

## Wickham, Jerry, Env. Health

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**From:** Tilotta, Vincent [VTilotta@haleyaldrich.com]  
**Sent:** Wednesday, January 22, 2014 11:19 AM  
**To:** Wickham, Jerry, Env. Health  
**Cc:** Schwartz, James  
**Subject:** Request for approval for onsite reuse of excavated soil at Hanson  
**Attachments:** Hanson Stockpile Reuse Locations.pdf; J54016-1 UDS Level 2 Report Final Report.pdf; J54016-2 UDS Level 2 Report Final Report.pdf; J54027-1 UDS Level 2 Report Final Report.pdf; J54027-2 UDS Level 2 Report Final Report.pdf; J54027-3 UDS Level 2 Report Final Report.pdf

Hi Jerry,

We would like to reuse some excavated material from the Hanson site as backfill. Attached is an aerial with the location of the stockpiles, along with the lab results from samples taken from the stockpiles. Here is some additional information about these soil stockpiles.

1) The location and volume of the stockpiles and volume that each sample represents to assure compliance with the proposed sample to soil volume ratios.

Locations: The locations of the stockpiles are in AOC 2 , near the former idle truck maintenance bay, and in AOC 3 in the east parking lot.

Volumes and Sampling frequency: There are two stockpiles, the leach field over burden (LF-Spoils Comp), and the transite pipe trench (3-TPT Spoils) over burden. The volume of the leach field overburden stockpile is 313 cubic yards (cy), and the transite pipe trench over burden is 94 cy. Per the DTSC backfill sampling guidance, 1 sample per every 250 cy was collected up to 1000 cy. Each sample was a 4-point composite collected from the surface to 0.5 ft due to access limitations. 2 composite samples were collected for the leach field overburden, and 1 sample was collected for the transite pipe trench over burden.

2) Distribution of samples within the stockpile (depth, etc.)

All samples were from surface to 0.5 ft due to access limitations.

3) The source of the fill material (Do each of the stockpiles appear to be left from Hanson operations?)

As mention above, both of these stockpiles were produced from excavations onsite. The leach field over burden stockpile was the soil located above the leach field from the surface to a depth of 5 feet below ground surface. The other stockpile is from the soil located above a transite pipe in AOC 3.

4) The type of fill and the heterogeneity

Both of these stockpiles appear heterogeneous and comprised of silt and sand.

5) Whether the fill contains any debris or construction material

No debris or construction material was observed during excavation or sampling. Should any debris, construction material, or otherwise suspect material be observed during preparation of the fill material we will assess the extent of foreign materials in the stockpile. No such materials will be used as backfill.

6) Laboratory analytical results consistent with the analytical suite from the attached set of emails.

Samples were run for the agreed upon analytes: TPH-d/mo, CAM17 metals, PAHs, pH, and asbestos (as bulk PLM).  
Please see the attached for original laboratory analytical reports.

Please let me know if you need any other information.

Thanks,  
-Vince

-----Original Message-----

From: Wickham, Jerry, Env. Health [<mailto:jerry.wickham@acgov.org>]

Sent: Monday, September 16, 2013 10:57 AM

To: Schwartz, James

Cc: [jrigter@lpfire.org](mailto:jrigter@lpfire.org); Sebik, Joanna; [brendan@albionpartners.com](mailto:brendan@albionpartners.com); Guthrie, Kristin

Subject: RE: Former Hanson Facility: Stockpiles Proposed for Reuse On Site

Jym,

I will need some additional information to go along with the analytical results. I have attached our last chain of emails which established a standard sampling scheme consistent with DTSC guidance and analytical suite for stockpile approvals. In order to know whether the soil meets these criteria, I would need the following for each stockpile:

1) The location and volume of the stockpiles and volume that each sample represents to assure compliance with the proposed sample to soil volume ratios. (the air photo is good for location)

2) Distribution of samples within the stockpile (depth, etc.)

3) The source of the fill material (Do each of the stockpiles appear to be left from Hanson operations?)

4) The type of fill and the heterogeneity

5) Whether the fill contains any debris or construction material

6) Laboratory analytical results consistent with the analytical suite from the attached set of emails.

Regards,

Jerry Wickham

Alameda County Environmental Health

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From: Schwartz, James [[JSchwartz@haleyaldrich.com](mailto:JSchwartz@haleyaldrich.com)]

Sent: Friday, September 13, 2013 11:16 AM

To: Wickham, Jerry, Env. Health

Cc: jrigter@lpfire.org; Sebik, Joanna; brendan@albionpartners.com; Guthrie, Kristin

Subject: Former Hanson Facility: Stockpiles Proposed for Reuse On Site

Hi Jerry,

Attached please find a summary of analytical data for "Borrow Piles" 2, 3 and 4, as well as an air photo showing their locations. Kindly let us know if we are approved to reuse this soil on site as excavation backfill at your earliest convenience, and if there are any recommendations or restrictions on that reuse if approved.

I am available if you have any questions!

Thanks,

-Jym

James P. Schwartz, P.G.

HALEY & ALDRICH

2033 North Main Street, Suite 309

Walnut Creek, CA 94596

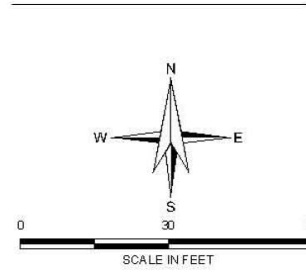
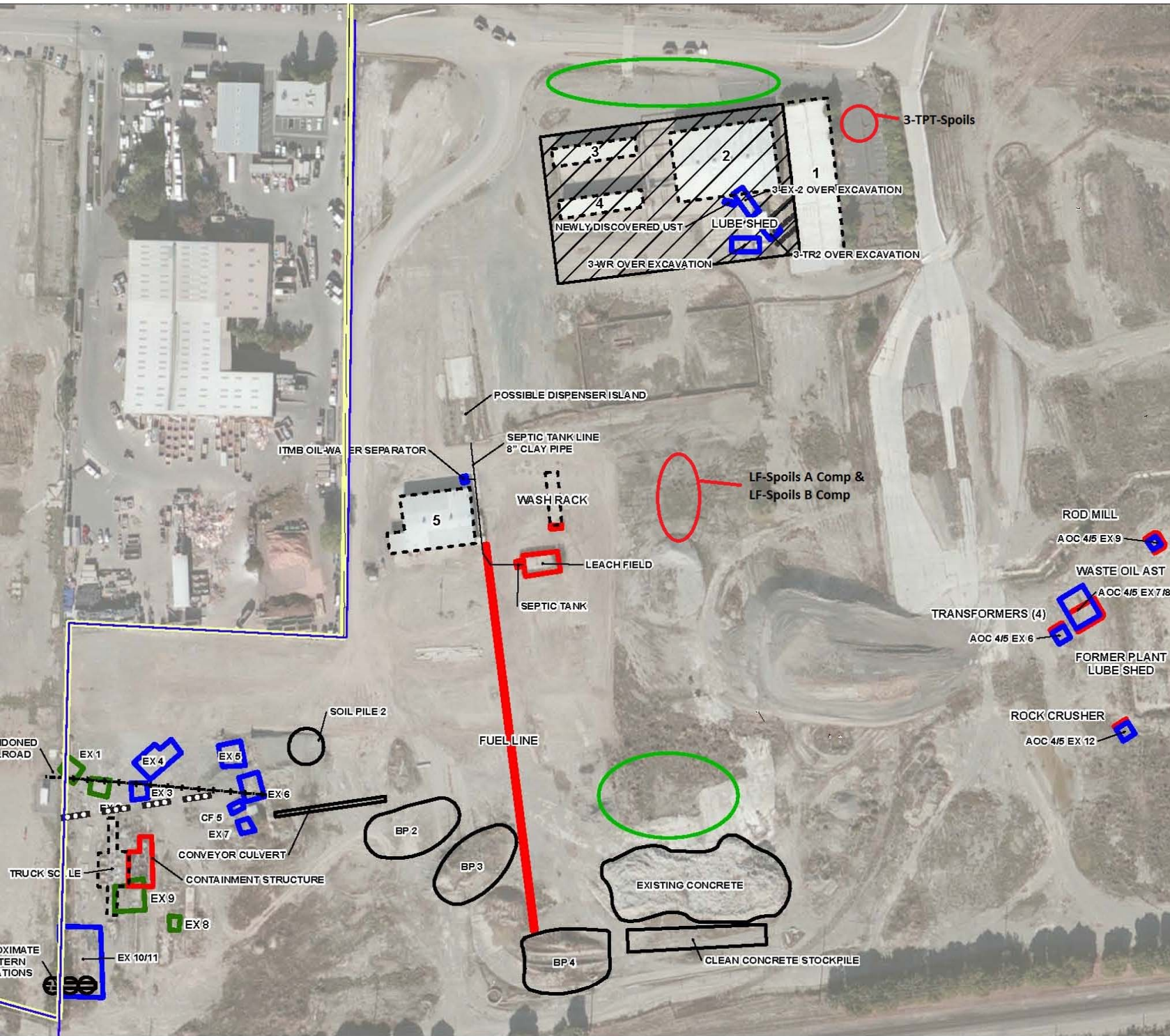
phone: 925.949.2760

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JSchwartz@HaleyAldrich.com

www.HaleyAldrich.com<<https://sync.acgov.org/OWA/UrlBlockedError.aspx>>



**HALEY & ALDRICH** FORMER HANSON AGGREGATES RADUM FACILITY  
3000 BUSCH ROAD  
PLEASANTON, CALIFORNIA

**FEATURES OF INTEREST**

SCALE: AS SHOWN  
OCTOBER 2013

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

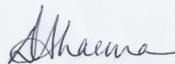
## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Pleasanton  
1220 Quarry Lane  
Pleasanton, CA 94566  
Tel: (925)484-1919

TestAmerica Job ID: 720-54016-1  
Client Project/Site: Hanson

For:  
Haley & Aldrich, Inc.  
2033 North Main Street  
Suite 309  
Walnut Creek, California 94596

Attn: James Schwartz



Authorized for release by:  
12/2/2013 4:56:03 PM

Dimple Sharma, Senior Project Manager  
(925)484-1919  
[dimple.sharma@testamericainc.com](mailto:dimple.sharma@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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# Definitions/Glossary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

## Qualifiers

### GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
*	ISTD response or retention time outside acceptable limits

### GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
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.

### Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.

## Glossary

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

# Case Narrative

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Job ID: 720-54016-1**

**Laboratory: TestAmerica Pleasanton**

## Narrative

### Job Narrative 720-54016-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 11/25/2013 11:09 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 16.4° C and 16.4° C.

#### GC/MS VOA

Method 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch #148978 recovered outside control limits for the following analytes: MEK. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260B: The continuing calibration verification (CCV) associated with batch #149012 recovered above the upper control limit for 2,2-DCPA. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: (CCVIS 720-149012/2).

Method 8260B: Internal standard response for the following sample 54016-5 exceeded the lower control limit and confirmed by reanalysis.

No other analytical or quality issues were noted.

#### GC VOA

No analytical or quality issues were noted.

#### GC Semi VOA

Method 8015B: Due to the level of dilution required for the following sample, surrogate recoveries are not reported: 3-EX2-SPOILS-A (720-54016-5), 3-TR/EX-SPOILS (720-54016-45).

Method 8015B: Capric acid Surrogate recovery for the following sample was outside control limits: 3-TR2-SPOILS-A (720-54016-20), 3-TR2-SPOILS-B (720-54016-25). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No other analytical or quality issues were noted.

#### Metals

Method 6010B: The continuing calibration verification (CCV) associated with batch 149181 recovered above the upper control limit Ag. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: 15+05 (720-54063-1), 3-EX2-SPOILS-A (720-54016-5), 3-EX2-SPOILS-B (720-54016-10), 3-EX2-SPOILS-C (720-54016-15), 3-TPT-SPOILS (720-54016-40), 3-TR/EX-SPOILS (720-54016-45), 3-TR2-SPOILS-A (720-54016-20), 3-TR2-SPOILS-B (720-54016-25), 3-TR2-SPOILS-C (720-54016-30), 3-WR-SPOILS (720-54016-35).

