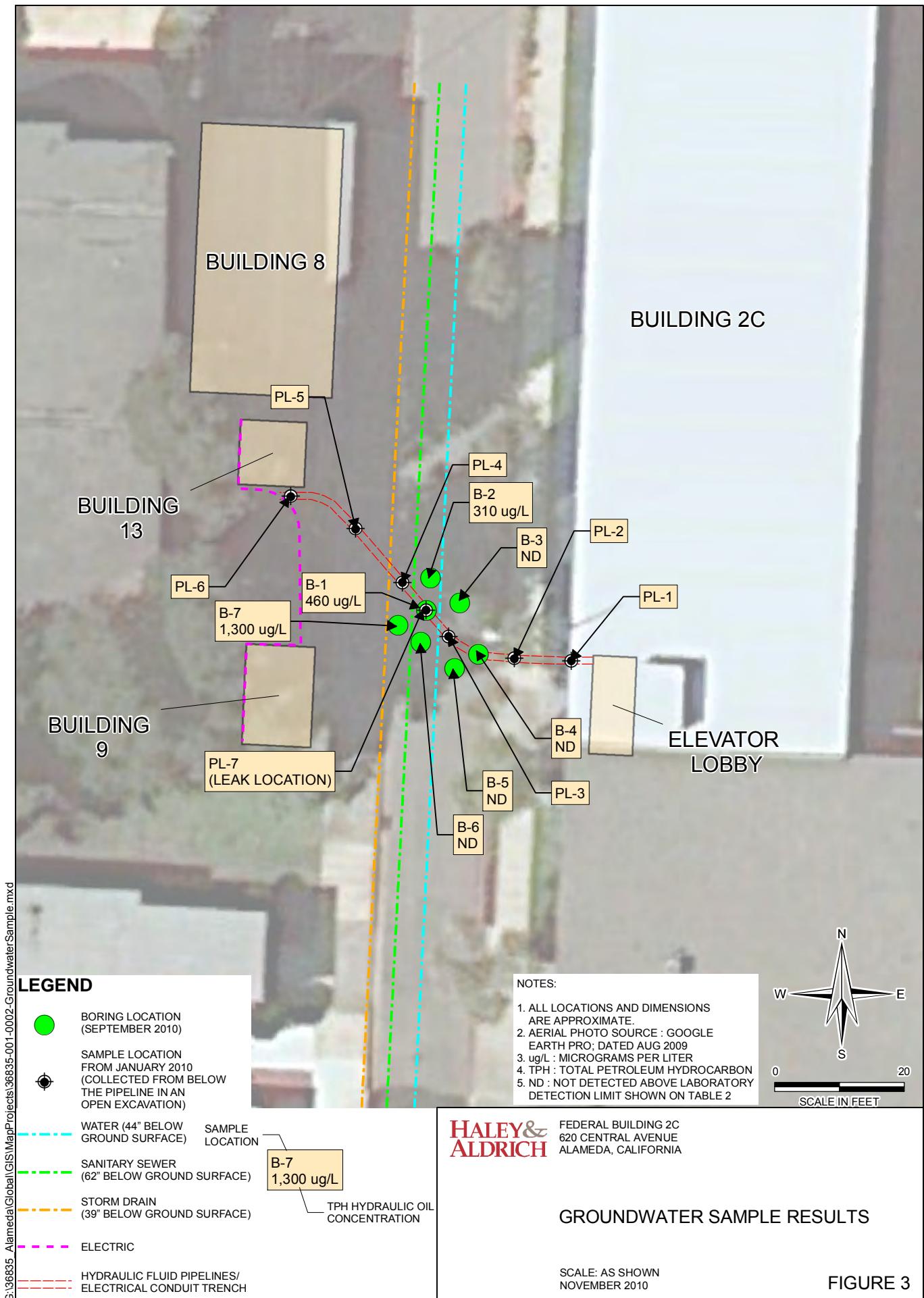
SCALE: 1:24,000  
MARCH 2010

36835001.PDF

U.S.G.S. QUADRANGLE: OAKLAND WEST, CA

FIGURE 1





## **APPENDIX A**

### **Analytical Laboratory Report and Chain-of-Custody Documentation-Soil**

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica San Francisco

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-30621-1

Client Project/Site: GSA Alameda

For:

Haley & Aldrich, Inc.

2033 North Main Street

Suite 309

Walnut Creek, California 94596

Attn: Charles Rome

Authorized for release by:

9/27/2010 3:47 PM

Dimple Sharma

Project Manager I

dimple.sharma@testamericainc.com

### LINKS

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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.

# Table of Contents

Cover Page .....	1
Table of Contents .....	2
Definitions .....	3
Case Narrative .....	4
Detection Summary .....	5
Client Sample Results .....	6
QC Sample Results .....	8
QC Association .....	9
Certification Summary .....	10
Method Summary .....	11
Sample Summary .....	12
Chain of Custody .....	13
Sample Receipt Checklist .....	14

# Qualifier Definition/Glossary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30621-1

## Qualifiers

### GC Semi VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
D	Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution may be flagged with a D.
F	RPD of the MS and MSD exceeds the control limits

## Glossary

Glossary	Glossary Description
☀	Listed under the "D" column to designate that the result is reported on a dry weight basis.

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

**Job Narrative**  
**720-30621-1**

**Comments**

No additional comments.

**Receipt**

All samples were received in good condition within temperature requirements.

**GC Semi VOA**

Method 8015B: Due to the level of dilution required for the following sample(s), surrogate recoveries are not reported: (720-30621-1 MS), (720-30621-1 MSD), B-1-3.5 (720-30621-1), B-7-4.0 (720-30621-7).

No other analytical or quality issues were noted.

**Organic Prep**

No analytical or quality issues were noted.

# Detection Summary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30621-1

## Client Sample ID: B-1-3.5

Lab Sample ID: 720-30621-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
TPH-Hydraulic Oil Range (C19-C36)	8900		5000		mg/Kg	100		8015B	Total/NA

## Client Sample ID: B-2-4.0

Lab Sample ID: 720-30621-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
TPH-Hydraulic Oil Range (C19-C36)	58		50		mg/Kg	1		8015B	Total/NA

## Client Sample ID: B-3-3.5

Lab Sample ID: 720-30621-3

No Detections.

## Client Sample ID: B-4-4.5

Lab Sample ID: 720-30621-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
TPH-Hydraulic Oil Range (C19-C36)	49		49		mg/Kg	1		8015B	Total/NA

## Client Sample ID: B-5-3.5

Lab Sample ID: 720-30621-5

No Detections.

## Client Sample ID: B-6-3.5

Lab Sample ID: 720-30621-6

No Detections.

## Client Sample ID: B-7-4.0

Lab Sample ID: 720-30621-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
TPH-Hydraulic Oil Range (C19-C36)	1200		490		mg/Kg	10		8015B	Total/NA

# Analytical Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30621-1

**Client Sample ID: B-1-3.5**  
Date Collected: 09/18/10 10:05  
Date Received: 09/20/10 13:00

**Lab Sample ID: 720-30621-1**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH-Hydraulic Oil Range (C19-C36)	8900		5000		mg/Kg		09/24/10 14:29	09/25/10 16:57	100
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	0	D	31 - 114				09/24/10 14:29	09/25/10 16:57	100

**Client Sample ID: B-2-4.0**  
Date Collected: 09/18/10 10:50  
Date Received: 09/20/10 13:00

**Lab Sample ID: 720-30621-2**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH-Hydraulic Oil Range (C19-C36)	58		50		mg/Kg		09/24/10 14:29	09/25/10 18:03	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	79		31 - 114				09/24/10 14:29	09/25/10 18:03	1

**Client Sample ID: B-3-3.5**  
Date Collected: 09/18/10 11:20  
Date Received: 09/20/10 13:00

**Lab Sample ID: 720-30621-3**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH-Hydraulic Oil Range (C19-C36)	ND		49		mg/Kg		09/24/10 14:29	09/27/10 10:09	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	89		31 - 114				09/24/10 14:29	09/27/10 10:09	1

**Client Sample ID: B-4-4.5**  
Date Collected: 09/18/10 08:40  
Date Received: 09/20/10 13:00

**Lab Sample ID: 720-30621-4**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH-Hydraulic Oil Range (C19-C36)	49		49		mg/Kg		09/24/10 14:29	09/25/10 18:46	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	80		31 - 114				09/24/10 14:29	09/25/10 18:46	1

**Client Sample ID: B-5-3.5**  
Date Collected: 09/18/10 09:15  
Date Received: 09/20/10 13:00

**Lab Sample ID: 720-30621-5**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH-Hydraulic Oil Range (C19-C36)	ND		49		mg/Kg		09/24/10 14:29	09/25/10 19:08	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
p-Terphenyl	93		31 - 114				09/24/10 14:29	09/25/10 19:08	1

# Analytical Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30621-1

**Client Sample ID: B-6-3.5**  
Date Collected: 09/18/10 09:40  
Date Received: 09/20/10 13:00

**Lab Sample ID: 720-30621-6**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH-Hydraulic Oil Range (C19-C36)	ND		50		mg/Kg		09/24/10 14:29	09/25/10 19:30	1
<i>Surrogate</i>	% Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac

**Client Sample ID: B-7-4.0**  
Date Collected: 09/18/10 09:55  
Date Received: 09/20/10 13:00

**Lab Sample ID: 720-30621-7**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH-Hydraulic Oil Range (C19-C36)	1200		490		mg/Kg		09/24/10 14:29	09/25/10 19:52	10
<i>Surrogate</i>	% Recovery	Qualifier		Limits			Prepared	Analyzed	Dil Fac

# Quality Control Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30621-1

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

**Lab Sample ID:** MB 720-78656/1-A

**Matrix:** Solid

**Analysis Batch:** 78692

**Client Sample ID:** MB 720-78656/1-A

**Prep Type:** Total/NA

**Prep Batch:** 78656

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics [C10-C28]	ND		1.0		mg/Kg		09/24/10 14:29	09/25/10 22:25	1
TPH-Hydraulic Oil Range (C19-C36)	ND		50		mg/Kg		09/24/10 14:29	09/25/10 22:25	1
Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac	% Rec.	Limits	
	% Recovery	Qualifier							
p-Terphenyl	96		31 - 114				09/24/10 14:29	09/25/10 22:25	1

**Lab Sample ID:** LCS 720-78656/2-A

**Matrix:** Solid

**Analysis Batch:** 78692

**Client Sample ID:** LCS 720-78656/2-A

**Prep Type:** Total/NA

**Prep Batch:** 78656

Analyte	Spike		Result	LCS Qualifier	Unit	D	% Rec.	Limits	
	Added								
Diesel Range Organics [C10-C28]		83.3	74.9		mg/Kg		90	59 - 134	
Surrogate	LCS		Result	LCS Qualifier	Unit	D	% Rec.	Limits	
	% Recovery	Qualifier							
p-Terphenyl	99		31 - 114						

**Lab Sample ID:** LCSD 720-78656/3-A

**Matrix:** Solid

**Analysis Batch:** 78692

**Client Sample ID:** LCSD 720-78656/3-A

**Prep Type:** Total/NA

**Prep Batch:** 78656

Analyte	Spike		Result	LCSD Qualifier	Unit	D	% Rec.	Limits	RPD	Limit
	Added									
Diesel Range Organics [C10-C28]		82.6	74.5		mg/Kg		90	59 - 134	0.5	35
Surrogate	LCSD		Result	LCSD Qualifier	Unit	D	% Rec.	Limits	RPD	Limit
	% Recovery	Qualifier								
p-Terphenyl	101		31 - 114							

**Lab Sample ID:** 720-30621-1 MS

**Matrix:** Solid

**Analysis Batch:** 78692

**Client Sample ID:** B-1-3.5

**Prep Type:** Total/NA

**Prep Batch:** 78656

Analyte	Sample		Spike	MS Result	MS Qualifier	Unit	D	% Rec.	Limits	
	Result	Qualifier								
Diesel Range Organics [C10-C28]			83.2	3060	4	mg/Kg		-1448	50 - 130	
Surrogate	MS		Result	MS Qualifier	Unit	D	% Rec.	Limits	RPD	Limit
	% Recovery	Qualifier								
p-Terphenyl	0	D	31 - 114							

**Lab Sample ID:** 720-30621-1 MSD

**Matrix:** Solid

**Analysis Batch:** 78692

**Client Sample ID:** B-1-3.5

**Prep Type:** Total/NA

**Prep Batch:** 78656

Analyte	Sample		Spike	MSD Result	MSD Qualifier	Unit	D	% Rec.	Limits	RPD	Limit
	Result	Qualifier									
Diesel Range Organics [C10-C28]			82.6	4590	4 F	mg/Kg		392	50 - 130	40	30
Surrogate	MSD		Result	MSD Qualifier	Unit	D	% Rec.	Limits	RPD	Limit	
	% Recovery	Qualifier									
p-Terphenyl	0	D	31 - 114								

# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30621-1

## GC Semi VOA

### Prep Batch: 78656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-78656/1-A	MB 720-78656/1-A	Total/NA	Solid	3550B	
720-30621-5	B-5-3.5	Total/NA	Solid	3550B	
720-30621-6	B-6-3.5	Total/NA	Solid	3550B	
720-30621-7	B-7-4.0	Total/NA	Solid	3550B	
LCS 720-78656/2-A	LCS 720-78656/2-A	Total/NA	Solid	3550B	
LCSD 720-78656/3-A	LCSD 720-78656/3-A	Total/NA	Solid	3550B	
720-30621-1	B-1-3.5	Total/NA	Solid	3550B	
720-30621-1 MS	B-1-3.5	Total/NA	Solid	3550B	
720-30621-1 MSD	B-1-3.5	Total/NA	Solid	3550B	
720-30621-2	B-2-4.0	Total/NA	Solid	3550B	
720-30621-3	B-3-3.5	Total/NA	Solid	3550B	
720-30621-4	B-4-4.5	Total/NA	Solid	3550B	

### Analysis Batch: 78692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-30621-1	B-1-3.5	Total/NA	Solid	8015B	78656
720-30621-1 MS	B-1-3.5	Total/NA	Solid	8015B	78656
720-30621-1 MSD	B-1-3.5	Total/NA	Solid	8015B	78656
720-30621-2	B-2-4.0	Total/NA	Solid	8015B	78656
720-30621-4	B-4-4.5	Total/NA	Solid	8015B	78656
720-30621-5	B-5-3.5	Total/NA	Solid	8015B	78656
720-30621-6	B-6-3.5	Total/NA	Solid	8015B	78656
720-30621-7	B-7-4.0	Total/NA	Solid	8015B	78656
LCS 720-78656/2-A	LCS 720-78656/2-A	Total/NA	Solid	8015B	78656
LCSD 720-78656/3-A	LCSD 720-78656/3-A	Total/NA	Solid	8015B	78656
MB 720-78656/1-A	MB 720-78656/1-A	Total/NA	Solid	8015B	78656

### Analysis Batch: 78731

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-30621-3	B-3-3.5	Total/NA	Solid	8015B	78656

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## Certification Summary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30621-1

Laboratory	Authority	Program	EPA Region	Certification ID	Expiration Date
TestAmerica San Francisco	California	State Program	9	2496	01/31/12

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

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## Method Summary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30621-1

Method	Method Description	Protocol	Laboratory
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL SF

**Protocol References:**

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

**Laboratory References:**

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

## Sample Summary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30621-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-30621-1	B-1-3.5	Solid	09/18/10 10:05	09/20/10 13:00
720-30621-2	B-2-4.0	Solid	09/18/10 10:50	09/20/10 13:00
720-30621-3	B-3-3.5	Solid	09/18/10 11:20	09/20/10 13:00
720-30621-4	B-4-4.5	Solid	09/18/10 08:40	09/20/10 13:00
720-30621-5	B-5-3.5	Solid	09/18/10 09:15	09/20/10 13:00
720-30621-6	B-6-3.5	Solid	09/18/10 09:40	09/20/10 13:00
720-30621-7	B-7-4.0	Solid	09/18/10 09:55	09/20/10 13:00

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## Login Sample Receipt Check List

Client: Haley & Aldrich, Inc.

Job Number: 720-30621-1

**Login Number: 30621**

**List Source: TestAmerica San Francisco**

**Creator: Mullen, Joan**

**List Number: 1**

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is 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 sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

## **APPENDIX B**

### **Analytical Laboratory Report and Chain-of-Custody Documentation-Water**

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# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica San Francisco

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

[TestAmerica Job ID: 720-30620-1](#)

Client Project/Site: GSA Alameda

Revision: 1

For:

Haley & Aldrich, Inc.

2033 North Main Street

Suite 309

Walnut Creek, California 94596

Attn: Charles Rome

Authorized for release by:

10/28/2010 2:20 PM

Dimple Sharma

Project Manager I

[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.*

# Table of Contents

Cover Page .....	1
Table of Contents .....	2
Definitions .....	3
Case Narrative .....	4
Detection Summary .....	5
Client Sample Results .....	6
QC Sample Results .....	8
QC Association .....	9
Certification Summary .....	10
Method Summary .....	11
Sample Summary .....	12
Chain of Custody .....	13
Sample Receipt Checklist .....	14

## Qualifier Definition/Glossary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30620-1

### Glossary

Glossary	Glossary Description
⊗	Listed under the "D" column to designate that the result is reported on a dry weight basis.

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**Job Narrative**  
**720-30620-1**

**Comments**

No additional comments.

**Receipt**

All samples were received in good condition within temperature requirements.

**GC Semi VOA**

No analytical or quality issues were noted.

**Organic Prep**

No analytical or quality issues were noted.

## Detection Summary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30620-1

### Client Sample ID: B-3

Lab Sample ID: 720-30620-1

No Detections.

### Client Sample ID: B-2

Lab Sample ID: 720-30620-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
TPH-Hydraulic Oil Range (C19-C36)	310		210		ug/L	1		8015B	Total/NA

### Client Sample ID: B-4

Lab Sample ID: 720-30620-3

No Detections.

### Client Sample ID: B-1

Lab Sample ID: 720-30620-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
TPH-Hydraulic Oil Range (C19-C36)	460		210		ug/L	1		8015B	Total/NA

### Client Sample ID: B-5

Lab Sample ID: 720-30620-5

No Detections.

### Client Sample ID: B-6

Lab Sample ID: 720-30620-6

No Detections.

### Client Sample ID: B-7

Lab Sample ID: 720-30620-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
TPH-Hydraulic Oil Range (C19-C36)	1300		200		ug/L	1		8015B	Total/NA

# Analytical Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30620-1

## Client Sample ID: B-3

Date Collected: 09/18/10 11:50  
Date Received: 09/20/10 13:00

## Lab Sample ID: 720-30620-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH-Hydraulic Oil Range (C19-C36)	ND		210		ug/L		09/22/10 15:38	09/23/10 16:25	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

p-Terphenyl

## Client Sample ID: B-2

Date Collected: 09/18/10 11:00  
Date Received: 09/20/10 13:00

## Lab Sample ID: 720-30620-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH-Hydraulic Oil Range (C19-C36)	310		210		ug/L		09/22/10 15:38	09/23/10 16:51	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

p-Terphenyl

## Client Sample ID: B-4

Date Collected: 09/18/10 11:10  
Date Received: 09/20/10 13:00

## Lab Sample ID: 720-30620-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH-Hydraulic Oil Range (C19-C36)	ND		210		ug/L		09/22/10 15:38	09/23/10 17:14	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

p-Terphenyl

## Client Sample ID: B-1

Date Collected: 09/18/10 10:50  
Date Received: 09/20/10 13:00

## Lab Sample ID: 720-30620-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH-Hydraulic Oil Range (C19-C36)	460		210		ug/L		09/22/10 15:38	09/23/10 17:35	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

p-Terphenyl

## Client Sample ID: B-5

Date Collected: 09/18/10 11:20  
Date Received: 09/20/10 13:00

## Lab Sample ID: 720-30620-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH-Hydraulic Oil Range (C19-C36)	ND		210		ug/L		09/22/10 15:38	09/23/10 17:57	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac

p-Terphenyl

# Analytical Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30620-1

## Client Sample ID: B-6

Date Collected: 09/18/10 11:30

Date Received: 09/20/10 13:00

## Lab Sample ID: 720-30620-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH-Hydraulic Oil Range (C19-C36)	ND		210		ug/L		09/22/10 15:38	09/23/10 18:19	1
Surrogate <i>p-Terphenyl</i>	% Recovery 100	Qualifier	Limits 23 - 156				Prepared 09/22/10 15:38	Analyzed 09/23/10 18:19	1

## Client Sample ID: B-7

Date Collected: 09/18/10 11:40

Date Received: 09/20/10 13:00

## Lab Sample ID: 720-30620-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
TPH-Hydraulic Oil Range (C19-C36)	1300		200		ug/L		09/22/10 15:38	09/23/10 18:41	1
Surrogate <i>p-Terphenyl</i>	% Recovery 84	Qualifier	Limits 23 - 156				Prepared 09/22/10 15:38	Analyzed 09/23/10 18:41	1

# Quality Control Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30620-1

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

**Lab Sample ID:** MB 720-78496/1-A

**Matrix:** Water

**Analysis Batch:** 78530

**Client Sample ID:** MB 720-78496/1-A

**Prep Type:** Total/NA

**Prep Batch:** 78496

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics [C10-C28]	ND		50		ug/L		09/22/10 15:38	09/23/10 22:41	1
TPH-Hydraulic Oil Range (C19-C36)	ND		200		ug/L		09/22/10 15:38	09/23/10 22:41	1
Surrogate	MB		Limits				Prepared	Analyzed	Dil Fac
	% Recovery	Qualifier							
p-Terphenyl	95		23 - 156				09/22/10 15:38	09/23/10 22:41	1

**Lab Sample ID:** MB 720-78496/1-A

**Matrix:** Water

**Analysis Batch:** 79109

**Client Sample ID:** MB 720-78496/1-A

**Prep Type:** Total/NA

**Prep Batch:** 78496

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics [C10-C28]	ND		50		ug/L		09/22/10 15:38	10/01/10 11:33	1
TPH-Hydraulic Oil Range (C19-C36)	ND		200		ug/L		09/22/10 15:38	10/01/10 11:33	1
Surrogate	MB		Limits				Prepared	Analyzed	Dil Fac
	% Recovery	Qualifier							
p-Terphenyl	95		23 - 156				09/22/10 15:38	10/01/10 11:33	1

**Lab Sample ID:** LCS 720-78496/2-A

**Matrix:** Water

**Analysis Batch:** 78530

**Client Sample ID:** LCS 720-78496/2-A

**Prep Type:** Total/NA

**Prep Batch:** 78496

Analyte	Spike		Added	Result	LCS	LCS	Unit	D	% Rec	% Rec.
	LCS	LCS								
Diesel Range Organics [C10-C28]			2500	1680			ug/L		67	40 - 150
Surrogate	LCS		Limits							
	% Recovery	Qualifier								
p-Terphenyl	102		23 - 156							

**Lab Sample ID:** LCSD 720-78496/3-A

**Matrix:** Water

**Analysis Batch:** 78530

**Client Sample ID:** LCSD 720-78496/3-A

**Prep Type:** Total/NA

**Prep Batch:** 78496

Analyte	Spike		Added	Result	LCSD	LCSD	Unit	D	% Rec	% Rec.
	LCSD	LCSD								
Diesel Range Organics [C10-C28]			2500	1550			ug/L		62	40 - 150
Surrogate	LCSD		Limits							RPD
	% Recovery	Qualifier								
p-Terphenyl	103		23 - 156							8

# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30620-1

## GC Semi VOA

### Prep Batch: 78496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-78496/1-A	MB 720-78496/1-A	Total/NA	Water	3510C	
MB 720-78496/1-A	MB 720-78496/1-A	Total/NA	Water	3510C	
720-30620-7	B-7	Total/NA	Water	3510C	
LCS 720-78496/2-A	LCS 720-78496/2-A	Total/NA	Water	3510C	
LCSD 720-78496/3-A	LCSD 720-78496/3-A	Total/NA	Water	3510C	
720-30620-1	B-3	Total/NA	Water	3510C	
720-30620-2	B-2	Total/NA	Water	3510C	
720-30620-3	B-4	Total/NA	Water	3510C	
720-30620-4	B-1	Total/NA	Water	3510C	
720-30620-5	B-5	Total/NA	Water	3510C	
720-30620-6	B-6	Total/NA	Water	3510C	

### Analysis Batch: 78530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-30620-1	B-3	Total/NA	Water	8015B	78496
720-30620-2	B-2	Total/NA	Water	8015B	78496
720-30620-3	B-4	Total/NA	Water	8015B	78496
720-30620-4	B-1	Total/NA	Water	8015B	78496
720-30620-5	B-5	Total/NA	Water	8015B	78496
720-30620-6	B-6	Total/NA	Water	8015B	78496
720-30620-7	B-7	Total/NA	Water	8015B	78496
LCS 720-78496/2-A	LCS 720-78496/2-A	Total/NA	Water	8015B	78496
LCSD 720-78496/3-A	LCSD 720-78496/3-A	Total/NA	Water	8015B	78496
MB 720-78496/1-A	MB 720-78496/1-A	Total/NA	Water	8015B	78496

### Analysis Batch: 79109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-78496/1-A	MB 720-78496/1-A	Total/NA	Water	8015B	78496

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## Certification Summary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30620-1

Laboratory	Authority	Program	EPA Region	Certification ID	Expiration Date
TestAmerica San Francisco	California	State Program	9	2496	01/31/12

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

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## Method Summary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30620-1

Method	Method Description	Protocol	Laboratory
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL SF

**Protocol References:**

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

**Laboratory References:**

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

## Sample Summary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30620-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-30620-1	B-3	Water	09/18/10 11:50	09/20/10 13:00
720-30620-2	B-2	Water	09/18/10 11:00	09/20/10 13:00
720-30620-3	B-4	Water	09/18/10 11:10	09/20/10 13:00
720-30620-4	B-1	Water	09/18/10 10:50	09/20/10 13:00
720-30620-5	B-5	Water	09/18/10 11:20	09/20/10 13:00
720-30620-6	B-6	Water	09/18/10 11:30	09/20/10 13:00
720-30620-7	B-7	Water	09/18/10 11:40	09/20/10 13:00

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**720-30620**  
TESTAMERICA San Francisco Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756  
Phone: (925) 484-1919 • Fax: (925) 600-3002

Reference #: 126956

10/28/2010

Date 9/18/10 Page 1 of 1

Report To

Attn: Charles Rome  
Company: Haley & Aldrich  
Address: 2033 N. Main St, Ste 309 Walnut Creek, CA  
Phone: 925-949-1454 Email: crome@haleyaldrich.com

Bill To: Same  
Sampled By: C. Rome

Attn: — Phone: —

Sample ID Date Time Matrix Preserv.