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: Hanson

TestAmerica Job ID: 720-54016-1

## Client Sample ID: 3-EX2-SPOILS-A

## Lab Sample ID: 720-54016-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	170		20		mg/Kg	20		8015B	Silica Gel Cleanup
Motor Oil Range Organics [C24-C36]	1200		1000		mg/Kg	20		8015B	Silica Gel Cleanup
Arsenic	4.0		3.7		mg/Kg	4		6010B	Total/NA
Barium	150		1.8		mg/Kg	4		6010B	Total/NA
Chromium	47		1.8		mg/Kg	4		6010B	Total/NA
Cobalt	11		0.73		mg/Kg	4		6010B	Total/NA
Copper	34		5.5		mg/Kg	4		6010B	Total/NA
Lead	6.8		1.8		mg/Kg	4		6010B	Total/NA
Nickel	70		1.8		mg/Kg	4		6010B	Total/NA
Vanadium	30		1.8		mg/Kg	4		6010B	Total/NA
Zinc	43		5.5		mg/Kg	4		6010B	Total/NA
Mercury	0.17		0.0092		mg/Kg	1		7471A	Total/NA

## Client Sample ID: 3-EX2-SPOILS-B

## Lab Sample ID: 720-54016-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	30		1.0		mg/Kg	1		8015B	Silica Gel Cleanup
Motor Oil Range Organics [C24-C36]	120		50		mg/Kg	1		8015B	Silica Gel Cleanup
Arsenic	4.9		3.5		mg/Kg	4		6010B	Total/NA
Barium	160		1.8		mg/Kg	4		6010B	Total/NA
Chromium	53		1.8		mg/Kg	4		6010B	Total/NA
Cobalt	12		0.71		mg/Kg	4		6010B	Total/NA
Copper	29		5.3		mg/Kg	4		6010B	Total/NA
Lead	8.6		1.8		mg/Kg	4		6010B	Total/NA
Nickel	81		1.8		mg/Kg	4		6010B	Total/NA
Vanadium	31		1.8		mg/Kg	4		6010B	Total/NA
Zinc	72		5.3		mg/Kg	4		6010B	Total/NA
Mercury	0.15		0.0090		mg/Kg	1		7471A	Total/NA

## Client Sample ID: 3-EX2-SPOILS-C

## Lab Sample ID: 720-54016-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	20		1.0		mg/Kg	1		8015B	Silica Gel Cleanup
Motor Oil Range Organics [C24-C36]	78		50		mg/Kg	1		8015B	Silica Gel Cleanup
Arsenic	6.3		3.1		mg/Kg	4		6010B	Total/NA
Barium	180		1.6		mg/Kg	4		6010B	Total/NA
Chromium	63		1.6		mg/Kg	4		6010B	Total/NA
Cobalt	13		0.63		mg/Kg	4		6010B	Total/NA
Copper	33		4.7		mg/Kg	4		6010B	Total/NA
Lead	8.7		1.6		mg/Kg	4		6010B	Total/NA
Nickel	93		1.6		mg/Kg	4		6010B	Total/NA
Vanadium	34		1.6		mg/Kg	4		6010B	Total/NA
Zinc	59		4.7		mg/Kg	4		6010B	Total/NA
Mercury	0.068		0.0092		mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Detection Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

## Client Sample ID: 3-TR2-SPOILS-A

## Lab Sample ID: 720-54016-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	180		1.0		mg/Kg	1		8015B	Silica Gel Cleanup
Motor Oil Range Organics [C24-C36]	120		50		mg/Kg	1		8015B	Silica Gel Cleanup
Arsenic	4.0		3.6		mg/Kg	4		6010B	Total/NA
Barium	120		1.8		mg/Kg	4		6010B	Total/NA
Chromium	45		1.8		mg/Kg	4		6010B	Total/NA
Cobalt	10		0.71		mg/Kg	4		6010B	Total/NA
Copper	24		5.4		mg/Kg	4		6010B	Total/NA
Lead	6.0		1.8		mg/Kg	4		6010B	Total/NA
Nickel	67		1.8		mg/Kg	4		6010B	Total/NA
Vanadium	24		1.8		mg/Kg	4		6010B	Total/NA
Zinc	45		5.4		mg/Kg	4		6010B	Total/NA
Mercury	0.045		0.0098		mg/Kg	1		7471A	Total/NA

## Client Sample ID: 3-TR2-SPOILS-B

## Lab Sample ID: 720-54016-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	200		2.0		mg/Kg	2		8015B	Silica Gel Cleanup
Arsenic	6.1		3.8		mg/Kg	4		6010B	Total/NA
Barium	190		1.9		mg/Kg	4		6010B	Total/NA
Chromium	64		1.9		mg/Kg	4		6010B	Total/NA
Cobalt	13		0.76		mg/Kg	4		6010B	Total/NA
Copper	32		5.7		mg/Kg	4		6010B	Total/NA
Lead	8.5		1.9		mg/Kg	4		6010B	Total/NA
Nickel	92		1.9		mg/Kg	4		6010B	Total/NA
Vanadium	32		1.9		mg/Kg	4		6010B	Total/NA
Zinc	53		5.7		mg/Kg	4		6010B	Total/NA
Mercury	0.048		0.0088		mg/Kg	1		7471A	Total/NA

## Client Sample ID: 3-TR2-SPOILS-C

## Lab Sample ID: 720-54016-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	120		1.0		mg/Kg	1		8015B	Silica Gel Cleanup
Arsenic	4.9		3.4		mg/Kg	4		6010B	Total/NA
Barium	140		1.7		mg/Kg	4		6010B	Total/NA
Chromium	47		1.7		mg/Kg	4		6010B	Total/NA
Cobalt	12		0.68		mg/Kg	4		6010B	Total/NA
Copper	28		5.1		mg/Kg	4		6010B	Total/NA
Lead	6.5		1.7		mg/Kg	4		6010B	Total/NA
Nickel	71		1.7		mg/Kg	4		6010B	Total/NA
Vanadium	26		1.7		mg/Kg	4		6010B	Total/NA
Zinc	44		5.1		mg/Kg	4		6010B	Total/NA
Mercury	0.040		0.0087		mg/Kg	1		7471A	Total/NA

## Client Sample ID: 3-WR-SPOILS

## Lab Sample ID: 720-54016-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	84		3.0		mg/Kg	3		8015B	Silica Gel Cleanup

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Detection Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

## Client Sample ID: 3-WR-SPOILS (Continued)

Lab Sample ID: 720-54016-35

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Motor Oil Range Organics [C24-C36]	280		150		mg/Kg	3		8015B	Silica Gel Cleanup
Arsenic	4.6		3.7		mg/Kg	4		6010B	Total/NA
Barium	160		1.9		mg/Kg	4		6010B	Total/NA
Chromium	45		1.9		mg/Kg	4		6010B	Total/NA
Cobalt	9.8		0.75		mg/Kg	4		6010B	Total/NA
Copper	28		5.6		mg/Kg	4		6010B	Total/NA
Lead	9.3		1.9		mg/Kg	4		6010B	Total/NA
Molybdenum	7.7		1.9		mg/Kg	4		6010B	Total/NA
Nickel	74		1.9		mg/Kg	4		6010B	Total/NA
Vanadium	29		1.9		mg/Kg	4		6010B	Total/NA
Zinc	52		5.6		mg/Kg	4		6010B	Total/NA
Mercury	0.10		0.0090		mg/Kg	1		7471A	Total/NA

## Client Sample ID: 3-TPT-SPOILS

Lab Sample ID: 720-54016-40

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	41		0.99		mg/Kg	1		8015B	Silica Gel Cleanup
Motor Oil Range Organics [C24-C36]	150		50		mg/Kg	1		8015B	Silica Gel Cleanup
Arsenic	5.2		3.9		mg/Kg	4		6010B	Total/NA
Barium	130		2.0		mg/Kg	4		6010B	Total/NA
Chromium	48		2.0		mg/Kg	4		6010B	Total/NA
Cobalt	11		0.78		mg/Kg	4		6010B	Total/NA
Copper	32		5.9		mg/Kg	4		6010B	Total/NA
Lead	6.3		2.0		mg/Kg	4		6010B	Total/NA
Nickel	67		2.0		mg/Kg	4		6010B	Total/NA
Vanadium	30		2.0		mg/Kg	4		6010B	Total/NA
Zinc	43		5.9		mg/Kg	4		6010B	Total/NA
Mercury	0.073		0.0088		mg/Kg	1		7471A	Total/NA

## Client Sample ID: 3-TR/EX-SPOILS

Lab Sample ID: 720-54016-45

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	310		9.9		mg/Kg	10		8015B	Silica Gel Cleanup
Motor Oil Range Organics [C24-C36]	1300		500		mg/Kg	10		8015B	Silica Gel Cleanup
Arsenic	5.6		3.8		mg/Kg	4		6010B	Total/NA
Barium	160		1.9		mg/Kg	4		6010B	Total/NA
Chromium	58		1.9		mg/Kg	4		6010B	Total/NA
Cobalt	12		0.77		mg/Kg	4		6010B	Total/NA
Copper	29		5.8		mg/Kg	4		6010B	Total/NA
Lead	8.2		1.9		mg/Kg	4		6010B	Total/NA
Nickel	85		1.9		mg/Kg	4		6010B	Total/NA
Vanadium	31		1.9		mg/Kg	4		6010B	Total/NA
Zinc	57		5.8		mg/Kg	4		6010B	Total/NA
Mercury	0.071		0.0095		mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-EX2-SPOILS-A**

**Lab Sample ID: 720-54016-5**

Date Collected: 11/25/13 09:50

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Acetone	ND		46		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Benzene	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Dichlorobromomethane	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Bromobenzene	ND	*	4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Chlorobromomethane	ND		18		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Bromoform	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Bromomethane	ND		9.2		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
2-Butanone (MEK)	ND		46		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
n-Butylbenzene	ND	*	4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
sec-Butylbenzene	ND	*	4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
tert-Butylbenzene	ND	*	4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Carbon disulfide	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Carbon tetrachloride	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Chlorobenzene	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Chloroethane	ND		9.2		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Chloroform	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Chloromethane	ND		9.2		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
2-Chlorotoluene	ND	*	4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
4-Chlorotoluene	ND	*	4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Chlorodibromomethane	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
1,2-Dichlorobenzene	ND	*	4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
1,3-Dichlorobenzene	ND	*	4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
1,4-Dichlorobenzene	ND	*	4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
1,3-Dichloropropane	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
1,1-Dichloropropene	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
1,2-Dibromo-3-Chloropropane	ND	*	4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Ethylene Dibromide	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Dibromomethane	ND		9.2		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Dichlorodifluoromethane	ND		9.2		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
1,1-Dichloroethane	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
1,2-Dichloroethane	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
1,1-Dichloroethene	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
cis-1,2-Dichloroethene	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
trans-1,2-Dichloroethene	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
1,2-Dichloropropane	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
cis-1,3-Dichloropropene	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
trans-1,3-Dichloropropene	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Ethylbenzene	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Hexachlorobutadiene	ND	*	4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
2-Hexanone	ND		46		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Isopropylbenzene	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
4-Isopropyltoluene	ND	*	4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Methylene Chloride	ND		9.2		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
4-Methyl-2-pentanone (MIBK)	ND		46		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Naphthalene	ND	*	9.2		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
N-Propylbenzene	ND	*	4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Styrene	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
1,1,1,2-Tetrachloroethane	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-EX2-SPOILS-A**

**Lab Sample ID: 720-54016-5**

Date Collected: 11/25/13 09:50

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND	*	4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Tetrachloroethene	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Toluene	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
1,2,3-Trichlorobenzene	ND	*	4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
1,2,4-Trichlorobenzene	ND	*	4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
1,1,1-Trichloroethane	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
1,1,2-Trichloroethane	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Trichloroethene	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Trichlorofluoromethane	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
1,2,3-Trichloropropane	ND	*	4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
1,2,4-Trimethylbenzene	ND	*	4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
1,3,5-Trimethylbenzene	ND	*	4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Vinyl acetate	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Vinyl chloride	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Xylenes, Total	ND		9.2		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
2,2-Dichloropropane	ND		4.6		ug/Kg		11/26/13 11:00	11/26/13 16:58	1
Gasoline Range Organics (GRO) -C5-C12	ND		230		ug/Kg		11/26/13 11:00	11/26/13 16:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	85		45 - 131	11/26/13 11:00	11/26/13 16:58	1
1,2-Dichloroethane-d4 (Surr)	117		60 - 140	11/26/13 11:00	11/26/13 16:58	1
Toluene-d8 (Surr)	87		58 - 140	11/26/13 11:00	11/26/13 16:58	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>170</b>		20		mg/Kg		11/26/13 11:16	11/27/13 19:23	20
<b>Motor Oil Range Organics [C24-C36]</b>	<b>1200</b>		1000		mg/Kg		11/26/13 11:16	11/27/13 19:23	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0		0 - 1	11/26/13 11:16	11/27/13 19:23	20
p-Terphenyl	0	X D	38 - 148	11/26/13 11:16	11/27/13 19:23	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.8		mg/Kg		11/26/13 18:20	11/27/13 19:58	4
<b>Arsenic</b>	<b>4.0</b>		3.7		mg/Kg		11/26/13 18:20	11/27/13 19:58	4
<b>Barium</b>	<b>150</b>		1.8		mg/Kg		11/26/13 18:20	11/27/13 19:58	4
Beryllium	ND		0.37		mg/Kg		11/26/13 18:20	11/27/13 19:58	4
Cadmium	ND		0.46		mg/Kg		11/26/13 18:20	11/27/13 19:58	4
<b>Chromium</b>	<b>47</b>		1.8		mg/Kg		11/26/13 18:20	11/27/13 19:58	4
<b>Cobalt</b>	<b>11</b>		0.73		mg/Kg		11/26/13 18:20	11/27/13 19:58	4
<b>Copper</b>	<b>34</b>		5.5		mg/Kg		11/26/13 18:20	11/27/13 19:58	4
<b>Lead</b>	<b>6.8</b>		1.8		mg/Kg		11/26/13 18:20	11/27/13 19:58	4
Molybdenum	ND		1.8		mg/Kg		11/26/13 18:20	11/27/13 19:58	4
<b>Nickel</b>	<b>70</b>		1.8		mg/Kg		11/26/13 18:20	11/27/13 19:58	4
Selenium	ND		3.7		mg/Kg		11/26/13 18:20	11/27/13 19:58	4
Silver	ND	^	0.92		mg/Kg		11/26/13 18:20	11/27/13 19:58	4
Thallium	ND		1.8		mg/Kg		11/26/13 18:20	11/27/13 19:58	4

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-EX2-SPOILS-A**

**Lab Sample ID: 720-54016-5**

Date Collected: 11/25/13 09:50

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	30		1.8		mg/Kg		11/26/13 18:20	11/27/13 19:58	4
Zinc	43		5.5		mg/Kg		11/26/13 18:20	11/27/13 19:58	4

**Method: 7471A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17		0.0092		mg/Kg		11/25/13 22:03	11/26/13 13:43	1



# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-EX2-SPOILS-B**

**Lab Sample ID: 720-54016-10**

**Date Collected: 11/25/13 10:15**

**Matrix: Solid**

**Date Received: 11/25/13 11:09**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Acetone	ND		47		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Benzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Dichlorobromomethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Bromobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Chlorobromomethane	ND		19		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Bromoform	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Bromomethane	ND		9.3		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
2-Butanone (MEK)	ND	*	47		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
n-Butylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
sec-Butylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
tert-Butylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Carbon disulfide	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Carbon tetrachloride	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Chlorobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Chloroethane	ND		9.3		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Chloroform	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Chloromethane	ND		9.3		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
2-Chlorotoluene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
4-Chlorotoluene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Chlorodibromomethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
1,2-Dichlorobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
1,3-Dichlorobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
1,4-Dichlorobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
1,3-Dichloropropane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
1,1-Dichloropropene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
1,2-Dibromo-3-Chloropropane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Ethylene Dibromide	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Dibromomethane	ND		9.3		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Dichlorodifluoromethane	ND		9.3		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
1,1-Dichloroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
1,2-Dichloroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
1,1-Dichloroethene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
cis-1,2-Dichloroethene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
trans-1,2-Dichloroethene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
1,2-Dichloropropane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
cis-1,3-Dichloropropene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
trans-1,3-Dichloropropene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Ethylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Hexachlorobutadiene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
2-Hexanone	ND		47		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Isopropylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
4-Isopropyltoluene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Methylene Chloride	ND		9.3		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
4-Methyl-2-pentanone (MIBK)	ND		47		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Naphthalene	ND		9.3		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
N-Propylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Styrene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
1,1,1,2-Tetrachloroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-EX2-SPOILS-B**

**Lab Sample ID: 720-54016-10**

Date Collected: 11/25/13 10:15

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Tetrachloroethene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Toluene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
1,2,3-Trichlorobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
1,2,4-Trichlorobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
1,1,1-Trichloroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
1,1,2-Trichloroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Trichloroethene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Trichlorofluoromethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
1,2,3-Trichloropropane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
1,2,4-Trimethylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
1,3,5-Trimethylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Vinyl acetate	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Vinyl chloride	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Xylenes, Total	ND		9.3		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
2,2-Dichloropropane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 02:25	1
Gasoline Range Organics (GRO) -C5-C12	ND		230		ug/Kg		11/25/13 20:22	11/26/13 02:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	90		45 - 131	11/25/13 20:22	11/26/13 02:25	1
1,2-Dichloroethane-d4 (Surr)	116		60 - 140	11/25/13 20:22	11/26/13 02:25	1
Toluene-d8 (Surr)	92		58 - 140	11/25/13 20:22	11/26/13 02:25	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>30</b>		1.0		mg/Kg		11/26/13 11:16	11/27/13 18:10	1
<b>Motor Oil Range Organics [C24-C36]</b>	<b>120</b>		50		mg/Kg		11/26/13 11:16	11/27/13 18:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.05		0 - 1	11/26/13 11:16	11/27/13 18:10	1
p-Terphenyl	120		38 - 148	11/26/13 11:16	11/27/13 18:10	1

## Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.8		mg/Kg		11/26/13 18:20	11/27/13 20:02	4
<b>Arsenic</b>	<b>4.9</b>		3.5		mg/Kg		11/26/13 18:20	11/27/13 20:02	4
<b>Barium</b>	<b>160</b>		1.8		mg/Kg		11/26/13 18:20	11/27/13 20:02	4
Beryllium	ND		0.35		mg/Kg		11/26/13 18:20	11/27/13 20:02	4
Cadmium	ND		0.44		mg/Kg		11/26/13 18:20	11/27/13 20:02	4
<b>Chromium</b>	<b>53</b>		1.8		mg/Kg		11/26/13 18:20	11/27/13 20:02	4
<b>Cobalt</b>	<b>12</b>		0.71		mg/Kg		11/26/13 18:20	11/27/13 20:02	4
<b>Copper</b>	<b>29</b>		5.3		mg/Kg		11/26/13 18:20	11/27/13 20:02	4
<b>Lead</b>	<b>8.6</b>		1.8		mg/Kg		11/26/13 18:20	11/27/13 20:02	4
Molybdenum	ND		1.8		mg/Kg		11/26/13 18:20	11/27/13 20:02	4
<b>Nickel</b>	<b>81</b>		1.8		mg/Kg		11/26/13 18:20	11/27/13 20:02	4
Selenium	ND		3.5		mg/Kg		11/26/13 18:20	11/27/13 20:02	4
Silver	ND	^	0.88		mg/Kg		11/26/13 18:20	11/27/13 20:02	4
Thallium	ND		1.8		mg/Kg		11/26/13 18:20	11/27/13 20:02	4

TestAmerica Pleasanton



# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-EX2-SPOILS-B**

**Lab Sample ID: 720-54016-10**

Date Collected: 11/25/13 10:15

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	31		1.8		mg/Kg		11/26/13 18:20	11/27/13 20:02	4
Zinc	72		5.3		mg/Kg		11/26/13 18:20	11/27/13 20:02	4

## Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.15		0.0090		mg/Kg		11/25/13 22:03	11/26/13 13:45	1

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-EX2-SPOILS-C**

**Lab Sample ID: 720-54016-15**

Date Collected: 11/25/13 10:20

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Acetone	ND		44		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Benzene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Dichlorobromomethane	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Bromobenzene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Chlorobromomethane	ND		17		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Bromoform	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Bromomethane	ND		8.7		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
2-Butanone (MEK)	ND	*	44		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
n-Butylbenzene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
sec-Butylbenzene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
tert-Butylbenzene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Carbon disulfide	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Carbon tetrachloride	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Chlorobenzene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Chloroethane	ND		8.7		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Chloroform	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Chloromethane	ND		8.7		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
2-Chlorotoluene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
4-Chlorotoluene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Chlorodibromomethane	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
1,2-Dichlorobenzene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
1,3-Dichlorobenzene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
1,4-Dichlorobenzene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
1,3-Dichloropropane	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
1,1-Dichloropropene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
1,2-Dibromo-3-Chloropropane	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Ethylene Dibromide	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Dibromomethane	ND		8.7		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Dichlorodifluoromethane	ND		8.7		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
1,1-Dichloroethane	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
1,2-Dichloroethane	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
1,1-Dichloroethene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
cis-1,2-Dichloroethene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
trans-1,2-Dichloroethene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
1,2-Dichloropropane	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
cis-1,3-Dichloropropene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
trans-1,3-Dichloropropene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Ethylbenzene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Hexachlorobutadiene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
2-Hexanone	ND		44		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Isopropylbenzene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
4-Isopropyltoluene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Methylene Chloride	ND		8.7		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
4-Methyl-2-pentanone (MIBK)	ND		44		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Naphthalene	ND		8.7		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
N-Propylbenzene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Styrene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
1,1,1,2-Tetrachloroethane	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-EX2-SPOILS-C**

**Lab Sample ID: 720-54016-15**

Date Collected: 11/25/13 10:20

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Tetrachloroethene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Toluene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
1,2,3-Trichlorobenzene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
1,2,4-Trichlorobenzene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
1,1,1-Trichloroethane	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
1,1,2-Trichloroethane	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Trichloroethene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Trichlorofluoromethane	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
1,2,3-Trichloropropane	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
1,2,4-Trimethylbenzene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
1,3,5-Trimethylbenzene	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Vinyl acetate	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Vinyl chloride	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Xylenes, Total	ND		8.7		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
2,2-Dichloropropane	ND		4.4		ug/Kg		11/25/13 20:22	11/26/13 02:54	1
Gasoline Range Organics (GRO) -C5-C12	ND		220		ug/Kg		11/25/13 20:22	11/26/13 02:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	90		45 - 131	11/25/13 20:22	11/26/13 02:54	1
1,2-Dichloroethane-d4 (Surr)	113		60 - 140	11/25/13 20:22	11/26/13 02:54	1
Toluene-d8 (Surr)	91		58 - 140	11/25/13 20:22	11/26/13 02:54	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>20</b>		1.0		mg/Kg		11/26/13 11:16	11/29/13 10:00	1
<b>Motor Oil Range Organics [C24-C36]</b>	<b>78</b>		50		mg/Kg		11/26/13 11:16	11/29/13 10:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.02		0 - 1	11/26/13 11:16	11/29/13 10:00	1
p-Terphenyl	66		38 - 148	11/26/13 11:16	11/29/13 10:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.6		mg/Kg		11/26/13 18:20	11/27/13 20:06	4
<b>Arsenic</b>	<b>6.3</b>		3.1		mg/Kg		11/26/13 18:20	11/27/13 20:06	4
<b>Barium</b>	<b>180</b>		1.6		mg/Kg		11/26/13 18:20	11/27/13 20:06	4
Beryllium	ND		0.31		mg/Kg		11/26/13 18:20	11/27/13 20:06	4
Cadmium	ND		0.39		mg/Kg		11/26/13 18:20	11/27/13 20:06	4
<b>Chromium</b>	<b>63</b>		1.6		mg/Kg		11/26/13 18:20	11/27/13 20:06	4
<b>Cobalt</b>	<b>13</b>		0.63		mg/Kg		11/26/13 18:20	11/27/13 20:06	4
<b>Copper</b>	<b>33</b>		4.7		mg/Kg		11/26/13 18:20	11/27/13 20:06	4
<b>Lead</b>	<b>8.7</b>		1.6		mg/Kg		11/26/13 18:20	11/27/13 20:06	4
Molybdenum	ND		1.6		mg/Kg		11/26/13 18:20	11/27/13 20:06	4
<b>Nickel</b>	<b>93</b>		1.6		mg/Kg		11/26/13 18:20	11/27/13 20:06	4
Selenium	ND		3.1		mg/Kg		11/26/13 18:20	11/27/13 20:06	4
Silver	ND	^	0.79		mg/Kg		11/26/13 18:20	11/27/13 20:06	4
Thallium	ND		1.6		mg/Kg		11/26/13 18:20	11/27/13 20:06	4

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-EX2-SPOILS-C**

**Lab Sample ID: 720-54016-15**

Date Collected: 11/25/13 10:20

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	34		1.6		mg/Kg		11/26/13 18:20	11/27/13 20:06	4
Zinc	59		4.7		mg/Kg		11/26/13 18:20	11/27/13 20:06	4

**Method: 7471A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.068		0.0092		mg/Kg		11/25/13 22:03	11/26/13 13:48	1

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

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-TR2-SPOILS-A**

**Lab Sample ID: 720-54016-20**

**Date Collected: 11/25/13 09:40**

**Matrix: Solid**

**Date Received: 11/25/13 11:09**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Acetone	ND		50		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Benzene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Dichlorobromomethane	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Bromobenzene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Chlorobromomethane	ND		20		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Bromoform	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Bromomethane	ND		9.9		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
2-Butanone (MEK)	ND	*	50		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
n-Butylbenzene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
sec-Butylbenzene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
tert-Butylbenzene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Carbon disulfide	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Carbon tetrachloride	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Chlorobenzene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Chloroethane	ND		9.9		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Chloroform	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Chloromethane	ND		9.9		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
2-Chlorotoluene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
4-Chlorotoluene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Chlorodibromomethane	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
1,2-Dichlorobenzene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
1,3-Dichlorobenzene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
1,4-Dichlorobenzene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
1,3-Dichloropropane	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
1,1-Dichloropropene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Ethylene Dibromide	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Dibromomethane	ND		9.9		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Dichlorodifluoromethane	ND		9.9		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
1,1-Dichloroethane	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
1,2-Dichloroethane	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
1,1-Dichloroethene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
cis-1,2-Dichloroethene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
trans-1,2-Dichloroethene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
1,2-Dichloropropane	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
cis-1,3-Dichloropropene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
trans-1,3-Dichloropropene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Ethylbenzene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Hexachlorobutadiene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
2-Hexanone	ND		50		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Isopropylbenzene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
4-Isopropyltoluene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Methylene Chloride	ND		9.9		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Naphthalene	ND		9.9		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
N-Propylbenzene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Styrene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
1,1,1,2-Tetrachloroethane	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-TR2-SPOILS-A**

**Lab Sample ID: 720-54016-20**

Date Collected: 11/25/13 09:40

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Tetrachloroethene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Toluene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
1,2,3-Trichlorobenzene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
1,2,4-Trichlorobenzene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
1,1,1-Trichloroethane	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
1,1,2-Trichloroethane	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Trichloroethene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Trichlorofluoromethane	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
1,2,3-Trichloropropane	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
1,2,4-Trimethylbenzene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
1,3,5-Trimethylbenzene	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Vinyl acetate	ND		50		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Vinyl chloride	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Xylenes, Total	ND		9.9		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
2,2-Dichloropropane	ND		5.0		ug/Kg		11/25/13 20:22	11/26/13 03:23	1
Gasoline Range Organics (GRO) -C5-C12	ND		250		ug/Kg		11/25/13 20:22	11/26/13 03:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		45 - 131	11/25/13 20:22	11/26/13 03:23	1
1,2-Dichloroethane-d4 (Surr)	115		60 - 140	11/25/13 20:22	11/26/13 03:23	1
Toluene-d8 (Surr)	92		58 - 140	11/25/13 20:22	11/26/13 03:23	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>180</b>		1.0		mg/Kg		11/26/13 11:16	11/27/13 16:08	1
<b>Motor Oil Range Organics [C24-C36]</b>	<b>120</b>		50		mg/Kg		11/26/13 11:16	11/27/13 16:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	2	X	0 - 1	11/26/13 11:16	11/27/13 16:08	1
p-Terphenyl	106		38 - 148	11/26/13 11:16	11/27/13 16:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.8		mg/Kg		11/26/13 18:20	11/27/13 20:10	4
<b>Arsenic</b>	<b>4.0</b>		3.6		mg/Kg		11/26/13 18:20	11/27/13 20:10	4
<b>Barium</b>	<b>120</b>		1.8		mg/Kg		11/26/13 18:20	11/27/13 20:10	4
Beryllium	ND		0.36		mg/Kg		11/26/13 18:20	11/27/13 20:10	4
Cadmium	ND		0.45		mg/Kg		11/26/13 18:20	11/27/13 20:10	4
<b>Chromium</b>	<b>45</b>		1.8		mg/Kg		11/26/13 18:20	11/27/13 20:10	4
<b>Cobalt</b>	<b>10</b>		0.71		mg/Kg		11/26/13 18:20	11/27/13 20:10	4
<b>Copper</b>	<b>24</b>		5.4		mg/Kg		11/26/13 18:20	11/27/13 20:10	4
<b>Lead</b>	<b>6.0</b>		1.8		mg/Kg		11/26/13 18:20	11/27/13 20:10	4
Molybdenum	ND		1.8		mg/Kg		11/26/13 18:20	11/27/13 20:10	4
<b>Nickel</b>	<b>67</b>		1.8		mg/Kg		11/26/13 18:20	11/27/13 20:10	4
Selenium	ND		3.6		mg/Kg		11/26/13 18:20	11/27/13 20:10	4
Silver	ND	^	0.89		mg/Kg		11/26/13 18:20	11/27/13 20:10	4
Thallium	ND		1.8		mg/Kg		11/26/13 18:20	11/27/13 20:10	4