B-3	9/18/10	1150	W	HCl
B-2		1100		
B-4		1110		
B-1		1050		
B-5		1120		
B-6		1130		
B-7		1140		

Analysis Request		Number of Containers
<input type="checkbox"/> TPH EPA - 8260B	<input type="checkbox"/> Gas w/ BTEX	
<input type="checkbox"/> TEPH EPA 8015M*	<input type="checkbox"/> Silica Gel	<input type="checkbox"/> Other/HCl
<input type="checkbox"/> Diesel	<input type="checkbox"/> Motor Oil	
<input type="checkbox"/> EPA 8260B: Gas, BTEX 5 Oxygenates	<input type="checkbox"/> DGA, EDB	<input type="checkbox"/> Ethanol
<input type="checkbox"/> EPA 8021 by 8260B		
<input type="checkbox"/> Volatile Organics GCMS (VOCS)		
<input type="checkbox"/> EPA 8260B □ 624		
<input type="checkbox"/> Semivolatiles GCMS		
<input type="checkbox"/> EPA 8270 □ 625		
<input type="checkbox"/> Oil and Grease	<input type="checkbox"/> Petroleum	
<input type="checkbox"/> (EPA 1664) □ Total		
<input type="checkbox"/> Pesticides	<input type="checkbox"/> EPA 8081	<input type="checkbox"/> 608
<input type="checkbox"/> PCBs □ EPA 8082 □ 608		
<input type="checkbox"/> PNAs by □ 8270 □ 8310		
<input type="checkbox"/> CAM117 Metals (EPA 6010/7470/7471)		
<input type="checkbox"/> Metals:	<input type="checkbox"/> Lead	<input type="checkbox"/> LUFT
<input type="checkbox"/> RCRA		
<input type="checkbox"/> Other		
<input type="checkbox"/> Low Level Metals by EPA 2000/86020		
<input type="checkbox"/> W.E.T (STLC) □ TCLP		
<input type="checkbox"/> Hexavalent Chromium □ pH (24h hold time for H <sub>2</sub> O)		
<input type="checkbox"/> Spec. Cond.	<input type="checkbox"/> Alkalinity	
<input type="checkbox"/> TSS	<input type="checkbox"/> TDS	
<input type="checkbox"/> Anions : □ Cl □ SO <sub>4</sub> □ NO <sub>3</sub> □ F □ Br □ NO <sub>2</sub> □ PO <sub>4</sub>		

Project Info:

Sample Receipt

Project Name:  
GSA Alameda

# of Containers:

Project#:  
36885-001

Head Space:

PO#:

Temp:

Credit Card#:

3.2°C, 2.6°C

Conforms to record:

T  
A  
T  
Day Day Day Day

Other:

Report:  Routine  Level 3  Level 4  EDD  State Tank Fund EDF

Special Instructions / Comments:  Global ID \_\_\_\_\_

See Terms and Conditions on reverse

\*TestAmerica SF reports 8015M from C<sub>9</sub>-C<sub>24</sub> (industry norm). Default for 8015B is C<sub>10</sub>-C<sub>28</sub>

1) Relinquished by:  Signature <u>Charles Rome</u> Time <u>1015</u> Printed Name <u>Charles Rome</u> Date <u>9/20/10</u> Company <u>Haley &amp; Aldrich</u>	2) Relinquished by:  Signature <u>Ed Martin</u> Time <u>1300</u> Printed Name <u>Ed Martin</u> Date <u>9/20/10</u> Company <u>HAF</u>	3) Relinquished by:  Signature _____ Time _____ Printed Name _____ Date _____ Company _____
1) Received by:  Signature <u>Ed Martin</u> Time <u>1015</u> Printed Name <u>Ed Martin</u> Date <u>9/20/10</u> Company <u>HAF</u>	2) Received by:  Signature <u>Jeanne Muller</u> Time <u>1300</u> Printed Name <u>Muller</u> Date <u>9/20/10</u> Company <u>Test America</u>	3) Received by:  Signature _____ Time _____ Printed Name _____ Date _____ Company _____

## Login Sample Receipt Check List

Client: Haley & Aldrich, Inc.

Job Number: 720-30620-1

**Login Number: 30620**

**List Source: TestAmerica San Francisco**

**Creator: Mullen, Joan**

**List Number: 1**

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is 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 sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

## **APPENDIX C**

### **Analytical Laboratory Report and Chain-of-Custody Documentation-Disposal Samples**

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica San Francisco

1220 Quarry Lane

Pleasanton, CA 94566

Tel: (925)484-1919

TestAmerica Job ID: 720-30628-1

Client Project/Site: GSA Alameda

For:

Haley & Aldrich, Inc.

2033 North Main Street

Suite 309

Walnut Creek, California 94596

Attn: Charles Rome



Authorized for release by:

9/27/2010 3:49 PM

Dimple Sharma

Project Manager I

dimple.sharma@testamericainc.com

### LINKS

Review your project  
results through

TotalAccess

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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.

# Table of Contents

Cover Page .....	1
Table of Contents .....	2
Definitions .....	3
Case Narrative .....	4
Detection Summary .....	5
Client Sample Results .....	6
QC Sample Results .....	8
QC Association .....	20
Certification Summary .....	23
Method Summary .....	24
Sample Summary .....	25
Chain of Custody .....	26
Sample Receipt Checklist .....	27

# Qualifier Definition/Glossary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
F	MS or MSD exceeds the control limits
F	RPD of the MS and MSD exceeds the control limits

## Glossary

Glossary	Glossary Description
✉	Listed under the "D" column to designate that the result is reported on a dry weight basis.

1

2

3

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11

12

13

**Job Narrative**  
**720-30628-1**

**Comments**

No additional comments.

**Receipt**

All samples were received in good condition within temperature requirements.

**GC/MS VOA**

No analytical or quality issues were noted.

**GC Semi VOA**

No analytical or quality issues were noted.

**Metals**

Method 6010B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 78632 were outside control limits. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

**Organic Prep**

No analytical or quality issues were noted.

# Detection Summary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

## Client Sample ID: DISP-1

Lab Sample ID: 720-30628-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	6.5		1.0		mg/Kg	1		8015B	Silica Gel Clea
Barium	29		2.0		mg/Kg	4		6010B	Total/NA
Chromium	21		2.0		mg/Kg	4		6010B	Total/NA
Cobalt	3.3		0.80		mg/Kg	4		6010B	Total/NA
Copper	8.4		6.0		mg/Kg	4		6010B	Total/NA
Lead	4.1		2.0		mg/Kg	4		6010B	Total/NA
Nickel	14		2.0		mg/Kg	4		6010B	Total/NA
Vanadium	16		2.0		mg/Kg	4		6010B	Total/NA
Zinc	17		6.0		mg/Kg	4		6010B	Total/NA
Mercury	0.050		0.0097		mg/Kg	1		7471A	Total/NA

## Client Sample ID: DISP-2

Lab Sample ID: 720-30628-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.19		0.0050		mg/L	1		6010B	Total/NA
Chromium	0.090		0.010		mg/L	1		6010B	Total/NA
Cobalt	0.20		0.0020		mg/L	1		6010B	Total/NA
Copper	0.13		0.020		mg/L	1		6010B	Total/NA
Molybdenum	0.050		0.010		mg/L	1		6010B	Total/NA
Nickel	0.034		0.010		mg/L	1		6010B	Total/NA
Vanadium	0.057		0.010		mg/L	1		6010B	Total/NA
Zinc	0.070		0.020		mg/L	1		6010B	Total/NA
Diesel Range Organics [C10-C28]	500		62		ug/L	1		8015B	Silica Gel Clea
Motor Oil Range Organics [C24-C36]	1100		370		ug/L	1		8015B	Silica Gel Clea

# Analytical Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

**Client Sample ID: DISP-1**  
Date Collected: 09/18/10 13:15  
Date Received: 09/20/10 13:00

**Lab Sample ID: 720-30628-1**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		4.9		ug/Kg		09/22/10 16:00	09/23/10 02:51	1
Ethylbenzene	ND		4.9		ug/Kg		09/22/10 16:00	09/23/10 02:51	1
Toluene	ND		4.9		ug/Kg		09/22/10 16:00	09/23/10 02:51	1
Xylenes, Total	ND		9.9		ug/Kg		09/22/10 16:00	09/23/10 02:51	1
Gasoline Range Organics (GRO) -C5-C12	ND		250		ug/Kg		09/22/10 16:00	09/23/10 02:51	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	95		65 - 117				09/22/10 16:00	09/23/10 02:51	1
1,2-Dichloroethane-d4 (Surr)	100		73 - 140				09/22/10 16:00	09/23/10 02:51	1
Toluene-d8 (Surr)	95		72 - 113				09/22/10 16:00	09/23/10 02:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Diesel Range Organics [C10-C28]</b>	<b>6.5</b>		1.0		mg/Kg		09/21/10 20:17	09/22/10 16:45	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		09/21/10 20:17	09/22/10 16:45	1
<b>Surrogate</b>	<b>% Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
Capric Acid (Surr)	0.8		0 - 5				09/21/10 20:17	09/22/10 16:45	1
p-Terphenyl	92		46 - 115				09/21/10 20:17	09/22/10 16:45	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		mg/Kg		09/24/10 08:58	09/24/10 15:02	4
Arsenic	ND		4.0		mg/Kg		09/24/10 08:58	09/24/10 15:02	4
<b>Barium</b>	<b>29</b>		2.0		mg/Kg		09/24/10 08:58	09/24/10 15:02	4
Beryllium	ND		0.40		mg/Kg		09/24/10 08:58	09/24/10 15:02	4
Cadmium	ND		0.50		mg/Kg		09/24/10 08:58	09/24/10 15:02	4
<b>Chromium</b>	<b>21</b>		2.0		mg/Kg		09/24/10 08:58	09/24/10 15:02	4
<b>Cobalt</b>	<b>3.3</b>		0.80		mg/Kg		09/24/10 08:58	09/24/10 15:02	4
<b>Copper</b>	<b>8.4</b>		6.0		mg/Kg		09/24/10 08:58	09/24/10 15:02	4
<b>Lead</b>	<b>4.1</b>		2.0		mg/Kg		09/24/10 08:58	09/24/10 15:02	4
Molybdenum	ND		2.0		mg/Kg		09/24/10 08:58	09/24/10 15:02	4
<b>Nickel</b>	<b>14</b>		2.0		mg/Kg		09/24/10 08:58	09/24/10 15:02	4
Selenium	ND		4.0		mg/Kg		09/24/10 08:58	09/24/10 15:02	4
Silver	ND		1.0		mg/Kg		09/24/10 08:58	09/24/10 15:02	4
Thallium	ND		2.0		mg/Kg		09/24/10 08:58	09/24/10 15:02	4
<b>Vanadium</b>	<b>16</b>		2.0		mg/Kg		09/24/10 08:58	09/24/10 15:02	4
Zinc	17		6.0		mg/Kg		09/24/10 08:58	09/24/10 15:02	4

## Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.050</b>		0.0097		mg/Kg		09/23/10 22:32	09/24/10 16:18	1

**Client Sample ID: DISP-2**  
Date Collected: 09/18/10 13:25  
Date Received: 09/20/10 13:00

**Lab Sample ID: 720-30628-2**  
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50		ug/L			09/22/10 19:03	1
Ethylbenzene	ND		0.50		ug/L			09/22/10 19:03	1

TestAmerica San Francisco

# Analytical Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

**Client Sample ID: DISP-2**

**Lab Sample ID: 720-30628-2**

Date Collected: 09/18/10 13:25

Matrix: Water

Date Received: 09/20/10 13:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		0.50		ug/L			09/22/10 19:03	1
Xylenes, Total	ND		1.0		ug/L			09/22/10 19:03	1
Gasoline Range Organics (GRO) -C5-C12	ND		50		ug/L			09/22/10 19:03	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	95		67 - 130					09/22/10 19:03	1
1,2-Dichloroethane-d4 (Surr)	96		67 - 130					09/22/10 19:03	1
Toluene-d8 (Surr)	94		70 - 130					09/22/10 19:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	500		62		ug/L		09/22/10 21:55	09/26/10 01:03	1
Motor Oil Range Organics [C24-C36]	1100		370		ug/L		09/22/10 21:55	09/26/10 01:03	1
Surrogate	% Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	2		0 - 5				09/22/10 21:55	09/26/10 01:03	1
p-Terphenyl	93		31 - 150				09/22/10 21:55	09/26/10 01:03	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L		09/22/10 12:00	09/22/10 22:20	1
Arsenic	ND		0.010		mg/L		09/22/10 12:00	09/22/10 22:20	1
<b>Barium</b>	<b>0.19</b>		0.0050		mg/L		09/22/10 12:00	09/22/10 22:20	1
Beryllium	ND		0.0020		mg/L		09/22/10 12:00	09/22/10 22:20	1
Cadmium	ND		0.0025		mg/L		09/22/10 12:00	09/22/10 22:20	1
<b>Chromium</b>	<b>0.090</b>		0.010		mg/L		09/22/10 12:00	09/22/10 22:20	1
<b>Cobalt</b>	<b>0.20</b>		0.0020		mg/L		09/22/10 12:00	09/22/10 22:20	1
<b>Copper</b>	<b>0.13</b>		0.020		mg/L		09/22/10 12:00	09/22/10 22:20	1
Lead	ND		0.0050		mg/L		09/22/10 12:00	09/22/10 22:20	1
<b>Molybdenum</b>	<b>0.050</b>		0.010		mg/L		09/22/10 12:00	09/22/10 22:20	1
<b>Nickel</b>	<b>0.034</b>		0.010		mg/L		09/22/10 12:00	09/22/10 22:20	1
Selenium	ND		0.020		mg/L		09/22/10 12:00	09/22/10 22:20	1
Silver	ND		0.0050		mg/L		09/22/10 12:00	09/22/10 22:20	1
Thallium	ND		0.010		mg/L		09/22/10 12:00	09/22/10 22:20	1
<b>Vanadium</b>	<b>0.057</b>		0.010		mg/L		09/22/10 12:00	09/22/10 22:20	1
Zinc	0.070		0.020		mg/L		09/22/10 12:00	09/22/10 22:20	1

## Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020		mg/L		09/23/10 15:45	09/24/10 12:32	1

# Quality Control Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

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

**Lab Sample ID: MB 720-78538/1-A**

**Matrix: Solid**

**Analysis Batch: 78520**

**Client Sample ID: MB 720-78538/1-A**

**Prep Type: Total/NA**

**Prep Batch: 78538**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		5.0		ug/Kg		09/22/10 16:00	09/22/10 22:23	1
Ethylbenzene	ND		5.0		ug/Kg		09/22/10 16:00	09/22/10 22:23	1
Toluene	ND		5.0		ug/Kg		09/22/10 16:00	09/22/10 22:23	1
m-Xylene & p-Xylene	ND		5.0		ug/Kg		09/22/10 16:00	09/22/10 22:23	1
o-Xylene	ND		5.0		ug/Kg		09/22/10 16:00	09/22/10 22:23	1
Xylenes, Total	ND		10		ug/Kg		09/22/10 16:00	09/22/10 22:23	1
Gasoline Range Organics (GRO) -C5-C12	ND		250		ug/Kg		09/22/10 16:00	09/22/10 22:23	1

Surrogate	MB % Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	103		65 - 117	09/22/10 16:00	09/22/10 22:23	1
1,2-Dichloroethane-d4 (Surr)	103		73 - 140	09/22/10 16:00	09/22/10 22:23	1
Toluene-d8 (Surr)	97		72 - 113	09/22/10 16:00	09/22/10 22:23	1

**Lab Sample ID: LCS 720-78538/2-A**

**Matrix: Solid**

**Analysis Batch: 78520**

**Client Sample ID: LCS 720-78538/2-A**  
**Prep Type: Total/NA**  
**Prep Batch: 78538**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec.	Limits
Benzene	50.0	51.6		ug/Kg		103	82 - 124
Ethylbenzene	50.0	48.4		ug/Kg		97	80 - 137
Toluene	50.0	47.4		ug/Kg		95	83 - 128
m-Xylene & p-Xylene	100	98.4		ug/Kg		98	79 - 146
o-Xylene	50.0	50.0		ug/Kg		100	84 - 140

Surrogate	LCS % Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	104		65 - 117
1,2-Dichloroethane-d4 (Surr)	99		73 - 140
Toluene-d8 (Surr)	101		72 - 113

**Lab Sample ID: LCS 720-78538/4-A**

**Matrix: Solid**

**Analysis Batch: 78520**

**Client Sample ID: LCS 720-78538/4-A**  
**Prep Type: Total/NA**  
**Prep Batch: 78538**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec.	Limits
Gasoline Range Organics (GRO) -C5-C12	1000	880		ug/Kg		88	68 - 115

Surrogate	LCS % Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	108		65 - 117
1,2-Dichloroethane-d4 (Surr)	106		73 - 140
Toluene-d8 (Surr)	100		72 - 113

**Lab Sample ID: LCSD 720-78538/3-A**

**Matrix: Solid**

**Analysis Batch: 78520**

**Client Sample ID: LCSD 720-78538/3-A**  
**Prep Type: Total/NA**  
**Prep Batch: 78538**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec.	RPD	Limit
Benzene	50.0	51.2		ug/Kg		102	82 - 124	0.9
Ethylbenzene	50.0	48.6		ug/Kg		97	80 - 137	0.3

TestAmerica San Francisco

# Quality Control Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

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

**Lab Sample ID: LCSD 720-78538/3-A**

**Matrix: Solid**

**Analysis Batch: 78520**

**Client Sample ID: LCSD 720-78538/3-A**

**Prep Type: Total/NA**

**Prep Batch: 78538**

Analyte	Spike Added	LCSD		Unit	D	% Rec.	Limits	RPD	RPD Limit
		Result	Qualifier						
Toluene	50.0	47.8		ug/Kg		96	83 - 128	0.8	20
m-Xylene & p-Xylene	100	98.9		ug/Kg		99	79 - 146	0.5	20
o-Xylene	50.0	49.8		ug/Kg		100	84 - 140	0.4	20

**LCSD LCSD**

**% Recovery Qualifier Limits**

<b>Surrogate</b>	<b>% Recovery</b>	<b>Qualifier</b>	<b>Limits</b>
4-Bromofluorobenzene	103		65 - 117
1,2-Dichloroethane-d4 (Surr)	100		73 - 140
Toluene-d8 (Surr)	100		72 - 113

**Lab Sample ID: LCSD 720-78538/5-A**

**Matrix: Solid**

**Analysis Batch: 78520**

**Client Sample ID: LCSD 720-78538/5-A**

**Prep Type: Total/NA**

**Prep Batch: 78538**

Analyte	Spike Added	LCSD		Unit	D	% Rec.	Limits	RPD	RPD Limit
		Result	Qualifier						
Gasoline Range Organics (GRO) -C5-C12	1000	880		ug/Kg		88	68 - 115	0.03	20

**LCSD LCSD**

**% Recovery Qualifier Limits**

<b>Surrogate</b>	<b>% Recovery</b>	<b>Qualifier</b>	<b>Limits</b>
4-Bromofluorobenzene	107		65 - 117
1,2-Dichloroethane-d4 (Surr)	103		73 - 140
Toluene-d8 (Surr)	99		72 - 113

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

**Lab Sample ID: MB 720-78439/4**

**Matrix: Water**

**Analysis Batch: 78439**

**Client Sample ID: MB 720-78439/4**

**Prep Type: Total/NA**

Analyte	Result	Qualifier	MB		MDL	Unit	D	Prepared	Analyzed	Dil Fac
			RL							
Benzene	ND		0.50			ug/L			09/22/10 10:01	1
Ethylbenzene	ND		0.50			ug/L			09/22/10 10:01	1
Toluene	ND		0.50			ug/L			09/22/10 10:01	1
m-Xylene & p-Xylene	ND		1.0			ug/L			09/22/10 10:01	1
o-Xylene	ND		0.50			ug/L			09/22/10 10:01	1
Xylenes, Total	ND		1.0			ug/L			09/22/10 10:01	1
Gasoline Range Organics (GRO) -C5-C12	ND		50			ug/L			09/22/10 10:01	1

**MB MB**

**% Recovery Qualifier Limits**

Surrogate	% Recovery	Qualifier	MB		Prepared	Analyzed	Dil Fac
			RL				
4-Bromofluorobenzene	98		67 - 130				1
1,2-Dichloroethane-d4 (Surr)	94		67 - 130				1
Toluene-d8 (Surr)	95		70 - 130				1

**Lab Sample ID: LCS 720-78439/5**

**Matrix: Water**

**Analysis Batch: 78439**

**Client Sample ID: LCS 720-78439/5**

**Prep Type: Total/NA**

Analyte	Spike Added	Spike		LCS	LCS	Unit	D	% Rec.	
		Result	Qualifier					% Rec.	Limits
Benzene	25.0	25.8		ug/L		103		82 - 127	
Ethylbenzene	25.0	24.8		ug/L		99		86 - 135	
Toluene	25.0	25.1		ug/L		100		83 - 129	

TestAmerica San Francisco

# Quality Control Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

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

**Lab Sample ID: LCS 720-78439/5**

**Matrix: Water**

**Analysis Batch: 78439**

**Client Sample ID: LCS 720-78439/5**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit ug/L	D	% Rec.	% Rec. Limits
m-Xylene & p-Xylene	50.0	48.0				96	70 - 142
o-Xylene	25.0	24.5		ug/L		98	89 - 136
<b>Surrogate</b>							
LCS    LCS % Recovery    Qualifier    Limits							
4-Bromofluorobenzene	100		67 - 130				
1,2-Dichloroethane-d4 (Surr)	92		67 - 130				
Toluene-d8 (Surr)	97		70 - 130				

**Lab Sample ID: LCS 720-78439/7**

**Matrix: Water**

**Analysis Batch: 78439**

**Client Sample ID: LCS 720-78439/7**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit ug/L	D	% Rec.	% Rec. Limits
Gasoline Range Organics (GRO) -C5-C12	500	479		ug/L		96	59 - 111
<b>Surrogate</b>							
LCS    LCS % Recovery    Qualifier    Limits							
4-Bromofluorobenzene	103		67 - 130				
1,2-Dichloroethane-d4 (Surr)	96		67 - 130				
Toluene-d8 (Surr)	96		70 - 130				

**Lab Sample ID: LCSD 720-78439/6**

**Matrix: Water**

**Analysis Batch: 78439**

**Client Sample ID: LCSD 720-78439/6**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit ug/L	D	% Rec.	RPD	RPD Limit
Benzene	25.0	25.7		ug/L		103	82 - 127	0.4    20
Ethylbenzene	25.0	24.7		ug/L		99	86 - 135	0.6    20
Toluene	25.0	25.0		ug/L		100	83 - 129	0.5    20
m-Xylene & p-Xylene	50.0	48.0		ug/L		96	70 - 142	0.2    20
o-Xylene	25.0	24.4		ug/L		97	89 - 136	0.6    20
<b>Surrogate</b>								
LCSD    LCSD % Recovery    Qualifier    Limits								
4-Bromofluorobenzene	101		67 - 130					
1,2-Dichloroethane-d4 (Surr)	92		67 - 130					
Toluene-d8 (Surr)	96		70 - 130					

**Lab Sample ID: LCSD 720-78439/8**

**Matrix: Water**

**Analysis Batch: 78439**

**Client Sample ID: LCSD 720-78439/8**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit ug/L	D	% Rec.	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12	500	465		ug/L		93	59 - 111	3    20
<b>Surrogate</b>								
LCSD    LCSD % Recovery    Qualifier    Limits								
4-Bromofluorobenzene	100		67 - 130					
1,2-Dichloroethane-d4 (Surr)	96		67 - 130					
Toluene-d8 (Surr)	97		70 - 130					

# Quality Control Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

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

**Lab Sample ID: 720-30663-A-1 MS**

**Matrix: Water**

**Analysis Batch: 78439**

**Client Sample ID: 720-30663-A-1 MS**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	% Rec.		Limits	
	Result	Qualifier	Added	Result	Qualifier			% Rec.	Limits		
Benzene	ND		25.0	24.7		ug/L		98	60 - 140		
Ethylbenzene	ND		25.0	25.1		ug/L		100	60 - 140		
Toluene	0.88		25.0	26.0		ug/L		100	60 - 140		
m-Xylene & p-Xylene	ND		50.0	48.6		ug/L		96	60 - 140		
o-Xylene	ND		25.0	25.0		ug/L		99	60 - 140		
<b>Surrogate</b>											
4-Bromofluorobenzene	96			67 - 130							
1,2-Dichloroethane-d4 (Surr)	94			67 - 130							
Toluene-d8 (Surr)	95			70 - 130							

**Lab Sample ID: 720-30663-A-1 MSD**

**Matrix: Water**

**Analysis Batch: 78439**

**Client Sample ID: 720-30663-A-1 MSD**

**Prep Type: Total/NA**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	% Rec.		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier			% Rec.	Limits		
Benzene	ND		25.0	25.3		ug/L		101	60 - 140	2	20
Ethylbenzene	ND		25.0	25.2		ug/L		100	60 - 140	0.6	20
Toluene	0.88		25.0	26.2		ug/L		101	60 - 140	0.9	20
m-Xylene & p-Xylene	ND		50.0	48.8		ug/L		97	60 - 140	0.5	20
o-Xylene	ND		25.0	25.4		ug/L		101	60 - 140	2	20
<b>Surrogate</b>											
4-Bromofluorobenzene	98			67 - 130							
1,2-Dichloroethane-d4 (Surr)	95			67 - 130							
Toluene-d8 (Surr)	95			70 - 130							