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-TR2-SPOILS-A**

**Lab Sample ID: 720-54016-20**

Date Collected: 11/25/13 09:40

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	24		1.8		mg/Kg		11/26/13 18:20	11/27/13 20:10	4
Zinc	45		5.4		mg/Kg		11/26/13 18:20	11/27/13 20:10	4

**Method: 7471A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.045		0.0098		mg/Kg		11/25/13 22:03	11/26/13 13:50	1

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

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-TR2-SPOILS-B**

**Lab Sample ID: 720-54016-25**

Date Collected: 11/25/13 09:45

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Acetone	ND		47		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Benzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Dichlorobromomethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Bromobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Chlorobromomethane	ND		19		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Bromoform	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Bromomethane	ND		9.4		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
2-Butanone (MEK)	ND	*	47		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
n-Butylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
sec-Butylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
tert-Butylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Carbon disulfide	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Carbon tetrachloride	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Chlorobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Chloroethane	ND		9.4		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Chloroform	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Chloromethane	ND		9.4		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
2-Chlorotoluene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
4-Chlorotoluene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Chlorodibromomethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
1,2-Dichlorobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
1,3-Dichlorobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
1,4-Dichlorobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
1,3-Dichloropropane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
1,1-Dichloropropene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
1,2-Dibromo-3-Chloropropane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Ethylene Dibromide	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Dibromomethane	ND		9.4		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Dichlorodifluoromethane	ND		9.4		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
1,1-Dichloroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
1,2-Dichloroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
1,1-Dichloroethene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
cis-1,2-Dichloroethene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
trans-1,2-Dichloroethene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
1,2-Dichloropropane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
cis-1,3-Dichloropropene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
trans-1,3-Dichloropropene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Ethylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Hexachlorobutadiene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
2-Hexanone	ND		47		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Isopropylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
4-Isopropyltoluene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Methylene Chloride	ND		9.4		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
4-Methyl-2-pentanone (MIBK)	ND		47		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Naphthalene	ND		9.4		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
N-Propylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Styrene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
1,1,1,2-Tetrachloroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1

TestAmerica Pleasanton



# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

## Client Sample ID: 3-TR2-SPOILS-B

## Lab Sample ID: 720-54016-25

Date Collected: 11/25/13 09:45

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Tetrachloroethene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Toluene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
1,2,3-Trichlorobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
1,2,4-Trichlorobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
1,1,1-Trichloroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
1,1,2-Trichloroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Trichloroethene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Trichlorofluoromethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
1,2,3-Trichloropropane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
1,2,4-Trimethylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
1,3,5-Trimethylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Vinyl acetate	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Vinyl chloride	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Xylenes, Total	ND		9.4		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
2,2-Dichloropropane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 03:50	1
Gasoline Range Organics (GRO) -C5-C12	ND		230		ug/Kg		11/25/13 20:22	11/26/13 03:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	101		45 - 131	11/25/13 20:22	11/26/13 03:50	1
1,2-Dichloroethane-d4 (Surr)	113		60 - 140	11/25/13 20:22	11/26/13 03:50	1
Toluene-d8 (Surr)	90		58 - 140	11/25/13 20:22	11/26/13 03:50	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>200</b>		2.0		mg/Kg		11/26/13 11:16	11/27/13 18:34	2
Motor Oil Range Organics [C24-C36]	ND		100		mg/Kg		11/26/13 11:16	11/27/13 18:34	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	2	X	0 - 1	11/26/13 11:16	11/27/13 18:34	2
p-Terphenyl	121		38 - 148	11/26/13 11:16	11/27/13 18:34	2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:15	4
<b>Arsenic</b>	<b>6.1</b>		3.8		mg/Kg		11/26/13 18:20	11/27/13 20:15	4
<b>Barium</b>	<b>190</b>		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:15	4
Beryllium	ND		0.38		mg/Kg		11/26/13 18:20	11/27/13 20:15	4
Cadmium	ND		0.48		mg/Kg		11/26/13 18:20	11/27/13 20:15	4
<b>Chromium</b>	<b>64</b>		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:15	4
<b>Cobalt</b>	<b>13</b>		0.76		mg/Kg		11/26/13 18:20	11/27/13 20:15	4
<b>Copper</b>	<b>32</b>		5.7		mg/Kg		11/26/13 18:20	11/27/13 20:15	4
<b>Lead</b>	<b>8.5</b>		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:15	4
Molybdenum	ND		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:15	4
<b>Nickel</b>	<b>92</b>		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:15	4
Selenium	ND		3.8		mg/Kg		11/26/13 18:20	11/27/13 20:15	4
Silver	ND	^	0.95		mg/Kg		11/26/13 18:20	11/27/13 20:15	4
Thallium	ND		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:15	4
<b>Vanadium</b>	<b>32</b>		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:15	4

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-TR2-SPOILS-B**

**Lab Sample ID: 720-54016-25**

Date Collected: 11/25/13 09:45

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	53		5.7		mg/Kg		11/26/13 18:20	11/27/13 20:15	4

## Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.048		0.0088		mg/Kg		11/25/13 22:03	11/26/13 13:52	1

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-TR2-SPOILS-C**

**Lab Sample ID: 720-54016-30**

**Date Collected: 11/25/13 10:25**

**Matrix: Solid**

**Date Received: 11/25/13 11:09**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Acetone	ND		48		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Benzene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Dichlorobromomethane	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Bromobenzene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Chlorobromomethane	ND		19		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Bromoform	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Bromomethane	ND		9.6		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
2-Butanone (MEK)	ND	*	48		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
n-Butylbenzene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
sec-Butylbenzene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
tert-Butylbenzene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Carbon disulfide	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Carbon tetrachloride	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Chlorobenzene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Chloroethane	ND		9.6		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Chloroform	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Chloromethane	ND		9.6		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
2-Chlorotoluene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
4-Chlorotoluene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Chlorodibromomethane	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
1,2-Dichlorobenzene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
1,3-Dichlorobenzene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
1,4-Dichlorobenzene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
1,3-Dichloropropane	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
1,1-Dichloropropene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
1,2-Dibromo-3-Chloropropane	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Ethylene Dibromide	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Dibromomethane	ND		9.6		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Dichlorodifluoromethane	ND		9.6		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
1,1-Dichloroethane	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
1,2-Dichloroethane	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
1,1-Dichloroethene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
cis-1,2-Dichloroethene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
trans-1,2-Dichloroethene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
1,2-Dichloropropane	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
cis-1,3-Dichloropropene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
trans-1,3-Dichloropropene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Ethylbenzene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Hexachlorobutadiene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
2-Hexanone	ND		48		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Isopropylbenzene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
4-Isopropyltoluene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Methylene Chloride	ND		9.6		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
4-Methyl-2-pentanone (MIBK)	ND		48		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Naphthalene	ND		9.6		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
N-Propylbenzene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Styrene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
1,1,1,2-Tetrachloroethane	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-TR2-SPOILS-C**

**Lab Sample ID: 720-54016-30**

Date Collected: 11/25/13 10:25

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Tetrachloroethene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Toluene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
1,2,3-Trichlorobenzene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
1,2,4-Trichlorobenzene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
1,1,1-Trichloroethane	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
1,1,2-Trichloroethane	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Trichloroethene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Trichlorofluoromethane	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
1,2,3-Trichloropropane	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
1,2,4-Trimethylbenzene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
1,3,5-Trimethylbenzene	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Vinyl acetate	ND		48		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Vinyl chloride	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Xylenes, Total	ND		9.6		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
2,2-Dichloropropane	ND		4.8		ug/Kg		11/25/13 20:22	11/26/13 04:19	1
Gasoline Range Organics (GRO) -C5-C12	ND		240		ug/Kg		11/25/13 20:22	11/26/13 04:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	96		45 - 131	11/25/13 20:22	11/26/13 04:19	1
1,2-Dichloroethane-d4 (Surr)	110		60 - 140	11/25/13 20:22	11/26/13 04:19	1
Toluene-d8 (Surr)	89		58 - 140	11/25/13 20:22	11/26/13 04:19	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>120</b>		1.0		mg/Kg		11/26/13 11:16	11/27/13 14:07	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		11/26/13 11:16	11/27/13 14:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	1		0 - 1	11/26/13 11:16	11/27/13 14:07	1
p-Terphenyl	104		38 - 148	11/26/13 11:16	11/27/13 14:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.7		mg/Kg		11/26/13 18:20	11/27/13 20:19	4
<b>Arsenic</b>	<b>4.9</b>		3.4		mg/Kg		11/26/13 18:20	11/27/13 20:19	4
<b>Barium</b>	<b>140</b>		1.7		mg/Kg		11/26/13 18:20	11/27/13 20:19	4
Beryllium	ND		0.34		mg/Kg		11/26/13 18:20	11/27/13 20:19	4
Cadmium	ND		0.43		mg/Kg		11/26/13 18:20	11/27/13 20:19	4
<b>Chromium</b>	<b>47</b>		1.7		mg/Kg		11/26/13 18:20	11/27/13 20:19	4
<b>Cobalt</b>	<b>12</b>		0.68		mg/Kg		11/26/13 18:20	11/27/13 20:19	4
<b>Copper</b>	<b>28</b>		5.1		mg/Kg		11/26/13 18:20	11/27/13 20:19	4
<b>Lead</b>	<b>6.5</b>		1.7		mg/Kg		11/26/13 18:20	11/27/13 20:19	4
Molybdenum	ND		1.7		mg/Kg		11/26/13 18:20	11/27/13 20:19	4
<b>Nickel</b>	<b>71</b>		1.7		mg/Kg		11/26/13 18:20	11/27/13 20:19	4
Selenium	ND		3.4		mg/Kg		11/26/13 18:20	11/27/13 20:19	4
Silver	ND	^	0.85		mg/Kg		11/26/13 18:20	11/27/13 20:19	4
Thallium	ND		1.7		mg/Kg		11/26/13 18:20	11/27/13 20:19	4
<b>Vanadium</b>	<b>26</b>		1.7		mg/Kg		11/26/13 18:20	11/27/13 20:19	4

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-TR2-SPOILS-C**

**Lab Sample ID: 720-54016-30**

Date Collected: 11/25/13 10:25

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	44		5.1		mg/Kg		11/26/13 18:20	11/27/13 20:19	4

**Method: 7471A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.040		0.0087		mg/Kg		11/25/13 22:03	11/26/13 13:54	1

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-WR-SPOILS**

**Lab Sample ID: 720-54016-35**

Date Collected: 11/25/13 09:30

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Acetone	ND		47		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Benzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Dichlorobromomethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Bromobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Chlorobromomethane	ND		19		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Bromoform	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Bromomethane	ND		9.3		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
2-Butanone (MEK)	ND	*	47		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
n-Butylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
sec-Butylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
tert-Butylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Carbon disulfide	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Carbon tetrachloride	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Chlorobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Chloroethane	ND		9.3		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Chloroform	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Chloromethane	ND		9.3		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
2-Chlorotoluene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
4-Chlorotoluene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Chlorodibromomethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
1,2-Dichlorobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
1,3-Dichlorobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
1,4-Dichlorobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
1,3-Dichloropropane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
1,1-Dichloropropene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
1,2-Dibromo-3-Chloropropane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Ethylene Dibromide	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Dibromomethane	ND		9.3		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Dichlorodifluoromethane	ND		9.3		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
1,1-Dichloroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
1,2-Dichloroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
1,1-Dichloroethene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
cis-1,2-Dichloroethene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
trans-1,2-Dichloroethene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
1,2-Dichloropropane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
cis-1,3-Dichloropropene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
trans-1,3-Dichloropropene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Ethylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Hexachlorobutadiene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
2-Hexanone	ND		47		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Isopropylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
4-Isopropyltoluene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Methylene Chloride	ND		9.3		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
4-Methyl-2-pentanone (MIBK)	ND		47		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Naphthalene	ND		9.3		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
N-Propylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Styrene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
1,1,1,2-Tetrachloroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

## Client Sample ID: 3-WR-SPOILS

## Lab Sample ID: 720-54016-35

Date Collected: 11/25/13 09:30

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Tetrachloroethene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Toluene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
1,2,3-Trichlorobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
1,2,4-Trichlorobenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
1,1,1-Trichloroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
1,1,2-Trichloroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Trichloroethene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Trichlorofluoromethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
1,2,3-Trichloropropane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
1,2,4-Trimethylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
1,3,5-Trimethylbenzene	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Vinyl acetate	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Vinyl chloride	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Xylenes, Total	ND		9.3		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
2,2-Dichloropropane	ND		4.7		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Gasoline Range Organics (GRO) -C5-C12	ND		230		ug/Kg		11/25/13 20:22	11/26/13 04:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	94		45 - 131				11/25/13 20:22	11/26/13 04:48	1
1,2-Dichloroethane-d4 (Surr)	110		60 - 140				11/25/13 20:22	11/26/13 04:48	1
Toluene-d8 (Surr)	94		58 - 140				11/25/13 20:22	11/26/13 04:48	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>84</b>		3.0		mg/Kg		11/26/13 11:16	11/27/13 19:57	3
<b>Motor Oil Range Organics [C24-C36]</b>	<b>280</b>		150		mg/Kg		11/26/13 11:16	11/27/13 19:57	3
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.2		0 - 1				11/26/13 11:16	11/27/13 19:57	3
p-Terphenyl	72		38 - 148				11/26/13 11:16	11/27/13 19:57	3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:23	4
<b>Arsenic</b>	<b>4.6</b>		3.7		mg/Kg		11/26/13 18:20	11/27/13 20:23	4
<b>Barium</b>	<b>160</b>		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:23	4
Beryllium	ND		0.37		mg/Kg		11/26/13 18:20	11/27/13 20:23	4
Cadmium	ND		0.47		mg/Kg		11/26/13 18:20	11/27/13 20:23	4
<b>Chromium</b>	<b>45</b>		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:23	4
<b>Cobalt</b>	<b>9.8</b>		0.75		mg/Kg		11/26/13 18:20	11/27/13 20:23	4
<b>Copper</b>	<b>28</b>		5.6		mg/Kg		11/26/13 18:20	11/27/13 20:23	4
<b>Lead</b>	<b>9.3</b>		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:23	4
<b>Molybdenum</b>	<b>7.7</b>		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:23	4
<b>Nickel</b>	<b>74</b>		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:23	4
Selenium	ND		3.7		mg/Kg		11/26/13 18:20	11/27/13 20:23	4
Silver	ND	^	0.93		mg/Kg		11/26/13 18:20	11/27/13 20:23	4
Thallium	ND		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:23	4

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-WR-SPOILS**

**Lab Sample ID: 720-54016-35**

Date Collected: 11/25/13 09:30

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	29		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:23	4
Zinc	52		5.6		mg/Kg		11/26/13 18:20	11/27/13 20:23	4

**Method: 7471A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.10		0.0090		mg/Kg		11/25/13 22:03	11/26/13 13:57	1

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



# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-TPT-SPOILS**

**Lab Sample ID: 720-54016-40**

Date Collected: 11/25/13 10:10

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Acetone	ND		45		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Benzene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Dichlorobromomethane	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Bromobenzene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Chlorobromomethane	ND		18		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Bromoform	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Bromomethane	ND		9.0		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
2-Butanone (MEK)	ND	*	45		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
n-Butylbenzene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
sec-Butylbenzene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
tert-Butylbenzene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Carbon disulfide	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Carbon tetrachloride	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Chlorobenzene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Chloroethane	ND		9.0		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Chloroform	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Chloromethane	ND		9.0		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
2-Chlorotoluene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
4-Chlorotoluene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Chlorodibromomethane	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
1,2-Dichlorobenzene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
1,3-Dichlorobenzene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
1,4-Dichlorobenzene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
1,3-Dichloropropane	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
1,1-Dichloropropene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
1,2-Dibromo-3-Chloropropane	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Ethylene Dibromide	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Dibromomethane	ND		9.0		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Dichlorodifluoromethane	ND		9.0		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
1,1-Dichloroethane	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
1,2-Dichloroethane	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
1,1-Dichloroethene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
cis-1,2-Dichloroethene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
trans-1,2-Dichloroethene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
1,2-Dichloropropane	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
cis-1,3-Dichloropropene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
trans-1,3-Dichloropropene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Ethylbenzene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Hexachlorobutadiene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
2-Hexanone	ND		45		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Isopropylbenzene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
4-Isopropyltoluene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Methylene Chloride	ND		9.0		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
4-Methyl-2-pentanone (MIBK)	ND		45		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Naphthalene	ND		9.0		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
N-Propylbenzene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Styrene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
1,1,1,2-Tetrachloroethane	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

## Client Sample ID: 3-TPT-SPOILS

Lab Sample ID: 720-54016-40

Date Collected: 11/25/13 10:10

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Tetrachloroethene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Toluene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
1,2,3-Trichlorobenzene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
1,2,4-Trichlorobenzene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
1,1,1-Trichloroethane	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
1,1,2-Trichloroethane	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Trichloroethene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Trichlorofluoromethane	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
1,2,3-Trichloropropane	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
1,2,4-Trimethylbenzene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
1,3,5-Trimethylbenzene	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Vinyl acetate	ND		45		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Vinyl chloride	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Xylenes, Total	ND		9.0		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
2,2-Dichloropropane	ND		4.5		ug/Kg		11/25/13 20:22	11/26/13 05:16	1
Gasoline Range Organics (GRO) -C5-C12	ND		220		ug/Kg		11/25/13 20:22	11/26/13 05:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	90		45 - 131	11/25/13 20:22	11/26/13 05:16	1
1,2-Dichloroethane-d4 (Surr)	106		60 - 140	11/25/13 20:22	11/26/13 05:16	1
Toluene-d8 (Surr)	92		58 - 140	11/25/13 20:22	11/26/13 05:16	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>41</b>		0.99		mg/Kg		11/26/13 11:16	11/27/13 18:34	1
<b>Motor Oil Range Organics [C24-C36]</b>	<b>150</b>		50		mg/Kg		11/26/13 11:16	11/27/13 18:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.1		0 - 1	11/26/13 11:16	11/27/13 18:34	1
p-Terphenyl	79		38 - 148	11/26/13 11:16	11/27/13 18:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		2.0		mg/Kg		11/26/13 18:20	11/27/13 20:27	4
<b>Arsenic</b>	<b>5.2</b>		3.9		mg/Kg		11/26/13 18:20	11/27/13 20:27	4
<b>Barium</b>	<b>130</b>		2.0		mg/Kg		11/26/13 18:20	11/27/13 20:27	4
Beryllium	ND		0.39		mg/Kg		11/26/13 18:20	11/27/13 20:27	4
Cadmium	ND		0.49		mg/Kg		11/26/13 18:20	11/27/13 20:27	4
<b>Chromium</b>	<b>48</b>		2.0		mg/Kg		11/26/13 18:20	11/27/13 20:27	4
<b>Cobalt</b>	<b>11</b>		0.78		mg/Kg		11/26/13 18:20	11/27/13 20:27	4
<b>Copper</b>	<b>32</b>		5.9		mg/Kg		11/26/13 18:20	11/27/13 20:27	4
<b>Lead</b>	<b>6.3</b>		2.0		mg/Kg		11/26/13 18:20	11/27/13 20:27	4
Molybdenum	ND		2.0		mg/Kg		11/26/13 18:20	11/27/13 20:27	4
<b>Nickel</b>	<b>67</b>		2.0		mg/Kg		11/26/13 18:20	11/27/13 20:27	4
Selenium	ND		3.9		mg/Kg		11/26/13 18:20	11/27/13 20:27	4
Silver	ND	^	0.98		mg/Kg		11/26/13 18:20	11/27/13 20:27	4
Thallium	ND		2.0		mg/Kg		11/26/13 18:20	11/27/13 20:27	4

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-TPT-SPOILS**

**Lab Sample ID: 720-54016-40**

Date Collected: 11/25/13 10:10

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	30		2.0		mg/Kg		11/26/13 18:20	11/27/13 20:27	4
Zinc	43		5.9		mg/Kg		11/26/13 18:20	11/27/13 20:27	4

**Method: 7471A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.073		0.0088		mg/Kg		11/25/13 22:03	11/26/13 14:04	1

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

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-TR/EX-SPOILS**

**Lab Sample ID: 720-54016-45**

Date Collected: 11/25/13 10:00

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Acetone	ND		49		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Benzene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Dichlorobromomethane	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Bromobenzene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Chlorobromomethane	ND		19		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Bromoform	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Bromomethane	ND		9.7		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
2-Butanone (MEK)	ND		49		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
n-Butylbenzene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
sec-Butylbenzene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
tert-Butylbenzene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Carbon disulfide	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Carbon tetrachloride	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Chlorobenzene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Chloroethane	ND		9.7		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Chloroform	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Chloromethane	ND		9.7		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
2-Chlorotoluene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
4-Chlorotoluene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Chlorodibromomethane	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
1,2-Dichlorobenzene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
1,3-Dichlorobenzene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
1,4-Dichlorobenzene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
1,3-Dichloropropane	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
1,1-Dichloropropene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
1,2-Dibromo-3-Chloropropane	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Ethylene Dibromide	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Dibromomethane	ND		9.7		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Dichlorodifluoromethane	ND		9.7		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
1,1-Dichloroethane	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
1,2-Dichloroethane	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
1,1-Dichloroethene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
cis-1,2-Dichloroethene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
trans-1,2-Dichloroethene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
1,2-Dichloropropane	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
cis-1,3-Dichloropropene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
trans-1,3-Dichloropropene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Ethylbenzene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Hexachlorobutadiene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
2-Hexanone	ND		49		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Isopropylbenzene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
4-Isopropyltoluene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Methylene Chloride	ND		9.7		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
4-Methyl-2-pentanone (MIBK)	ND		49		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Naphthalene	ND		9.7		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
N-Propylbenzene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Styrene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
1,1,1,2-Tetrachloroethane	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

## Client Sample ID: 3-TR/EX-SPOILS

Lab Sample ID: 720-54016-45

Date Collected: 11/25/13 10:00

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Tetrachloroethene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Toluene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
1,2,3-Trichlorobenzene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
1,2,4-Trichlorobenzene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
1,1,1-Trichloroethane	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
1,1,2-Trichloroethane	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Trichloroethene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Trichlorofluoromethane	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
1,2,3-Trichloropropane	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
1,2,4-Trimethylbenzene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
1,3,5-Trimethylbenzene	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Vinyl acetate	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Vinyl chloride	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Xylenes, Total	ND		9.7		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
2,2-Dichloropropane	ND		4.9		ug/Kg		11/29/13 08:00	11/29/13 14:08	1
Gasoline Range Organics (GRO) -C5-C12	ND		240		ug/Kg		11/29/13 08:00	11/29/13 14:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	81		45 - 131	11/29/13 08:00	11/29/13 14:08	1
1,2-Dichloroethane-d4 (Surr)	101		60 - 140	11/29/13 08:00	11/29/13 14:08	1
Toluene-d8 (Surr)	89		58 - 140	11/29/13 08:00	11/29/13 14:08	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]	310		9.9		mg/Kg		11/26/13 11:16	11/27/13 18:59	10
Motor Oil Range Organics [C24-C36]	1300		500		mg/Kg		11/26/13 11:16	11/27/13 18:59	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0		0 - 1	11/26/13 11:16	11/27/13 18:59	10
p-Terphenyl	0	X D	38 - 148	11/26/13 11:16	11/27/13 18:59	10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:31	4
Arsenic	5.6		3.8		mg/Kg		11/26/13 18:20	11/27/13 20:31	4
Barium	160		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:31	4
Beryllium	ND		0.38		mg/Kg		11/26/13 18:20	11/27/13 20:31	4
Cadmium	ND		0.48		mg/Kg		11/26/13 18:20	11/27/13 20:31	4
Chromium	58		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:31	4
Cobalt	12		0.77		mg/Kg		11/26/13 18:20	11/27/13 20:31	4
Copper	29		5.8		mg/Kg		11/26/13 18:20	11/27/13 20:31	4
Lead	8.2		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:31	4
Molybdenum	ND		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:31	4
Nickel	85		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:31	4
Selenium	ND		3.8		mg/Kg		11/26/13 18:20	11/27/13 20:31	4
Silver	ND	^	0.96		mg/Kg		11/26/13 18:20	11/27/13 20:31	4
Thallium	ND		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:31	4

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

**Client Sample ID: 3-TR/EX-SPOILS**

**Lab Sample ID: 720-54016-45**

Date Collected: 11/25/13 10:00

Matrix: Solid

Date Received: 11/25/13 11:09

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	31		1.9		mg/Kg		11/26/13 18:20	11/27/13 20:31	4
Zinc	57		5.8		mg/Kg		11/26/13 18:20	11/27/13 20:31	4