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

**Lab Sample ID: MB 720-78392/1-A**

**Matrix: Solid**

**Analysis Batch: 78437**

**Client Sample ID: MB 720-78392/1-A**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 78392**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared		Analyzed		Dil Fac
	Result	Qualifier					% Rec.	Limits	Prepared	Analyzed	
Diesel Range Organics [C10-C28]	ND		0.99		mg/Kg		09/21/10 14:57	09/22/10 11:02			1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		09/21/10 14:57	09/22/10 11:02			1
<b>Surrogate</b>											
Capric Acid (Surr)	0.03		0 - 5				09/21/10 14:57	09/22/10 11:02			1
p-Terphenyl	105		46 - 115				09/21/10 14:57	09/22/10 11:02			1

**Lab Sample ID: LCS 720-78392/2-A**

**Matrix: Solid**

**Analysis Batch: 78437**

**Client Sample ID: LCS 720-78392/2-A**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 78392**

Analyte	Spike	LCS		Unit	D	% Rec.		Limits
	Added	Result	Qualifier			% Rec.	Limits	
Diesel Range Organics [C10-C28]	82.3	71.4		mg/Kg		87	45 - 115	

# Quality Control Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

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

**Lab Sample ID: LCS 720-78392/2-A**

**Matrix: Solid**

**Analysis Batch: 78437**

Surrogate	LCS	LCS	Limits
	% Recovery	Qualifier	
p-Terphenyl	98		46 - 115

**Client Sample ID: LCS 720-78392/2-A**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 78392**

**Lab Sample ID: LCSD 720-78392/3-A**

**Matrix: Solid**

**Analysis Batch: 78437**

Analyte	Spike	LCSD	LCSD	Unit	D	% Rec.	RPD
	Added	Result	Qualifier				
Diesel Range Organics [C10-C28]	82.3	73.8		mg/Kg	90	45 - 115	3
<b>Surrogate</b>		<b>LCSD</b>	<b>LCSD</b>				
<b>Surrogate</b>		<b>% Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			
p-Terphenyl		102		46 - 115			

**Lab Sample ID: 720-30589-A-25-C MS**

**Matrix: Solid**

**Analysis Batch: 78437**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	% Rec.
	Result	Qualifier	Added	Result	Qualifier			
Diesel Range Organics [C10-C28]	4.9		83.2	68.1		mg/Kg	76	50 - 130
<b>Surrogate</b>		<b>MS</b>	<b>MS</b>					
<b>Surrogate</b>		<b>% Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				
p-Terphenyl		89		46 - 115				

**Lab Sample ID: 720-30589-A-25-D MSD**

**Matrix: Solid**

**Analysis Batch: 78437**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	% Rec.
	Result	Qualifier	Added	Result	Qualifier			
Diesel Range Organics [C10-C28]	4.9		82.1	61.6		mg/Kg	69	50 - 130
<b>Surrogate</b>		<b>MSD</b>	<b>MSD</b>					
<b>Surrogate</b>		<b>% Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				
p-Terphenyl		87		46 - 115				

**Lab Sample ID: MB 720-78518/1-A**

**Matrix: Water**

**Analysis Batch: 78531**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics [C10-C28]	ND		50		ug/L		09/22/10 18:29	09/23/10 12:09	1
Motor Oil Range Organics [C24-C36]	ND		300		ug/L		09/22/10 18:29	09/23/10 12:09	1
<b>Surrogate</b>		<b>MB</b>	<b>MB</b>						
<b>Surrogate</b>		<b>% Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
Capric Acid (Surr)		0		0 - 5					
p-Terphenyl		104		31 - 150					
				<b>Prepared</b>		<b>Analyzed</b>		<b>Dil Fac</b>	
				09/22/10 18:29		09/23/10 12:09		1	
				09/22/10 18:29		09/23/10 12:09		1	

# Quality Control Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

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

**Lab Sample ID:** LCS 720-78518/2-A

**Matrix:** Water

**Analysis Batch:** 78531

**Client Sample ID:** LCS 720-78518/2-A

**Prep Type:** Silica Gel Cleanup

**Prep Batch:** 78518

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec.	Limits
Diesel Range Organics [C10-C28]	2500	1540		ug/L	62	32 - 119	

Surrogate	LCS % Recovery	LCS Qualifier	Limits
p-Terphenyl	102		31 - 150

**Lab Sample ID:** LCSD 720-78518/3-A

**Matrix:** Water

**Analysis Batch:** 78531

**Client Sample ID:** LCSD 720-78518/3-A

**Prep Type:** Silica Gel Cleanup

**Prep Batch:** 78518

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec.	RPD
Diesel Range Organics [C10-C28]	2500	1770		ug/L	71	32 - 119	13

Surrogate	LCSD % Recovery	LCSD Qualifier	Limits
p-Terphenyl	112		31 - 150

## Method: 6010B - Metals (ICP)

**Lab Sample ID:** MB 720-78466/1-A

**Matrix:** Water

**Analysis Batch:** 78543

**Client Sample ID:** MB 720-78466/1-A

**Prep Type:** Total/NA

**Prep Batch:** 78466

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.010		mg/L	09/22/10 12:00	09/22/10 20:50		1
Arsenic	ND		0.010		mg/L	09/22/10 12:00	09/22/10 20:50		1
Barium	ND		0.0050		mg/L	09/22/10 12:00	09/22/10 20:50		1
Beryllium	ND		0.0020		mg/L	09/22/10 12:00	09/22/10 20:50		1
Cadmium	ND		0.0025		mg/L	09/22/10 12:00	09/22/10 20:50		1
Chromium	ND		0.010		mg/L	09/22/10 12:00	09/22/10 20:50		1
Cobalt	ND		0.0020		mg/L	09/22/10 12:00	09/22/10 20:50		1
Copper	ND		0.020		mg/L	09/22/10 12:00	09/22/10 20:50		1
Lead	ND		0.0050		mg/L	09/22/10 12:00	09/22/10 20:50		1
Molybdenum	ND		0.010		mg/L	09/22/10 12:00	09/22/10 20:50		1
Nickel	ND		0.010		mg/L	09/22/10 12:00	09/22/10 20:50		1
Selenium	ND		0.020		mg/L	09/22/10 12:00	09/22/10 20:50		1
Silver	ND		0.0050		mg/L	09/22/10 12:00	09/22/10 20:50		1
Thallium	ND		0.010		mg/L	09/22/10 12:00	09/22/10 20:50		1
Vanadium	ND		0.010		mg/L	09/22/10 12:00	09/22/10 20:50		1
Zinc	ND		0.020		mg/L	09/22/10 12:00	09/22/10 20:50		1

**Lab Sample ID:** LCS 720-78466/2-A

**Matrix:** Water

**Analysis Batch:** 78543

**Client Sample ID:** LCS 720-78466/2-A

**Prep Type:** Total/NA

**Prep Batch:** 78466

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec.	Limits
Antimony	1.00	0.936		mg/L	94	80 - 120	
Arsenic	1.00	0.915		mg/L	91	80 - 120	
Barium	1.00	1.01		mg/L	101	80 - 120	
Beryllium	1.00	0.993		mg/L	99	80 - 120	
Cadmium	1.00	0.974		mg/L	97	80 - 120	

TestAmerica San Francisco

# Quality Control Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

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

**Lab Sample ID: LCS 720-78466/2-A**

**Matrix: Water**

**Analysis Batch: 78543**

**Client Sample ID: LCS 720-78466/2-A**

**Prep Type: Total/NA**

**Prep Batch: 78466**

Analyte	Spike Added	LCS		Unit	D	% Rec	% Rec.	
		Result	Qualifier				Limits	RPD
Chromium	1.00	1.01		mg/L		101	80 - 120	
Cobalt	1.00	0.986		mg/L		99	80 - 120	
Copper	1.00	1.00		mg/L		100	80 - 120	
Lead	1.00	0.991		mg/L		99	80 - 120	
Molybdenum	1.00	0.995		mg/L		99	80 - 120	
Nickel	1.00	0.972		mg/L		97	80 - 120	
Selenium	1.00	0.945		mg/L		94	80 - 120	
Silver	0.500	0.484		mg/L		97	80 - 120	
Thallium	1.00	0.987		mg/L		99	80 - 120	
Vanadium	1.00	0.981		mg/L		98	80 - 120	
Zinc	1.00	0.980		mg/L		98	80 - 120	

**Lab Sample ID: LCSD 720-78466/3-A**

**Matrix: Water**

**Analysis Batch: 78543**

**Client Sample ID: LCSD 720-78466/3-A**

**Prep Type: Total/NA**

**Prep Batch: 78466**

Analyte	Spike Added	LCSD		Unit	D	% Rec	% Rec.		RPD	Limit
		Result	Qualifier				Limits	RPD		
Antimony	1.00	0.940		mg/L		94	80 - 120	0.5	20	
Arsenic	1.00	0.922		mg/L		92	80 - 120	0.8	20	
Barium	1.00	1.02		mg/L		102	80 - 120	0.4	20	
Beryllium	1.00	0.997		mg/L		100	80 - 120	0.4	20	
Cadmium	1.00	0.979		mg/L		98	80 - 120	0.5	20	
Chromium	1.00	1.02		mg/L		102	80 - 120	0.9	20	
Cobalt	1.00	0.992		mg/L		99	80 - 120	0.6	20	
Copper	1.00	1.02		mg/L		102	80 - 120	1	20	
Lead	1.00	0.996		mg/L		100	80 - 120	0.5	20	
Molybdenum	1.00	1.00		mg/L		100	80 - 120	0.8	20	
Nickel	1.00	0.977		mg/L		98	80 - 120	0.5	20	
Selenium	1.00	0.949		mg/L		95	80 - 120	0.5	20	
Silver	0.500	0.487		mg/L		97	80 - 120	0.7	20	
Thallium	1.00	0.992		mg/L		99	80 - 120	0.4	20	
Vanadium	1.00	0.988		mg/L		99	80 - 120	0.7	20	
Zinc	1.00	0.985		mg/L		99	80 - 120	0.5	20	

**Lab Sample ID: 720-30615-E-3-A MS**

**Matrix: Water**

**Analysis Batch: 78543**

**Client Sample ID: 720-30615-E-3-A MS**

**Prep Type: Total/NA**

**Prep Batch: 78466**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	% Rec	% Rec.	
				Result	Qualifier				Limits	RPD
Antimony	ND		1.00	0.949		mg/L		94	75 - 125	
Arsenic	ND		1.00	0.935		mg/L		93	75 - 125	
Barium	0.014		1.00	1.02		mg/L		101	75 - 125	
Beryllium	ND		1.00	0.989		mg/L		99	75 - 125	
Cadmium	ND		1.00	0.959		mg/L		96	75 - 125	
Chromium	ND		1.00	0.994		mg/L		99	75 - 125	
Cobalt	ND		1.00	0.955		mg/L		96	75 - 125	
Copper	ND		1.00	0.996		mg/L		99	75 - 125	
Lead	ND		1.00	0.957		mg/L		96	75 - 125	
Molybdenum	ND		1.00	1.01		mg/L		100	75 - 125	
Nickel	ND		1.00	0.949		mg/L		94	75 - 125	

# Quality Control Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

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

**Lab Sample ID: 720-30615-E-3-A MS**

**Matrix: Water**

**Analysis Batch: 78543**

**Client Sample ID: 720-30615-E-3-A MS**

**Prep Type: Total/NA**

**Prep Batch: 78466**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	% Rec	% Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD
Selenium	ND		1.00	0.960		mg/L		96	75 - 125	
Silver	ND		0.500	0.484		mg/L		97	75 - 125	
Thallium	ND		1.00	0.948		mg/L		95	75 - 125	
Vanadium	ND		1.00	0.986		mg/L		99	75 - 125	
Zinc	0.027		1.00	0.988		mg/L		96	75 - 125	

**Lab Sample ID: 720-30615-E-3-B MSD**

**Matrix: Water**

**Analysis Batch: 78543**

**Client Sample ID: 720-30615-E-3-B MSD**

**Prep Type: Total/NA**

**Prep Batch: 78466**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	% Rec	% Rec.		RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD		
Antimony	ND		1.00	0.965		mg/L		96	75 - 125	2	25	
Arsenic	ND		1.00	0.961		mg/L		96	75 - 125	3	25	
Barium	0.014		1.00	1.04		mg/L		103	75 - 125	2	25	
Beryllium	ND		1.00	1.01		mg/L		101	75 - 125	2	25	
Cadmium	ND		1.00	0.986		mg/L		99	75 - 125	3	25	
Chromium	ND		1.00	1.03		mg/L		103	75 - 125	3	25	
Cobalt	ND		1.00	0.982		mg/L		98	75 - 125	3	25	
Copper	ND		1.00	1.03		mg/L		103	75 - 125	3	25	
Lead	ND		1.00	0.983		mg/L		98	75 - 125	3	25	
Molybdenum	ND		1.00	1.03		mg/L		102	75 - 125	2	25	
Nickel	ND		1.00	0.972		mg/L		96	75 - 125	2	25	
Selenium	ND		1.00	0.981		mg/L		98	75 - 125	2	25	
Silver	ND		0.500	0.498		mg/L		100	75 - 125	3	25	
Thallium	ND		1.00	0.972		mg/L		97	75 - 125	3	25	
Vanadium	ND		1.00	1.02		mg/L		102	75 - 125	3	25	
Zinc	0.027		1.00	1.01		mg/L		99	75 - 125	3	25	