**Method: 7471A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.071		0.0095		mg/Kg		11/25/13 22:03	11/26/13 14:07	1

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

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

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

**Lab Sample ID: MB 720-148978/6**

**Matrix: Solid**

**Analysis Batch: 148978**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/Kg			11/25/13 19:14	1
Acetone	ND		50		ug/Kg			11/25/13 19:14	1
Benzene	ND		5.0		ug/Kg			11/25/13 19:14	1
Dichlorobromomethane	ND		5.0		ug/Kg			11/25/13 19:14	1
Bromobenzene	ND		5.0		ug/Kg			11/25/13 19:14	1
Chlorobromomethane	ND		20		ug/Kg			11/25/13 19:14	1
Bromoform	ND		5.0		ug/Kg			11/25/13 19:14	1
Bromomethane	ND		10		ug/Kg			11/25/13 19:14	1
2-Butanone (MEK)	ND		50		ug/Kg			11/25/13 19:14	1
n-Butylbenzene	ND		5.0		ug/Kg			11/25/13 19:14	1
sec-Butylbenzene	ND		5.0		ug/Kg			11/25/13 19:14	1
tert-Butylbenzene	ND		5.0		ug/Kg			11/25/13 19:14	1
Carbon disulfide	ND		5.0		ug/Kg			11/25/13 19:14	1
Carbon tetrachloride	ND		5.0		ug/Kg			11/25/13 19:14	1
Chlorobenzene	ND		5.0		ug/Kg			11/25/13 19:14	1
Chloroethane	ND		10		ug/Kg			11/25/13 19:14	1
Chloroform	ND		5.0		ug/Kg			11/25/13 19:14	1
Chloromethane	ND		10		ug/Kg			11/25/13 19:14	1
2-Chlorotoluene	ND		5.0		ug/Kg			11/25/13 19:14	1
4-Chlorotoluene	ND		5.0		ug/Kg			11/25/13 19:14	1
Chlorodibromomethane	ND		5.0		ug/Kg			11/25/13 19:14	1
1,2-Dichlorobenzene	ND		5.0		ug/Kg			11/25/13 19:14	1
1,3-Dichlorobenzene	ND		5.0		ug/Kg			11/25/13 19:14	1
1,4-Dichlorobenzene	ND		5.0		ug/Kg			11/25/13 19:14	1
1,3-Dichloropropane	ND		5.0		ug/Kg			11/25/13 19:14	1
1,1-Dichloropropene	ND		5.0		ug/Kg			11/25/13 19:14	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/Kg			11/25/13 19:14	1
Ethylene Dibromide	ND		5.0		ug/Kg			11/25/13 19:14	1
Dibromomethane	ND		10		ug/Kg			11/25/13 19:14	1
Dichlorodifluoromethane	ND		10		ug/Kg			11/25/13 19:14	1
1,1-Dichloroethane	ND		5.0		ug/Kg			11/25/13 19:14	1
1,2-Dichloroethane	ND		5.0		ug/Kg			11/25/13 19:14	1
1,1-Dichloroethene	ND		5.0		ug/Kg			11/25/13 19:14	1
cis-1,2-Dichloroethene	ND		5.0		ug/Kg			11/25/13 19:14	1
trans-1,2-Dichloroethene	ND		5.0		ug/Kg			11/25/13 19:14	1
1,2-Dichloropropane	ND		5.0		ug/Kg			11/25/13 19:14	1
cis-1,3-Dichloropropene	ND		5.0		ug/Kg			11/25/13 19:14	1
trans-1,3-Dichloropropene	ND		5.0		ug/Kg			11/25/13 19:14	1
Ethylbenzene	ND		5.0		ug/Kg			11/25/13 19:14	1
Hexachlorobutadiene	ND		5.0		ug/Kg			11/25/13 19:14	1
2-Hexanone	ND		50		ug/Kg			11/25/13 19:14	1
Isopropylbenzene	ND		5.0		ug/Kg			11/25/13 19:14	1
4-Isopropyltoluene	ND		5.0		ug/Kg			11/25/13 19:14	1
Methylene Chloride	ND		10		ug/Kg			11/25/13 19:14	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/Kg			11/25/13 19:14	1
Naphthalene	ND		10		ug/Kg			11/25/13 19:14	1
N-Propylbenzene	ND		5.0		ug/Kg			11/25/13 19:14	1
Styrene	ND		5.0		ug/Kg			11/25/13 19:14	1

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# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

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

**Lab Sample ID: MB 720-148978/6**

**Matrix: Solid**

**Analysis Batch: 148978**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0		ug/Kg			11/25/13 19:14	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/Kg			11/25/13 19:14	1
Tetrachloroethene	ND		5.0		ug/Kg			11/25/13 19:14	1
Toluene	ND		5.0		ug/Kg			11/25/13 19:14	1
1,2,3-Trichlorobenzene	ND		5.0		ug/Kg			11/25/13 19:14	1
1,2,4-Trichlorobenzene	ND		5.0		ug/Kg			11/25/13 19:14	1
1,1,1-Trichloroethane	ND		5.0		ug/Kg			11/25/13 19:14	1
1,1,2-Trichloroethane	ND		5.0		ug/Kg			11/25/13 19:14	1
Trichloroethene	ND		5.0		ug/Kg			11/25/13 19:14	1
Trichlorofluoromethane	ND		5.0		ug/Kg			11/25/13 19:14	1
1,2,3-Trichloropropane	ND		5.0		ug/Kg			11/25/13 19:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/Kg			11/25/13 19:14	1
1,2,4-Trimethylbenzene	ND		5.0		ug/Kg			11/25/13 19:14	1
1,3,5-Trimethylbenzene	ND		5.0		ug/Kg			11/25/13 19:14	1
Vinyl acetate	ND		50		ug/Kg			11/25/13 19:14	1
Vinyl chloride	ND		5.0		ug/Kg			11/25/13 19:14	1
Xylenes, Total	ND		10		ug/Kg			11/25/13 19:14	1
2,2-Dichloropropane	ND		5.0		ug/Kg			11/25/13 19:14	1
Gasoline Range Organics (GRO) -C5-C12	ND		250		ug/Kg			11/25/13 19:14	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	97		45 - 131		11/25/13 19:14	1
1,2-Dichloroethane-d4 (Surr)	103		60 - 140		11/25/13 19:14	1
Toluene-d8 (Surr)	97		58 - 140		11/25/13 19:14	1

**Lab Sample ID: LCS 720-148978/7**

**Matrix: Solid**

**Analysis Batch: 148978**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	60.0		ug/Kg		120	70 - 144
Acetone	250	285		ug/Kg		114	30 - 162
Benzene	50.0	51.3		ug/Kg		103	70 - 130
Dichlorobromomethane	50.0	55.9		ug/Kg		112	70 - 131
Bromobenzene	50.0	52.6		ug/Kg		105	70 - 130
Chlorobromomethane	50.0	56.9		ug/Kg		114	70 - 130
Bromoform	50.0	62.6		ug/Kg		125	59 - 158
Bromomethane	50.0	50.7		ug/Kg		101	59 - 132
2-Butanone (MEK)	250	320 *		ug/Kg		128	53 - 124
n-Butylbenzene	50.0	50.1		ug/Kg		100	70 - 142
sec-Butylbenzene	50.0	48.7		ug/Kg		97	70 - 136
tert-Butylbenzene	50.0	50.9		ug/Kg		102	70 - 130
Carbon disulfide	50.0	50.6		ug/Kg		101	60 - 140
Carbon tetrachloride	50.0	56.6		ug/Kg		113	70 - 138
Chlorobenzene	50.0	51.9		ug/Kg		104	70 - 130
Chloroethane	50.0	49.8		ug/Kg		100	65 - 130
Chloroform	50.0	54.2		ug/Kg		108	77 - 127

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# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

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

**Lab Sample ID: LCS 720-148978/7**

**Matrix: Solid**

**Analysis Batch: 148978**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	47.6		ug/Kg		95	55 - 140
2-Chlorotoluene	50.0	52.4		ug/Kg		105	70 - 138
4-Chlorotoluene	50.0	51.4		ug/Kg		103	70 - 136
Chlorodibromomethane	50.0	61.0		ug/Kg		122	70 - 146
1,2-Dichlorobenzene	50.0	51.8		ug/Kg		104	70 - 130
1,3-Dichlorobenzene	50.0	52.3		ug/Kg		105	70 - 131
1,4-Dichlorobenzene	50.0	54.3		ug/Kg		109	70 - 130
1,3-Dichloropropane	50.0	58.6		ug/Kg		117	70 - 140
1,1-Dichloropropene	50.0	58.1		ug/Kg		116	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	54.8		ug/Kg		110	60 - 145
Ethylene Dibromide	50.0	63.5		ug/Kg		127	70 - 140
Dibromomethane	50.0	59.1		ug/Kg		118	70 - 139
Dichlorodifluoromethane	50.0	46.9		ug/Kg		94	37 - 158
1,1-Dichloroethane	50.0	51.6		ug/Kg		103	70 - 130
1,2-Dichloroethane	50.0	58.7		ug/Kg		117	70 - 130
1,1-Dichloroethene	50.0	49.4		ug/Kg		99	76 - 122
cis-1,2-Dichloroethene	50.0	54.1		ug/Kg		108	70 - 138
trans-1,2-Dichloroethene	50.0	52.7		ug/Kg		105	67 - 130
1,2-Dichloropropane	50.0	53.7		ug/Kg		107	73 - 127
cis-1,3-Dichloropropene	50.0	59.4		ug/Kg		119	68 - 147
trans-1,3-Dichloropropene	50.0	65.6		ug/Kg		131	70 - 136
Ethylbenzene	50.0	49.9		ug/Kg		100	80 - 137
Hexachlorobutadiene	50.0	49.1		ug/Kg		98	70 - 132
2-Hexanone	250	312		ug/Kg		125	44 - 133
Isopropylbenzene	50.0	50.7		ug/Kg		101	88 - 128
4-Isopropyltoluene	50.0	49.0		ug/Kg		98	70 - 133
Methylene Chloride	50.0	59.4		ug/Kg		119	70 - 134
4-Methyl-2-pentanone (MIBK)	250	314		ug/Kg		126	60 - 160
Naphthalene	50.0	51.8		ug/Kg		104	60 - 147
N-Propylbenzene	50.0	49.4		ug/Kg		99	70 - 130
Styrene	50.0	55.3		ug/Kg		111	70 - 130
1,1,1,2-Tetrachloroethane	50.0	56.3		ug/Kg		113	70 - 130
1,1,2,2-Tetrachloroethane	50.0	57.9		ug/Kg		116	70 - 146
Tetrachloroethene	50.0	56.6		ug/Kg		113	70 - 132
Toluene	50.0	50.0		ug/Kg		100	80 - 128
1,2,3-Trichlorobenzene	50.0	51.6		ug/Kg		103	60 - 140
1,2,4-Trichlorobenzene	50.0	51.3		ug/Kg		103	60 - 140
1,1,1-Trichloroethane	50.0	56.9		ug/Kg		114	70 - 130
1,1,2-Trichloroethane	50.0	58.9		ug/Kg		118	70 - 130
Trichloroethene	50.0	55.3		ug/Kg		111	70 - 133
Trichlorofluoromethane	50.0	54.9		ug/Kg		110	60 - 140
1,2,3-Trichloropropane	50.0	60.1		ug/Kg		120	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	57.5		ug/Kg		115	60 - 140
1,2,4-Trimethylbenzene	50.0	52.7		ug/Kg		105	70 - 130
1,3,5-Trimethylbenzene	50.0	52.5		ug/Kg		105	70 - 131
Vinyl acetate	50.0	75.1		ug/Kg		150	38 - 176
Vinyl chloride	50.0	48.6		ug/Kg		97	58 - 125

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

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

**Lab Sample ID: LCS 720-148978/7**

**Matrix: Solid**

**Analysis Batch: 148978**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	100	96.6		ug/Kg		97	70 - 146
o-Xylene	50.0	53.6		ug/Kg		107	70 - 140
2,2-Dichloropropane	50.0	59.3		ug/Kg		119	70 - 162

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	97		45 - 131
1,2-Dichloroethane-d4 (Surr)	106		60 - 140
Toluene-d8 (Surr)	99		58 - 140

**Lab Sample ID: LCS 720-148978/9**

**Matrix: Solid**

**Analysis Batch: 148978**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C5-C12	1000	989		ug/Kg		99	61 - 128

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	99		45 - 131
1,2-Dichloroethane-d4 (Surr)	104		60 - 140
Toluene-d8 (Surr)	97		58 - 140

**Lab Sample ID: LCSD 720-148978/10**

**Matrix: Solid**

**Analysis Batch: 148978**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12	1000	1060		ug/Kg		106	61 - 128	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	99		45 - 131
1,2-Dichloroethane-d4 (Surr)	106		60 - 140
Toluene-d8 (Surr)	97		58 - 140

**Lab Sample ID: LCSD 720-148978/8**

**Matrix: Solid**

**Analysis Batch: 148978**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	57.8		ug/Kg		116	70 - 144	4	20
Acetone	250	268		ug/Kg		107	30 - 162	6	30
Benzene	50.0	52.2		ug/Kg		104	70 - 130	2	20
Dichlorobromomethane	50.0	56.7		ug/Kg		113	70 - 131	1	20
Bromobenzene	50.0	53.1		ug/Kg		106	70 - 130	1	20
Chlorobromomethane	50.0	53.1		ug/Kg		106	70 - 130	7	20
Bromoform	50.0	59.3		ug/Kg		119	59 - 158	5	20
Bromomethane	50.0	50.6		ug/Kg		101	59 - 132	0	20

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# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