**Lab Sample ID: MB 720-78632/1-A**

**Matrix: Solid**

**Analysis Batch: 78662**

**Client Sample ID: MB 720-78632/1-A**

**Prep Type: Total/NA**

**Prep Batch: 78632**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	ND		0.48		mg/Kg		09/24/10 08:56	09/24/10 13:56	1
Arsenic	ND		0.96		mg/Kg		09/24/10 08:56	09/24/10 13:56	1
Barium	ND		0.48		mg/Kg		09/24/10 08:56	09/24/10 13:56	1
Beryllium	ND		0.096		mg/Kg		09/24/10 08:56	09/24/10 13:56	1
Cadmium	ND		0.12		mg/Kg		09/24/10 08:56	09/24/10 13:56	1
Chromium	ND		0.48		mg/Kg		09/24/10 08:56	09/24/10 13:56	1
Cobalt	ND		0.19		mg/Kg		09/24/10 08:56	09/24/10 13:56	1
Copper	ND		1.4		mg/Kg		09/24/10 08:56	09/24/10 13:56	1
Lead	ND		0.48		mg/Kg		09/24/10 08:56	09/24/10 13:56	1
Molybdenum	ND		0.48		mg/Kg		09/24/10 08:56	09/24/10 13:56	1
Nickel	ND		0.48		mg/Kg		09/24/10 08:56	09/24/10 13:56	1
Selenium	ND		0.96		mg/Kg		09/24/10 08:56	09/24/10 13:56	1
Silver	ND		0.24		mg/Kg		09/24/10 08:56	09/24/10 13:56	1
Thallium	ND		0.48		mg/Kg		09/24/10 08:56	09/24/10 13:56	1
Vanadium	ND		0.48		mg/Kg		09/24/10 08:56	09/24/10 13:56	1
Zinc	ND		1.4		mg/Kg		09/24/10 08:56	09/24/10 13:56	1

TestAmerica San Francisco

# Quality Control Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

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

**Lab Sample ID: LCS 720-78632/2-A**

**Matrix: Solid**

**Analysis Batch: 78662**

**Client Sample ID: LCS 720-78632/2-A**

**Prep Type: Total/NA**

**Prep Batch: 78632**

Analyte	Spike Added	LCS		Unit	D	% Rec.		Limits	5
		Result	Qualifier			% Rec.	Limits		
Antimony	49.5	50.7		mg/Kg		102	80 - 120		6
Arsenic	49.5	49.4		mg/Kg		100	80 - 120		7
Barium	49.5	57.8		mg/Kg		117	80 - 120		8
Beryllium	49.5	57.9		mg/Kg		117	80 - 120		9
Cadmium	49.5	52.4		mg/Kg		106	80 - 120		10
Chromium	49.5	53.7		mg/Kg		109	80 - 120		11
Cobalt	49.5	53.3		mg/Kg		108	80 - 120		12
Copper	49.5	53.9		mg/Kg		109	80 - 120		13
Lead	49.5	53.9		mg/Kg		109	80 - 120		
Molybdenum	49.5	54.4		mg/Kg		110	80 - 120		
Nickel	49.5	53.0		mg/Kg		107	80 - 120		
Selenium	49.5	51.3		mg/Kg		104	80 - 120		
Silver	24.8	25.8		mg/Kg		104	80 - 120		
Thallium	49.5	53.5		mg/Kg		108	80 - 120		
Vanadium	49.5	53.9		mg/Kg		109	80 - 120		
Zinc	49.5	52.4		mg/Kg		106	80 - 120		

**Lab Sample ID: LCSD 720-78632/3-A**

**Matrix: Solid**

**Analysis Batch: 78662**

**Client Sample ID: LCSD 720-78632/3-A**

**Prep Type: Total/NA**

**Prep Batch: 78632**

Analyte	Spike Added	LCSD		Unit	D	% Rec.		RPD	Limit
		Result	Qualifier			% Rec.	RPD		
Antimony	50.5	50.9		mg/Kg		101	80 - 120	0.5	20
Arsenic	50.5	48.5		mg/Kg		96	80 - 120	2	20
Barium	50.5	53.3		mg/Kg		105	80 - 120	8	20
Beryllium	50.5	53.2		mg/Kg		105	80 - 120	9	20
Cadmium	50.5	51.6		mg/Kg		102	80 - 120	2	20
Chromium	50.5	52.2		mg/Kg		103	80 - 120	3	20
Cobalt	50.5	52.5		mg/Kg		104	80 - 120	2	20
Copper	50.5	52.5		mg/Kg		104	80 - 120	3	20
Lead	50.5	53.2		mg/Kg		105	80 - 120	1	20
Molybdenum	50.5	53.8		mg/Kg		107	80 - 120	1	20
Nickel	50.5	52.4		mg/Kg		104	80 - 120	1	20
Selenium	50.5	50.8		mg/Kg		101	80 - 120	1	20
Silver	25.3	25.4		mg/Kg		101	80 - 120	2	20
Thallium	50.5	52.6		mg/Kg		104	80 - 120	2	20
Vanadium	50.5	52.8		mg/Kg		105	80 - 120	2	20
Zinc	50.5	51.6		mg/Kg		102	80 - 120	2	20

**Lab Sample ID: LCSSRM 720-78632/15-A**

**Matrix: Solid**

**Analysis Batch: 78662**

**Client Sample ID: LCSSRM 720-78632/15-A**

**Prep Type: Total/NA**

**Prep Batch: 78632**

Analyte	Spike Added	LCSSRM		Unit	D	% Rec.		Limits
		Result	Qualifier			% Rec.	Limits	
Antimony	105	61.8		mg/Kg		59	11 - 101	
Arsenic	79.4	73.5		mg/Kg		93	69 - 119	
Barium	391	372		mg/Kg		95	61 - 117	
Beryllium	304	301		mg/Kg		99	56 - 102	
Cadmium	48.3	44.2		mg/Kg		92	67 - 118	
Chromium	171	160		mg/Kg		93	67 - 121	

TestAmerica San Francisco

# Quality Control Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

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

**Lab Sample ID: LCSSRM 720-78632/15-A**

**Matrix: Solid**

**Analysis Batch: 78662**

**Client Sample ID: LCSSRM 720-78632/15-A**

**Prep Type: Total/NA**

**Prep Batch: 78632**

Analyte		Spike	LCSSRM	LCSSRM	Unit	D	% Rec	% Rec.	Limits	
		Added	Result	Qualifier						
Cobalt		59.2	55.8		mg/Kg		94	64 - 133		
Copper		327	312		mg/Kg		95	68 - 126		
Lead		181	166		mg/Kg		92	62 - 113		
Molybdenum		156	151		mg/Kg		97	62 - 128		
Nickel		76.0	70.7		mg/Kg		93	65 - 117		
Selenium		76.9	74.3		mg/Kg		97	63 - 126		
Silver		29.1	27.9		mg/Kg		96	51 - 130		
Thallium		192	171		mg/Kg		89	64 - 124		
Vanadium		213	212		mg/Kg		100	67 - 123		
Zinc		256	237		mg/Kg		93	62 - 110		

**Lab Sample ID: 720-30623-A-5-B MS**

**Matrix: Solid**

**Analysis Batch: 78662**

**Client Sample ID: 720-30623-A-5-B MS**

**Prep Type: Total/NA**

**Prep Batch: 78632**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	% Rec	% Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Antimony	4.6		49.0	19.4	F	mg/Kg		30	75 - 125	
Arsenic	12		49.0	61.2		mg/Kg		100	75 - 125	
Barium	250		49.0	262	4	mg/Kg		30	75 - 125	
Beryllium	ND		49.0	56.6		mg/Kg		115	75 - 125	
Cadmium	ND		49.0	50.7		mg/Kg		103	75 - 125	
Chromium	41		49.0	101		mg/Kg		122	75 - 125	
Cobalt	11		49.0	61.5		mg/Kg		103	75 - 125	
Copper	73		49.0	130		mg/Kg		116	75 - 125	
Lead	80		49.0	135		mg/Kg		111	75 - 125	
Molybdenum	ND		49.0	47.4		mg/Kg		97	75 - 125	
Nickel	84		49.0	144		mg/Kg		121	75 - 125	
Selenium	ND		49.0	49.5		mg/Kg		100	75 - 125	
Silver	ND		24.5	25.7		mg/Kg		105	75 - 125	
Thallium	ND		49.0	49.6		mg/Kg		101	75 - 125	
Vanadium	26		49.0	81.3		mg/Kg		112	75 - 125	
Zinc	130		49.0	190		mg/Kg		124	75 - 125	

**Lab Sample ID: 720-30623-A-5-C MSD**

**Matrix: Solid**

**Analysis Batch: 78662**

**Client Sample ID: 720-30623-A-5-C MSD**

**Prep Type: Total/NA**

**Prep Batch: 78632**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	% Rec	% Rec.	RPD
	Result	Qualifier	Added	Result	Qualifier					
Antimony	4.6		48.5	20.3	F	mg/Kg		32	75 - 125	5
Arsenic	12		48.5	62.6		mg/Kg		103	75 - 125	2
Barium	250		48.5	361	4 F	mg/Kg		233	75 - 125	32
Beryllium	ND		48.5	57.7		mg/Kg		118	75 - 125	2
Cadmium	ND		48.5	51.7		mg/Kg		106	75 - 125	2
Chromium	41		48.5	102	F	mg/Kg		126	75 - 125	1
Cobalt	11		48.5	63.3		mg/Kg		107	75 - 125	3
Copper	73		48.5	138	F	mg/Kg		134	75 - 125	6
Lead	80		48.5	133		mg/Kg		109	75 - 125	1
Molybdenum	ND		48.5	48.7		mg/Kg		100	75 - 125	3
Nickel	84		48.5	151	F	mg/Kg		138	75 - 125	5
Selenium	ND		48.5	51.0		mg/Kg		104	75 - 125	3

TestAmerica San Francisco

# Quality Control Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

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

Lab Sample ID: 720-30623-A-5-C MSD				Client Sample ID: 720-30623-A-5-C MSD						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 78662				Prep Batch: 78632						
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	% Rec.	RPD	RPD Limit
Silver	ND		24.3	26.6		mg/Kg		110	75 - 125	3 20
Thallium	ND		48.5	50.4		mg/Kg		104	75 - 125	2 20
Vanadium	26		48.5	85.6		mg/Kg		122	75 - 125	5 20
Zinc	130		48.5	202 F		mg/Kg		150	75 - 125	6 20

## Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 720-78586/1-A				Client Sample ID: MB 720-78586/1-A						
Matrix: Water				Prep Type: Total/NA						
Analysis Batch: 78649				Prep Batch: 78586						
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Mercury	ND		0.00020		mg/L		09/23/10 15:45	09/24/10 12:18		1

Lab Sample ID: LCS 720-78586/2-A				Client Sample ID: LCS 720-78586/2-A						
Matrix: Water				Prep Type: Total/NA						
Analysis Batch: 78649				Prep Batch: 78586						
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec.	Limits			
Mercury	0.0100	0.00950		mg/L		95	80 - 120			

Lab Sample ID: LCSD 720-78586/3-A				Client Sample ID: LCSD 720-78586/3-A						
Matrix: Water				Prep Type: Total/NA						
Analysis Batch: 78649				Prep Batch: 78586						
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	% Rec.	Limits			
Mercury	0.0100	0.00964		mg/L		96	80 - 120	1		20

Lab Sample ID: 720-30629-G-1-D MS				Client Sample ID: 720-30629-G-1-D MS						
Matrix: Water				Prep Type: Total/NA						
Analysis Batch: 78649				Prep Batch: 78586						
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec.	Limits	
Mercury	ND		0.0100	0.0115		mg/L		115	75 - 125	

Lab Sample ID: 720-30629-G-1-E MSD				Client Sample ID: 720-30629-G-1-E MSD						
Matrix: Water				Prep Type: Total/NA						
Analysis Batch: 78649				Prep Batch: 78586						
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	% Rec.	Limits	RPD
Mercury	ND		0.0100	0.0112		mg/L		112	75 - 125	2 20

## Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-78610/1-A				Client Sample ID: MB 720-78610/1-A						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 78670				Prep Batch: 78610						
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Mercury	ND		0.010		mg/Kg		09/23/10 22:32	09/24/10 15:37		1

TestAmerica San Francisco

# Quality Control Data

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

## Method: 7471A - Mercury (CVAA) (Continued)

**Lab Sample ID: LCS 720-78610/2-A**

**Matrix: Solid**

**Analysis Batch: 78670**

**Client Sample ID: LCS 720-78610/2-A**

**Prep Type: Total/NA**

**Prep Batch: 78610**

Analyte		Spike	LCS	LCS	Unit	D	% Rec.	Limits
		Added	Result	Qualifier				
Mercury		0.833	0.842		mg/Kg	101	80 - 120	

**Lab Sample ID: LCSD 720-78610/3-A**

**Matrix: Solid**

**Analysis Batch: 78670**

**Client Sample ID: LCSD 720-78610/3-A**

**Prep Type: Total/NA**

**Prep Batch: 78610**

Analyte		Spike	LCSD	LCSD	Unit	D	% Rec.	Limits	RPD	Limit
		Added	Result	Qualifier						
Mercury		0.833	0.858		mg/Kg	103	80 - 120	2	20	