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

Lab Sample ID: LCSD 720-148978/8

Matrix: Solid

Analysis Batch: 148978

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	
								RPD	Limit
2-Butanone (MEK)	250	312	*	ug/Kg		125	53 - 124	2	20
n-Butylbenzene	50.0	52.4		ug/Kg		105	70 - 142	5	20
sec-Butylbenzene	50.0	51.8		ug/Kg		104	70 - 136	6	20
tert-Butylbenzene	50.0	53.8		ug/Kg		108	70 - 130	5	20
Carbon disulfide	50.0	52.0		ug/Kg		104	60 - 140	3	20
Carbon tetrachloride	50.0	56.9		ug/Kg		114	70 - 138	1	20
Chlorobenzene	50.0	53.2		ug/Kg		106	70 - 130	2	20
Chloroethane	50.0	51.3		ug/Kg		103	65 - 130	3	20
Chloroform	50.0	54.3		ug/Kg		109	77 - 127	0	20
Chloromethane	50.0	49.6		ug/Kg		99	55 - 140	4	20
2-Chlorotoluene	50.0	55.3		ug/Kg		111	70 - 138	5	20
4-Chlorotoluene	50.0	53.8		ug/Kg		108	70 - 136	5	20
Chlorodibromomethane	50.0	58.4		ug/Kg		117	70 - 146	4	20
1,2-Dichlorobenzene	50.0	51.9		ug/Kg		104	70 - 130	0	20
1,3-Dichlorobenzene	50.0	53.0		ug/Kg		106	70 - 131	1	20
1,4-Dichlorobenzene	50.0	54.1		ug/Kg		108	70 - 130	0	20
1,3-Dichloropropane	50.0	56.8		ug/Kg		114	70 - 140	3	20
1,1-Dichloropropene	50.0	59.2		ug/Kg		118	70 - 130	2	20
1,2-Dibromo-3-Chloropropane	50.0	51.4		ug/Kg		103	60 - 145	6	20
Ethylene Dibromide	50.0	59.8		ug/Kg		120	70 - 140	6	20
Dibromomethane	50.0	56.6		ug/Kg		113	70 - 139	4	20
Dichlorodifluoromethane	50.0	45.6		ug/Kg		91	37 - 158	3	20
1,1-Dichloroethane	50.0	52.9		ug/Kg		106	70 - 130	2	20
1,2-Dichloroethane	50.0	58.1		ug/Kg		116	70 - 130	1	20
1,1-Dichloroethene	50.0	49.1		ug/Kg		98	76 - 122	1	20
cis-1,2-Dichloroethene	50.0	54.8		ug/Kg		110	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	52.8		ug/Kg		106	67 - 130	0	20
1,2-Dichloropropane	50.0	54.0		ug/Kg		108	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	58.5		ug/Kg		117	68 - 147	2	20
trans-1,3-Dichloropropene	50.0	64.4		ug/Kg		129	70 - 136	2	20
Ethylbenzene	50.0	52.5		ug/Kg		105	80 - 137	5	20
Hexachlorobutadiene	50.0	48.4		ug/Kg		97	70 - 132	1	20
2-Hexanone	250	310		ug/Kg		124	44 - 133	1	20
Isopropylbenzene	50.0	53.2		ug/Kg		106	88 - 128	5	20
4-Isopropyltoluene	50.0	51.1		ug/Kg		102	70 - 133	4	20
Methylene Chloride	50.0	58.2		ug/Kg		116	70 - 134	2	20
4-Methyl-2-pentanone (MIBK)	250	311		ug/Kg		124	60 - 160	1	20
Naphthalene	50.0	50.4		ug/Kg		101	60 - 147	3	20
N-Propylbenzene	50.0	52.7		ug/Kg		105	70 - 130	6	20
Styrene	50.0	56.7		ug/Kg		113	70 - 130	2	20
1,1,1,2-Tetrachloroethane	50.0	57.2		ug/Kg		114	70 - 130	2	20
1,1,2,2-Tetrachloroethane	50.0	57.7		ug/Kg		115	70 - 146	0	20
Tetrachloroethene	50.0	55.5		ug/Kg		111	70 - 132	2	20
Toluene	50.0	52.4		ug/Kg		105	80 - 128	5	20
1,2,3-Trichlorobenzene	50.0	49.5		ug/Kg		99	60 - 140	4	20
1,2,4-Trichlorobenzene	50.0	49.3		ug/Kg		99	60 - 140	4	20
1,1,1-Trichloroethane	50.0	57.5		ug/Kg		115	70 - 130	1	20
1,1,2-Trichloroethane	50.0	56.3		ug/Kg		113	70 - 130	5	20

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

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

**Lab Sample ID: LCSD 720-148978/8**

**Matrix: Solid**

**Analysis Batch: 148978**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits		RPD	RPD Limit
Trichloroethene	50.0	54.2		ug/Kg		108	70 - 133	2	20	
Trichlorofluoromethane	50.0	54.3		ug/Kg		109	60 - 140	1	20	
1,2,3-Trichloropropane	50.0	57.7		ug/Kg		115	70 - 146	4	20	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	55.5		ug/Kg		111	60 - 140	4	20	
1,2,4-Trimethylbenzene	50.0	54.3		ug/Kg		109	70 - 130	3	20	
1,3,5-Trimethylbenzene	50.0	55.1		ug/Kg		110	70 - 131	5	20	
Vinyl acetate	50.0	72.9		ug/Kg		146	38 - 176	3	20	
Vinyl chloride	50.0	49.8		ug/Kg		100	58 - 125	2	20	
m-Xylene & p-Xylene	100	102		ug/Kg		102	70 - 146	5	20	
o-Xylene	50.0	55.9		ug/Kg		112	70 - 140	4	20	
2,2-Dichloropropane	50.0	58.5		ug/Kg		117	70 - 162	1	20	

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
4-Bromofluorobenzene	100		45 - 131
1,2-Dichloroethane-d4 (Surr)	104		60 - 140
Toluene-d8 (Surr)	99		58 - 140

**Lab Sample ID: MB 720-149012/10**

**Matrix: Solid**

**Analysis Batch: 149012**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl tert-butyl ether	ND		5.0		ug/Kg			11/26/13 10:56	1
Acetone	ND		50		ug/Kg			11/26/13 10:56	1
Benzene	ND		5.0		ug/Kg			11/26/13 10:56	1
Dichlorobromomethane	ND		5.0		ug/Kg			11/26/13 10:56	1
Bromobenzene	ND		5.0		ug/Kg			11/26/13 10:56	1
Chlorobromomethane	ND		20		ug/Kg			11/26/13 10:56	1
Bromoform	ND		5.0		ug/Kg			11/26/13 10:56	1
Bromomethane	ND		10		ug/Kg			11/26/13 10:56	1
2-Butanone (MEK)	ND		50		ug/Kg			11/26/13 10:56	1
n-Butylbenzene	ND		5.0		ug/Kg			11/26/13 10:56	1
sec-Butylbenzene	ND		5.0		ug/Kg			11/26/13 10:56	1
tert-Butylbenzene	ND		5.0		ug/Kg			11/26/13 10:56	1
Carbon disulfide	ND		5.0		ug/Kg			11/26/13 10:56	1
Carbon tetrachloride	ND		5.0		ug/Kg			11/26/13 10:56	1
Chlorobenzene	ND		5.0		ug/Kg			11/26/13 10:56	1
Chloroethane	ND		10		ug/Kg			11/26/13 10:56	1
Chloroform	ND		5.0		ug/Kg			11/26/13 10:56	1
Chloromethane	ND		10		ug/Kg			11/26/13 10:56	1
2-Chlorotoluene	ND		5.0		ug/Kg			11/26/13 10:56	1
4-Chlorotoluene	ND		5.0		ug/Kg			11/26/13 10:56	1
Chlorodibromomethane	ND		5.0		ug/Kg			11/26/13 10:56	1
1,2-Dichlorobenzene	ND		5.0		ug/Kg			11/26/13 10:56	1
1,3-Dichlorobenzene	ND		5.0		ug/Kg			11/26/13 10:56	1
1,4-Dichlorobenzene	ND		5.0		ug/Kg			11/26/13 10:56	1
1,3-Dichloropropane	ND		5.0		ug/Kg			11/26/13 10:56	1

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

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

Lab Sample ID: MB 720-149012/10

Matrix: Solid

Analysis Batch: 149012

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloropropene	ND		5.0		ug/Kg			11/26/13 10:56	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/Kg			11/26/13 10:56	1
Ethylene Dibromide	ND		5.0		ug/Kg			11/26/13 10:56	1
Dibromomethane	ND		10		ug/Kg			11/26/13 10:56	1
Dichlorodifluoromethane	ND		10		ug/Kg			11/26/13 10:56	1
1,1-Dichloroethane	ND		5.0		ug/Kg			11/26/13 10:56	1
1,2-Dichloroethane	ND		5.0		ug/Kg			11/26/13 10:56	1
1,1-Dichloroethene	ND		5.0		ug/Kg			11/26/13 10:56	1
cis-1,2-Dichloroethene	ND		5.0		ug/Kg			11/26/13 10:56	1
trans-1,2-Dichloroethene	ND		5.0		ug/Kg			11/26/13 10:56	1
1,2-Dichloropropane	ND		5.0		ug/Kg			11/26/13 10:56	1
cis-1,3-Dichloropropene	ND		5.0		ug/Kg			11/26/13 10:56	1
trans-1,3-Dichloropropene	ND		5.0		ug/Kg			11/26/13 10:56	1
Ethylbenzene	ND		5.0		ug/Kg			11/26/13 10:56	1
Hexachlorobutadiene	ND		5.0		ug/Kg			11/26/13 10:56	1
2-Hexanone	ND		50		ug/Kg			11/26/13 10:56	1
Isopropylbenzene	ND		5.0		ug/Kg			11/26/13 10:56	1
4-Isopropyltoluene	ND		5.0		ug/Kg			11/26/13 10:56	1
Methylene Chloride	ND		10		ug/Kg			11/26/13 10:56	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/Kg			11/26/13 10:56	1
Naphthalene	ND		10		ug/Kg			11/26/13 10:56	1
N-Propylbenzene	ND		5.0		ug/Kg			11/26/13 10:56	1
Styrene	ND		5.0		ug/Kg			11/26/13 10:56	1
1,1,1,2-Tetrachloroethane	ND		5.0		ug/Kg			11/26/13 10:56	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/Kg			11/26/13 10:56	1
Tetrachloroethene	ND		5.0		ug/Kg			11/26/13 10:56	1
Toluene	ND		5.0		ug/Kg			11/26/13 10:56	1
1,2,3-Trichlorobenzene	ND		5.0		ug/Kg			11/26/13 10:56	1
1,2,4-Trichlorobenzene	ND		5.0		ug/Kg			11/26/13 10:56	1
1,1,1-Trichloroethane	ND		5.0		ug/Kg			11/26/13 10:56	1
1,1,2-Trichloroethane	ND		5.0		ug/Kg			11/26/13 10:56	1
Trichloroethene	ND		5.0		ug/Kg			11/26/13 10:56	1
Trichlorofluoromethane	ND		5.0		ug/Kg			11/26/13 10:56	1
1,2,3-Trichloropropane	ND		5.0		ug/Kg			11/26/13 10:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/Kg			11/26/13 10:56	1
1,2,4-Trimethylbenzene	ND		5.0		ug/Kg			11/26/13 10:56	1
1,3,5-Trimethylbenzene	ND		5.0		ug/Kg			11/26/13 10:56	1
Vinyl acetate	ND		50		ug/Kg			11/26/13 10:56	1
Vinyl chloride	ND		5.0		ug/Kg			11/26/13 10:56	1
Xylenes, Total	ND		10		ug/Kg			11/26/13 10:56	1
2,2-Dichloropropane	ND		5.0		ug/Kg			11/26/13 10:56	1
Gasoline Range Organics (GRO) -C5-C12	ND		250		ug/Kg			11/26/13 10:56	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	100		45 - 131		11/26/13 10:56	1
1,2-Dichloroethane-d4 (Surr)	128		60 - 140		11/26/13 10:56	1
Toluene-d8 (Surr)	96		58 - 140		11/26/13 10:56	1

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

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

**Lab Sample ID: LCS 720-149012/5**

**Matrix: Solid**

**Analysis Batch: 149012**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	56.2		ug/Kg		112	70 - 144
Acetone	250	248		ug/Kg		99	30 - 162
Benzene	50.0	53.5		ug/Kg		107	70 - 130
Dichlorobromomethane	50.0	57.6		ug/Kg		115	70 - 131
Bromobenzene	50.0	53.8		ug/Kg		108	70 - 130
Chlorobromomethane	50.0	52.6		ug/Kg		105	70 - 130
Bromoform	50.0	57.8		ug/Kg		116	59 - 158
Bromomethane	50.0	52.3		ug/Kg		105	59 - 132
2-Butanone (MEK)	250	261		ug/Kg		105	53 - 124
n-Butylbenzene	50.0	55.2		ug/Kg		110	70 - 142
sec-Butylbenzene	50.0	53.7		ug/Kg		107	70 - 136
tert-Butylbenzene	50.0	54.7		ug/Kg		109	70 - 130
Carbon disulfide	50.0	53.4		ug/Kg		107	60 - 140
Carbon tetrachloride	50.0	62.7		ug/Kg		125	70 - 138
Chlorobenzene	50.0	53.7		ug/Kg		107	70 - 130
Chloroethane	50.0	52.7		ug/Kg		105	65 - 130
Chloroform	50.0	57.4		ug/Kg		115	77 - 127
Chloromethane	50.0	50.0		ug/Kg		100	55 - 140
2-Chlorotoluene	50.0	57.1		ug/Kg		114	70 - 138
4-Chlorotoluene	50.0	55.8		ug/Kg		112	70 - 136
Chlorodibromomethane	50.0	59.1		ug/Kg		118	70 - 146
1,2-Dichlorobenzene	50.0	51.0		ug/Kg		102	70 - 130
1,3-Dichlorobenzene	50.0	53.5		ug/Kg		107	70 - 131
1,4-Dichlorobenzene	50.0	55.1		ug/Kg		110	70 - 130
1,3-Dichloropropane	50.0	56.8		ug/Kg		114	70 - 140
1,1-Dichloropropene	50.0	62.8		ug/Kg		126	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	45.0		ug/Kg		90	60 - 145
Ethylene Dibromide	50.0	58.7		ug/Kg		117	70 - 140
Dibromomethane	50.0	56.5		ug/Kg		113	70 - 139
Dichlorodifluoromethane	50.0	50.1		ug/Kg		100	37 - 158
1,1-Dichloroethane	50.0	53.8		ug/Kg		108	70 - 130
1,2-Dichloroethane	50.0	61.0		ug/Kg		122	70 - 130
1,1-Dichloroethene	50.0	51.1		ug/Kg		102	76 - 122
cis-1,2-Dichloroethene	50.0	57.3		ug/Kg		115	70 - 138
trans-1,2-Dichloroethene	50.0	54.3		ug/Kg		109	67 - 130
1,2-Dichloropropane	50.0	53.0		ug/Kg		106	73 - 127
cis-1,3-Dichloropropene	50.0	59.5		ug/Kg		119	68 - 147
trans-1,3-Dichloropropene	50.0	65.2		ug/Kg		130	70 - 136
Ethylbenzene	50.0	54.3		ug/Kg		109	80 - 137
Hexachlorobutadiene	50.0	50.5		ug/Kg		101	70 - 132
2-Hexanone	250	283		ug/Kg		113	44 - 133
Isopropylbenzene	50.0	55.4		ug/Kg		111	88 - 128
4-Isopropyltoluene	50.0	53.1		ug/Kg		106	70 - 133
Methylene Chloride	50.0	56.0		ug/Kg		112	70 - 134
4-Methyl-2-pentanone (MIBK)	250	286		ug/Kg		114	60 - 160
Naphthalene	50.0	47.2		ug/Kg		94	60 - 147
N-Propylbenzene	50.0	55.2		ug/Kg		110	70 - 130
Styrene	50.0	56.2		ug/Kg		112	70 - 130