**Lab Sample ID: 720-30571-A-1-L MS**

**Matrix: Solid**

**Analysis Batch: 78670**

**Client Sample ID: 720-30571-A-1-L MS**

**Prep Type: Total/NA**

**Prep Batch: 78610**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	% Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier				
Mercury	0.32		0.806	1.14		mg/Kg	101	75 - 125	

**Lab Sample ID: 720-30571-A-1-M MSD**

**Matrix: Solid**

**Analysis Batch: 78670**

**Client Sample ID: 720-30571-A-1-M MSD**

**Prep Type: Total/NA**

**Prep Batch: 78610**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	% Rec.	Limits	RPD
	Result	Qualifier	Added	Result	Qualifier					
Mercury	0.32		0.847	1.26		mg/Kg	111	75 - 125	10	20

# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

## GC/MS VOA

### Analysis Batch: 78439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-30663-A-1 MS	720-30663-A-1 MS	Total/NA	Water	8260B/CA_LUF TMS	
720-30663-A-1 MSD	720-30663-A-1 MSD	Total/NA	Water	8260B/CA_LUF TMS	
720-30628-2	DISP-2	Total/NA	Water	8260B/CA_LUF TMS	
MB 720-78439/4	MB 720-78439/4	Total/NA	Water	8260B/CA_LUF TMS	
LCS 720-78439/5	LCS 720-78439/5	Total/NA	Water	8260B/CA_LUF TMS	
LCSD 720-78439/6	LCSD 720-78439/6	Total/NA	Water	8260B/CA_LUF TMS	
LCS 720-78439/7	LCS 720-78439/7	Total/NA	Water	8260B/CA_LUF TMS	
LCSD 720-78439/8	LCSD 720-78439/8	Total/NA	Water	8260B/CA_LUF TMS	

### Analysis Batch: 78520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-30628-1	DISP-1	Total/NA	Solid	8260B	78538
MB 720-78538/1-A	MB 720-78538/1-A	Total/NA	Solid	8260B	78538
LCS 720-78538/2-A	LCS 720-78538/2-A	Total/NA	Solid	8260B	78538
LCSD 720-78538/3-A	LCSD 720-78538/3-A	Total/NA	Solid	8260B	78538
LCS 720-78538/4-A	LCS 720-78538/4-A	Total/NA	Solid	8260B	78538
LCSD 720-78538/5-A	LCSD 720-78538/5-A	Total/NA	Solid	8260B	78538

### Prep Batch: 78538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-78538/1-A	MB 720-78538/1-A	Total/NA	Solid	5035	
720-30628-1	DISP-1	Total/NA	Solid	5035	
LCS 720-78538/2-A	LCS 720-78538/2-A	Total/NA	Solid	5035	
LCSD 720-78538/3-A	LCSD 720-78538/3-A	Total/NA	Solid	5035	
LCS 720-78538/4-A	LCS 720-78538/4-A	Total/NA	Solid	5035	
LCSD 720-78538/5-A	LCSD 720-78538/5-A	Total/NA	Solid	5035	

## GC Semi VOA

### Prep Batch: 78392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-78392/1-A	MB 720-78392/1-A	Silica Gel Cleanup	Solid	3550B	
720-30628-1	DISP-1	Silica Gel Cleanup	Solid	3550B	
LCS 720-78392/2-A	LCS 720-78392/2-A	Silica Gel Cleanup	Solid	3550B	
LCSD 720-78392/3-A	LCSD 720-78392/3-A	Silica Gel Cleanup	Solid	3550B	
720-30589-A-25-C MS	720-30589-A-25-C MS	Silica Gel Cleanup	Solid	3550B	
720-30589-A-25-D MSD	720-30589-A-25-D MSD	Silica Gel Cleanup	Solid	3550B	

### Analysis Batch: 78437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-78392/2-A	LCS 720-78392/2-A	Silica Gel Cleanup	Solid	8015B	78392
LCSD 720-78392/3-A	LCSD 720-78392/3-A	Silica Gel Cleanup	Solid	8015B	78392
MB 720-78392/1-A	MB 720-78392/1-A	Silica Gel Cleanup	Solid	8015B	78392
720-30589-A-25-C MS	720-30589-A-25-C MS	Silica Gel Cleanup	Solid	8015B	78392
720-30589-A-25-D MSD	720-30589-A-25-D MSD	Silica Gel Cleanup	Solid	8015B	78392
720-30628-1	DISP-1	Silica Gel Cleanup	Solid	8015B	78392

# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

## GC Semi VOA (Continued)

### Prep Batch: 78518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-78518/1-A	MB 720-78518/1-A	Silica Gel Cleanup	Water	3510C SGC	
720-30628-2	DISP-2	Silica Gel Cleanup	Water	3510C SGC	
LCS 720-78518/2-A	LCS 720-78518/2-A	Silica Gel Cleanup	Water	3510C SGC	
LCSD 720-78518/3-A	LCSD 720-78518/3-A	Silica Gel Cleanup	Water	3510C SGC	

### Analysis Batch: 78531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-78518/2-A	LCS 720-78518/2-A	Silica Gel Cleanup	Water	8015B	78518
LCSD 720-78518/3-A	LCSD 720-78518/3-A	Silica Gel Cleanup	Water	8015B	78518
MB 720-78518/1-A	MB 720-78518/1-A	Silica Gel Cleanup	Water	8015B	78518

### Analysis Batch: 78694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-30628-2	DISP-2	Silica Gel Cleanup	Water	8015B	78518

## Metals

### Prep Batch: 78466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-78466/1-A	MB 720-78466/1-A	Total/NA	Water	3010A	
LCS 720-78466/2-A	LCS 720-78466/2-A	Total/NA	Water	3010A	
720-30628-2	DISP-2	Total/NA	Water	3010A	
LCSD 720-78466/3-A	LCSD 720-78466/3-A	Total/NA	Water	3010A	
720-30615-E-3-A MS	720-30615-E-3-A MS	Total/NA	Water	3010A	
720-30615-E-3-B MSD	720-30615-E-3-B MSD	Total/NA	Water	3010A	

### Analysis Batch: 78543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-78466/1-A	MB 720-78466/1-A	Total/NA	Water	6010B	78466
LCS 720-78466/2-A	LCS 720-78466/2-A	Total/NA	Water	6010B	78466
720-30628-2	DISP-2	Total/NA	Water	6010B	78466
LCSD 720-78466/3-A	LCSD 720-78466/3-A	Total/NA	Water	6010B	78466
720-30615-E-3-A MS	720-30615-E-3-A MS	Total/NA	Water	6010B	78466
720-30615-E-3-B MSD	720-30615-E-3-B MSD	Total/NA	Water	6010B	78466

### Prep Batch: 78586

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-78586/1-A	MB 720-78586/1-A	Total/NA	Water	7470A	
LCS 720-78586/2-A	LCS 720-78586/2-A	Total/NA	Water	7470A	
LCSD 720-78586/3-A	LCSD 720-78586/3-A	Total/NA	Water	7470A	
720-30629-G-1-D MS	720-30629-G-1-D MS	Total/NA	Water	7470A	
720-30629-G-1-E MSD	720-30629-G-1-E MSD	Total/NA	Water	7470A	
720-30628-2	DISP-2	Total/NA	Water	7470A	

### Prep Batch: 78610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-78610/1-A	MB 720-78610/1-A	Total/NA	Solid	7471A	
720-30628-1	DISP-1	Total/NA	Solid	7471A	
LCS 720-78610/2-A	LCS 720-78610/2-A	Total/NA	Solid	7471A	
LCSD 720-78610/3-A	LCSD 720-78610/3-A	Total/NA	Solid	7471A	
720-30571-A-1-L MS	720-30571-A-1-L MS	Total/NA	Solid	7471A	
720-30571-A-1-M MSD	720-30571-A-1-M MSD	Total/NA	Solid	7471A	

# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

## Metals (Continued)

### Prep Batch: 78632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-78632/1-A	MB 720-78632/1-A	Total/NA	Solid	3050B	
LCSSRM 720-78632/15-A	LCSSRM 720-78632/15-A	Total/NA	Solid	3050B	
720-30628-1	DISP-1	Total/NA	Solid	3050B	
LCS 720-78632/2-A	LCS 720-78632/2-A	Total/NA	Solid	3050B	
LCSD 720-78632/3-A	LCSD 720-78632/3-A	Total/NA	Solid	3050B	
720-30623-A-5-B MS	720-30623-A-5-B MS	Total/NA	Solid	3050B	
720-30623-A-5-C MSD	720-30623-A-5-C MSD	Total/NA	Solid	3050B	

### Analysis Batch: 78649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-78586/1-A	MB 720-78586/1-A	Total/NA	Water	7470A	78586
LCS 720-78586/2-A	LCS 720-78586/2-A	Total/NA	Water	7470A	78586
LCSD 720-78586/3-A	LCSD 720-78586/3-A	Total/NA	Water	7470A	78586
720-30629-G-1-D MS	720-30629-G-1-D MS	Total/NA	Water	7470A	78586
720-30629-G-1-E MSD	720-30629-G-1-E MSD	Total/NA	Water	7470A	78586
720-30628-2	DISP-2	Total/NA	Water	7470A	78586

### Analysis Batch: 78662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 720-78632/1-A	MB 720-78632/1-A	Total/NA	Solid	6010B	78632
720-30628-1	DISP-1	Total/NA	Solid	6010B	78632
LCSSRM 720-78632/15-A	LCSSRM 720-78632/15-A	Total/NA	Solid	6010B	78632
LCS 720-78632/2-A	LCS 720-78632/2-A	Total/NA	Solid	6010B	78632
LCSD 720-78632/3-A	LCSD 720-78632/3-A	Total/NA	Solid	6010B	78632
720-30623-A-5-B MS	720-30623-A-5-B MS	Total/NA	Solid	6010B	78632
720-30623-A-5-C MSD	720-30623-A-5-C MSD	Total/NA	Solid	6010B	78632

### Analysis Batch: 78670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-30628-1	DISP-1	Total/NA	Solid	7471A	78610
MB 720-78610/1-A	MB 720-78610/1-A	Total/NA	Solid	7471A	78610
LCS 720-78610/2-A	LCS 720-78610/2-A	Total/NA	Solid	7471A	78610
LCSD 720-78610/3-A	LCSD 720-78610/3-A	Total/NA	Solid	7471A	78610
720-30571-A-1-L MS	720-30571-A-1-L MS	Total/NA	Solid	7471A	78610
720-30571-A-1-M MSD	720-30571-A-1-M MSD	Total/NA	Solid	7471A	78610

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## Certification Summary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

Laboratory	Authority	Program	EPA Region	Certification ID	Expiration Date
TestAmerica San Francisco	California	State Program	9	2496	01/31/12

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

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## Method Summary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SF
8260B/CA_LUFT MS	8260B / CA LUFT MS	SW846	TAL SF
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL SF
6010B	Metals (ICP)	SW846	TAL SF
7470A	Mercury (CVAA)	SW846	TAL SF
7471A	Mercury (CVAA)	SW846	TAL SF

**Protocol References:**

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

**Laboratory References:**

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

## Sample Summary

Client: Haley & Aldrich, Inc.  
Project/Site: GSA Alameda

TestAmerica Job ID: 720-30628-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-30628-1	DISP-1	Solid	09/18/10 13:15	09/20/10 13:00
720-30628-2	DISP-2	Water	09/18/10 13:25	09/20/10 13:00

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## TESTAMERICA San Francisco Chain of Custody

1220 Quarry Lane • Pleasanton CA 94566-4756  
Phone: (925) 464-1919 • Fax: (925) 609-3002

Date 9/18/10 Page 1 of 1

## Report To

Attn: Charles Rome  
 Company: Haley & Aldrich  
 Address: 2033 N. Main St. Ste 309 Walnut Creek, CA  
 Phone: 925-979-1454 Email: crome@haleyaldrich.com  
 Bill To: Same  
 Sampled By: C. Rome

Attn: Phone:

Sample ID	Date	Time	Matrix	Preserv
DISP-1	9/18/10	1315	S	Y/N
DISP-2	9/18/10	1325	W	Y

**Analysis Request**

Test	Method	Sample ID	Result
TPH EPA -	<input type="checkbox"/> 8260B	DISP-1	X
TPH EPA 8015M*	<input checked="" type="checkbox"/>	DISP-1	X
Gas w/ Diesel	<input checked="" type="checkbox"/>	DISP-1	X
MTBE	<input type="checkbox"/>	DISP-1	X
Silica Gel	<input type="checkbox"/>	DISP-1	X
Motor Oil	<input type="checkbox"/>	DISP-1	X
Other	<input type="checkbox"/>	DISP-1	X
EPA 8260B: Gas	<input type="checkbox"/>	DISP-1	X
Diesel	<input type="checkbox"/>	DISP-1	X
5 Oxigenates	<input type="checkbox"/>	DISP-1	X
DCA, EDB	<input type="checkbox"/>	DISP-1	X
Ethanol	<input type="checkbox"/>	DISP-1	X
(IVOCs) EPA 8021 by 8260B	<input type="checkbox"/>	DISP-1	X
Volatile Organics GC/MS (VOCs)	<input type="checkbox"/>	DISP-1	X
EPA 8260B	<input type="checkbox"/>	DISP-1	X
624	<input type="checkbox"/>	DISP-1	X
Semivolatiles GC/MS	<input type="checkbox"/>	DISP-1	X
EPA 8270	<input type="checkbox"/>	DISP-1	X
625	<input type="checkbox"/>	DISP-1	X
Oil and Grease	<input type="checkbox"/>	DISP-1	X
Petroleum	<input type="checkbox"/>	DISP-1	X
Total	<input type="checkbox"/>	DISP-1	X
(EPA 1664)	<input type="checkbox"/>	DISP-1	X
Pesticides	<input type="checkbox"/>	DISP-1	X
EPA 8081	<input type="checkbox"/>	DISP-1	X
608	<input type="checkbox"/>	DISP-1	X
PCBs	<input type="checkbox"/>	DISP-1	X
EPA 8082	<input type="checkbox"/>	DISP-1	X
608	<input type="checkbox"/>	DISP-1	X
PNAs by	<input type="checkbox"/>	DISP-1	X
8270	<input type="checkbox"/>	DISP-1	X
8310	<input type="checkbox"/>	DISP-1	X
CAM17 Metals	<input type="checkbox"/>	DISP-1	X
(EPA 6010/7470/7471)	<input type="checkbox"/>	DISP-1	X
Metals: Lead	<input type="checkbox"/>	DISP-1	X
LUFT	<input type="checkbox"/>	DISP-1	X
RCRA	<input type="checkbox"/>	DISP-1	X
Other:	<input type="checkbox"/>	DISP-1	X
Low Level Metals by EPA 2008/6020	<input type="checkbox"/>	DISP-1	X
(ICP-MS):	<input type="checkbox"/>	DISP-1	X
W.E.T. (STLC)	<input type="checkbox"/>	DISP-1	X
TCLP	<input type="checkbox"/>	DISP-1	X
Hexavalent Chromium	<input type="checkbox"/>	DISP-1	X
pH (24h hold time for H <sub>2</sub> O)	<input type="checkbox"/>	DISP-1	X
Spec. Cond.	<input type="checkbox"/>	DISP-1	X
Alkalinity	<input type="checkbox"/>	DISP-1	X
TSS	<input type="checkbox"/>	DISP-1	X
TDS	<input type="checkbox"/>	DISP-1	X
Anions : Cl	<input type="checkbox"/>	DISP-1	X
SO <sub>4</sub>	<input type="checkbox"/>	DISP-1	X
NO <sub>3</sub>	<input type="checkbox"/>	DISP-1	X
F	<input type="checkbox"/>	DISP-1	X
Br	<input type="checkbox"/>	DISP-1	X
NO <sub>2</sub>	<input type="checkbox"/>	DISP-1	X
PO <sub>4</sub>	<input type="checkbox"/>	DISP-1	X

Number of Containers

4

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C.R.  
9/18/10

## Project Info Sample Receipt

Project Name: GSA Alameda # of Containers:

Project #: 365885-001 Head Space:

PO #: Temp: 32°C, 2-60°C

Credit Card #: Conforms to record:

T	<input checked="" type="checkbox"/>	5 Day	3 Day	2 Day	1 Day	Other:
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Report:  Routine  Level 3  Level 4  EDD  State Tank

Fund EDF

Special Instructions / Comments:  Global ID \_\_\_\_\_

See Terms and Conditions on reverse

\*TestAmerica SF reports 8015M from C<sub>9</sub>-C<sub>24</sub> (industry norm). Default for 8015B is C<sub>10</sub>-C<sub>28</sub>

1) Relinquished by:  Signature: <i>Charles Rome</i> Time: <i>1015</i> Printed Name: <i>Charles Rome</i> Date: <i>9/20/10</i> Company: <i>Haley &amp; Aldrich</i>	2) Relinquished by:  Signature: <i>Ed Martin</i> Time: <i>1300</i> Printed Name: <i>Ed Martin</i> Date: <i>9-20-10</i> Company: <i>TASP</i>	3) Relinquished by:  Signature: _____ Time: _____ Printed Name: _____ Date: _____ Company: _____
1) Received by:  Signature: <i>John Mullen</i> Time: <i>1015</i> Printed Name: <i>John Mullen</i> Date: <i>9-20-10</i> Company: <i>TASP</i>	2) Received by:  Signature: <i>Mullen</i> Time: <i>1300</i> Printed Name: <i>Mullen</i> Date: <i>9-20-10</i> Company: <i>test America</i>	3) Received by:  Signature: _____ Time: _____ Printed Name: _____ Date: _____ Company: _____

## Login Sample Receipt Check List

Client: Haley & Aldrich, Inc.

Job Number: 720-30628-1

**Login Number: 30628**

**List Source: TestAmerica San Francisco**

**Creator: Mullen, Joan**

**List Number: 1**

Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is 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 sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

## **APPENDIX D**

### **Manifest**

POTRERO HILLS LANDFILL, INC.  
Weighed at:  
POTRERO HILLS LANDFILL, INC.  
3675 POTRERO HILLS LANE  
SUISUN, CA 94585

Deputy: Jairo Torres  
Deposit: Jairo Torres  
BILL TO: 137  
ENV AMERICA/ENV ENVIROMNNT

Vehicle ID: 1370  
Reference: PHLF10015  
DriverOn?: N

Origin: ALAMEDA  
DATE IN: 03/05/2010 TIME IN: 09:48:46  
DATE OUT: 03/05/2010 TIME OUT: 10:11

INBOUND TICKET Number: 01-075242

SCALE 1 GROSS WT. 35460 LB  
SCALE 3 TARE WT. 26000 LB  
NET WEIGHT 9460 LB

Qty	Description	Amount
4.73	Profile Soil-T ADC	

X \_\_\_\_\_

WEIGHMASTER CERTIFICATE:

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code), administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

X \_\_\_\_\_  
(Deputy Signature)

This is to certify that this load does not contain any hazardous materials, medical waste or liquids of any type.

1 1 1

*Brin*

POTRERO HILLS LANDFILL, INC.  
Weighed at:  
POTRERO HILLS LANDFILL, INC.  
3676 POTRERO HILLS LANE  
SUISUN, CA 94585

Deputy: Janee Quinonez  
Deposit: Janee Quinonez  
BILL TO: 137  
ENV AMERICA/ENV ENVIRONMT

Vehicle ID: 1799215  
Reference: PHLF10015  
DriverOn?: N

Origin: ALAMEDA  
DATE IN: 03/05/2010 TIME IN: 17:00:26  
DATE OUT: 03/05/2010 TIME OUT: 17:42

INBOUND TICKET Number: 01-075401

SCALE 1 GROSS WT. 67000 LB  
SCALE 3 TARE WT. 38680 LB  
NET WEIGHT 28320 LB

Qty	Description	Amount
14.16	Profile Soil-T ADD	

*X*

WEIGHMASTER CERTIFICATE:

THIS IS TO CERTIFY that the following described commodity was weighed, measured, or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code), administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

*X* \_\_\_\_\_  
(Deputy Signature)

This is to certify that this load does not contain any hazardous materials, medical waste or liquids of any type.

*X* \_\_\_\_\_ *JAG*



**POTRERO HILLS LANDFILL**  
A Waste Connections Company

HF 75242

SCALE TAG# \_\_\_\_\_

**NON-HAZARDOUS WASTE MANIFEST**

**GENERATOR INFORMATION**

Generator Name: GENERAL SERVICES ADMIN. / GSA

Address: 620 CENTRAL AVE

City: ALAMEDA County: ALAMEDA

State: CA Zip: 94501

Site Location (if different): \_\_\_\_\_

**CUSTOMER/BILLING INFORMATION**

Billing Name: ENVIRONMENTAL INTERNATIONAL

Address: 6180 B FORET CT

City: BENICIA County: SOLANO

State: CA Zip: 94510

Approval #	Description of Waste	Volume/Weight	Expiration Date	Container Type
PHLF10015	PROFILE SOIL ADC	5705	6/2/2010	
	Max tons for profile	150Tns		

\*Attach Additional Sheet if necessary

I hereby certify that the above-described materials are non-hazardous wastes as defined by 40 CFR 261 or any applicable state law. Further, that the above named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Carolyne Coker  
Generator/Authorized Agent Name

Signature

3/4/10

Date Shipped

**TRANSPORTER INFORMATION**

Transporter Name: Enviro Environmental

DOT# 1299215

Transporter Address: 6180 Agent ct.

Truck Number: 13712

BENICIA CA 94510

Phone Number: 707-751-3817

I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

Larry Ryland  
Name of Authorized Agent

Signature

3/5/10

Date Delivered

**DISPOSAL SITE INFORMATION**

Site Name: POTRERO HILLS LANDFILL, INC.

Phone No. 707-432-4627

Site Address: 3675 POTRERO HILLS LANE SUISUN, CA 94585

Truck Weight:

I hereby acknowledge receipt of the above-described materials.

JT  
Name (Print or Type)

Signature

7-5-10

Date Received



**POTRERO HILLS LANDFILL**  
A Waste Connections Company

GSA0901

SCALE TAG#

75401

**NON-HAZARDOUS WASTE MANIFEST**

**GENERATOR INFORMATION**

GENERAL SERVICES ADMIN./  
GSA

Address: 620 CENTRAL AVE.

City: ALAMEDA County: ALAMEDA

State: CA Zip: 94501

Site Location (if different):

**CUSTOMER/BILLING INFORMATION**

Billing Name: ENVIRONMENTAL INTERNATIONAL

Address: 6180 B EURET CT

City: BENICIA County: SOLANO

State: CA Zip: 94510

Appraiser #	Description of Waste	Volume/Weight	Expiration Date	Container Type
PHLF10015	PROFILE SOIL ADC		6/2/2010	
	Max tons for profile	150 Tns		

\*Attach Additional Sheet if Necessary

I hereby certify that the above-described materials are non-hazardous wastes as defined by 40 CFR 261, or any applicable state law. Further, that the above listed materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

Darwin Foley

Signature

3/4/10

Date Shipped

**TRANSPORTER INFORMATION**

Transporter Name: ENVIRONMENTAL

DOT# 1749215

Transporter Address: 6180 B EURET CT.

Truck Number: 127-6-644/61803

BENICIA CA 94510

Phone Number: 707-751-3817

I certify no hazardous waste or other regulated substance was knowingly introduced to the waste while in my custody. The waste transported in this vehicle is the waste identified above, to the best of my knowledge.

Harry Ryland

Signature

3/5/10

Date Delivered

**DISPOSAL SITE INFORMATION**

Name: POTRERO HILLS LANDFILL, INC.

Phone No. 707-432-4627

Address: 3675 POTRERO HILLS LANE SUISUN, CA 94585

Truck Weight: 607600

I hereby acknowledge receipt of the above-described materials.

Name (Print or Type)

Signature

3/5/10

Date Received

<b>NON-HAZARDOUS WASTE MANIFEST</b>	1. Generator ID Number  N/A	2. Page 1 of 1	3. Emergency Response Phone 707.355.0150	4. Waste Tracking Number GSA 0902.5		
	5. Generator's Name and Mailing Address U.S. General Services Administration 620 Central Avenue Alameda, California 94501		Generator's Site Address (if different than mailing address)			
Generator's Phone: (510) 337-5027						
6. Transporter 1 Company Name ENV Environmental International, Inc.		U.S. EPA ID Number CA R00179382				
7. Transporter 2 Company Name		U.S. EPA ID Number				
8. Designated Facility Name and Site Address Crosby and Orenton 1610 W. 17th Street, Long Beach, CA 90813		U.S. EPA ID Number				
Facility's Phone: 552-432-5445				CAD 028409019		
<b>GENERATOR</b>	9. Waste Shipping Name and Description	10. Containers		11. Total Quantity	12. Unit Wt./Vol.	
		No.	Type			
		1.	DDI	DM	30	G
		2.	DDI	DM	200	P
		3.				
4.						
13. Special Handling Instructions and Additional Information Send invoice to: ENV Environmental International, Inc. Attn: Mark Warr. Always wear proper PPE when handling this material. Project number: GSA.0902.5 Alameda Soil and Water Disposal 9b.1 Profile number 78110 // 9b.2 Profile number 78111						
14. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.						
Generator's/Officer's Printed/Typed Name <i>Carlyn Cooley</i>		Signature		Month Day Year <i>10/14/10</i>		
15. International Shipments <input type="checkbox"/> Import to U.S. <input type="checkbox"/> Export from U.S.		Port of entry/exit: <i>Los Angeles</i>		Date leaving U.S.: <i>10/14/10</i>		
Transporter Signature (for exports only):						
16. Transporter Acknowledgment of Receipt of Materials						
Transporter 1 Printed/Typed Name <i>Wm. J. Dugay</i>		Signature		Month Day Year <i>10/14/10</i>		
Transporter 2 Printed/Typed Name		Signature		Month Day Year		
17. Discrepancy						
17a. Discrepancy Indication Space <input type="checkbox"/> Quantity <input type="checkbox"/> Type <input type="checkbox"/> Residue		<input type="checkbox"/> Partial Rejection		<input type="checkbox"/> Full Rejection		
Manifest Reference Number:						
17b. Alternate Facility (or Generator)		U.S. EPA ID Number				
Facility's Phone:						
17c. Signature of Alternate Facility (or Generator)				Month Day Year		
18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a						
Printed/Typed Name		Signature		Month Day Year		