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

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

**Lab Sample ID: LCS 720-149012/5**

**Matrix: Solid**

**Analysis Batch: 149012**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	58.2		ug/Kg		116	70 - 130
1,1,2,2-Tetrachloroethane	50.0	52.8		ug/Kg		106	70 - 146
Tetrachloroethene	50.0	58.7		ug/Kg		117	70 - 132
Toluene	50.0	52.9		ug/Kg		106	80 - 128
1,2,3-Trichlorobenzene	50.0	49.0		ug/Kg		98	60 - 140
1,2,4-Trichlorobenzene	50.0	50.2		ug/Kg		100	60 - 140
1,1,1-Trichloroethane	50.0	63.0		ug/Kg		126	70 - 130
1,1,2-Trichloroethane	50.0	54.9		ug/Kg		110	70 - 130
Trichloroethene	50.0	56.8		ug/Kg		114	70 - 133
Trichlorofluoromethane	50.0	61.1		ug/Kg		122	60 - 140
1,2,3-Trichloropropane	50.0	55.9		ug/Kg		112	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	58.3		ug/Kg		117	60 - 140
1,2,4-Trimethylbenzene	50.0	56.0		ug/Kg		112	70 - 130
1,3,5-Trimethylbenzene	50.0	57.2		ug/Kg		114	70 - 131
Vinyl acetate	50.0	70.1		ug/Kg		140	38 - 176
Vinyl chloride	50.0	52.0		ug/Kg		104	58 - 125
m-Xylene & p-Xylene	100	107		ug/Kg		107	70 - 146
o-Xylene	50.0	57.3		ug/Kg		115	70 - 140
2,2-Dichloropropane	50.0	70.1		ug/Kg		140	70 - 162

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	99		45 - 131
1,2-Dichloroethane-d4 (Surr)	110		60 - 140
Toluene-d8 (Surr)	100		58 - 140

**Lab Sample ID: LCS 720-149012/7**

**Matrix: Solid**

**Analysis Batch: 149012**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C5-C12	1000	1090		ug/Kg		109	61 - 128

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	99		45 - 131
1,2-Dichloroethane-d4 (Surr)	109		60 - 140
Toluene-d8 (Surr)	99		58 - 140

**Lab Sample ID: LCSD 720-149012/6**

**Matrix: Solid**

**Analysis Batch: 149012**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Methyl tert-butyl ether	50.0	56.1		ug/Kg		112	70 - 144	0	20
Acetone	250	259		ug/Kg		104	30 - 162	4	30
Benzene	50.0	53.0		ug/Kg		106	70 - 130	1	20
Dichlorobromomethane	50.0	59.5		ug/Kg		119	70 - 131	3	20

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

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

Lab Sample ID: LCSD 720-149012/6

Matrix: Solid

Analysis Batch: 149012

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Added	Result	Qualifier				Limits		
Bromobenzene	50.0	54.4		ug/Kg		109	70 - 130	1	20
Chlorobromomethane	50.0	55.6		ug/Kg		111	70 - 130	6	20
Bromoform	50.0	56.8		ug/Kg		114	59 - 158	2	20
Bromomethane	50.0	53.9		ug/Kg		108	59 - 132	3	20
2-Butanone (MEK)	250	274		ug/Kg		110	53 - 124	5	20
n-Butylbenzene	50.0	52.8		ug/Kg		106	70 - 142	4	20
sec-Butylbenzene	50.0	52.0		ug/Kg		104	70 - 136	3	20
tert-Butylbenzene	50.0	54.3		ug/Kg		109	70 - 130	1	20
Carbon disulfide	50.0	52.5		ug/Kg		105	60 - 140	2	20
Carbon tetrachloride	50.0	64.1		ug/Kg		128	70 - 138	2	20
Chlorobenzene	50.0	52.9		ug/Kg		106	70 - 130	1	20
Chloroethane	50.0	52.3		ug/Kg		105	65 - 130	1	20
Chloroform	50.0	57.9		ug/Kg		116	77 - 127	1	20
Chloromethane	50.0	49.1		ug/Kg		98	55 - 140	2	20
2-Chlorotoluene	50.0	55.5		ug/Kg		111	70 - 138	3	20
4-Chlorotoluene	50.0	54.0		ug/Kg		108	70 - 136	3	20
Chlorodibromomethane	50.0	60.8		ug/Kg		122	70 - 146	3	20
1,2-Dichlorobenzene	50.0	51.8		ug/Kg		104	70 - 130	2	20
1,3-Dichlorobenzene	50.0	54.0		ug/Kg		108	70 - 131	1	20
1,4-Dichlorobenzene	50.0	55.4		ug/Kg		111	70 - 130	0	20
1,3-Dichloropropane	50.0	56.2		ug/Kg		112	70 - 140	1	20
1,1-Dichloropropene	50.0	62.6		ug/Kg		125	70 - 130	0	20
1,2-Dibromo-3-Chloropropane	50.0	44.1		ug/Kg		88	60 - 145	2	20
Ethylene Dibromide	50.0	59.1		ug/Kg		118	70 - 140	1	20
Dibromomethane	50.0	56.7		ug/Kg		113	70 - 139	0	20
Dichlorodifluoromethane	50.0	50.6		ug/Kg		101	37 - 158	1	20
1,1-Dichloroethane	50.0	54.3		ug/Kg		109	70 - 130	1	20
1,2-Dichloroethane	50.0	59.9		ug/Kg		120	70 - 130	2	20
1,1-Dichloroethene	50.0	51.0		ug/Kg		102	76 - 122	0	20
cis-1,2-Dichloroethene	50.0	57.2		ug/Kg		114	70 - 138	0	20
trans-1,2-Dichloroethene	50.0	55.3		ug/Kg		111	67 - 130	2	20
1,2-Dichloropropane	50.0	53.3		ug/Kg		107	73 - 127	0	20
cis-1,3-Dichloropropene	50.0	59.4		ug/Kg		119	68 - 147	0	20
trans-1,3-Dichloropropene	50.0	65.1		ug/Kg		130	70 - 136	0	20
Ethylbenzene	50.0	52.1		ug/Kg		104	80 - 137	4	20
Hexachlorobutadiene	50.0	50.9		ug/Kg		102	70 - 132	1	20
2-Hexanone	250	254		ug/Kg		102	44 - 133	11	20
Isopropylbenzene	50.0	52.8		ug/Kg		106	88 - 128	5	20
4-Isopropyltoluene	50.0	51.8		ug/Kg		104	70 - 133	3	20
Methylene Chloride	50.0	56.1		ug/Kg		112	70 - 134	0	20
4-Methyl-2-pentanone (MIBK)	250	257		ug/Kg		103	60 - 160	10	20
Naphthalene	50.0	46.0		ug/Kg		92	60 - 147	3	20
N-Propylbenzene	50.0	53.2		ug/Kg		106	70 - 130	4	20
Styrene	50.0	55.1		ug/Kg		110	70 - 130	2	20
1,1,1,2-Tetrachloroethane	50.0	58.2		ug/Kg		116	70 - 130	0	20
1,1,2,2-Tetrachloroethane	50.0	50.0		ug/Kg		100	70 - 146	6	20
Tetrachloroethene	50.0	59.9		ug/Kg		120	70 - 132	2	20
Toluene	50.0	51.6		ug/Kg		103	80 - 128	2	20

TestAmerica Pleasanton



# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

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

**Lab Sample ID: LCSD 720-149012/6**

**Matrix: Solid**

**Analysis Batch: 149012**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene	50.0	50.5		ug/Kg		101	60 - 140	3	20
1,2,4-Trichlorobenzene	50.0	50.7		ug/Kg		101	60 - 140	1	20
1,1,1-Trichloroethane	50.0	63.1		ug/Kg		126	70 - 130	0	20
1,1,1,2-Trichloroethane	50.0	54.9		ug/Kg		110	70 - 130	0	20
Trichloroethene	50.0	58.1		ug/Kg		116	70 - 133	2	20
Trichlorofluoromethane	50.0	62.7		ug/Kg		125	60 - 140	3	20
1,2,3-Trichloropropane	50.0	53.1		ug/Kg		106	70 - 146	5	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	60.4		ug/Kg		121	60 - 140	4	20
1,2,4-Trimethylbenzene	50.0	55.5		ug/Kg		111	70 - 130	1	20
1,3,5-Trimethylbenzene	50.0	55.9		ug/Kg		112	70 - 131	2	20
Vinyl acetate	50.0	66.6		ug/Kg		133	38 - 176	5	20
Vinyl chloride	50.0	51.6		ug/Kg		103	58 - 125	1	20
m-Xylene & p-Xylene	100	102		ug/Kg		102	70 - 146	5	20
o-Xylene	50.0	55.6		ug/Kg		111	70 - 140	3	20
2,2-Dichloropropane	50.0	69.5		ug/Kg		139	70 - 162	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	96		45 - 131
1,2-Dichloroethane-d4 (Surr)	104		60 - 140
Toluene-d8 (Surr)	99		58 - 140

**Lab Sample ID: LCSD 720-149012/8**

**Matrix: Solid**

**Analysis Batch: 149012**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12	1000	1100		ug/Kg		110	61 - 128	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	101		45 - 131
1,2-Dichloroethane-d4 (Surr)	111		60 - 140
Toluene-d8 (Surr)	98		58 - 140

**Lab Sample ID: MB 720-149194/5**

**Matrix: Solid**

**Analysis Batch: 149194**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/Kg			11/29/13 09:43	1
Acetone	ND		50		ug/Kg			11/29/13 09:43	1
Benzene	ND		5.0		ug/Kg			11/29/13 09:43	1
Dichlorobromomethane	ND		5.0		ug/Kg			11/29/13 09:43	1
Bromobenzene	ND		5.0		ug/Kg			11/29/13 09:43	1
Chlorobromomethane	ND		20		ug/Kg			11/29/13 09:43	1
Bromoform	ND		5.0		ug/Kg			11/29/13 09:43	1
Bromomethane	ND		10		ug/Kg			11/29/13 09:43	1

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

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

Lab Sample ID: MB 720-149194/5

Matrix: Solid

Analysis Batch: 149194

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		50		ug/Kg			11/29/13 09:43	1
n-Butylbenzene	ND		5.0		ug/Kg			11/29/13 09:43	1
sec-Butylbenzene	ND		5.0		ug/Kg			11/29/13 09:43	1
tert-Butylbenzene	ND		5.0		ug/Kg			11/29/13 09:43	1
Carbon disulfide	ND		5.0		ug/Kg			11/29/13 09:43	1
Carbon tetrachloride	ND		5.0		ug/Kg			11/29/13 09:43	1
Chlorobenzene	ND		5.0		ug/Kg			11/29/13 09:43	1
Chloroethane	ND		10		ug/Kg			11/29/13 09:43	1
Chloroform	ND		5.0		ug/Kg			11/29/13 09:43	1
Chloromethane	ND		10		ug/Kg			11/29/13 09:43	1
2-Chlorotoluene	ND		5.0		ug/Kg			11/29/13 09:43	1
4-Chlorotoluene	ND		5.0		ug/Kg			11/29/13 09:43	1
Chlorodibromomethane	ND		5.0		ug/Kg			11/29/13 09:43	1
1,2-Dichlorobenzene	ND		5.0		ug/Kg			11/29/13 09:43	1
1,3-Dichlorobenzene	ND		5.0		ug/Kg			11/29/13 09:43	1
1,4-Dichlorobenzene	ND		5.0		ug/Kg			11/29/13 09:43	1
1,3-Dichloropropane	ND		5.0		ug/Kg			11/29/13 09:43	1
1,1-Dichloropropene	ND		5.0		ug/Kg			11/29/13 09:43	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/Kg			11/29/13 09:43	1
Ethylene Dibromide	ND		5.0		ug/Kg			11/29/13 09:43	1
Dibromomethane	ND		10		ug/Kg			11/29/13 09:43	1
Dichlorodifluoromethane	ND		10		ug/Kg			11/29/13 09:43	1
1,1-Dichloroethane	ND		5.0		ug/Kg			11/29/13 09:43	1
1,2-Dichloroethane	ND		5.0		ug/Kg			11/29/13 09:43	1
1,1-Dichloroethene	ND		5.0		ug/Kg			11/29/13 09:43	1
cis-1,2-Dichloroethene	ND		5.0		ug/Kg			11/29/13 09:43	1
trans-1,2-Dichloroethene	ND		5.0		ug/Kg			11/29/13 09:43	1
1,2-Dichloropropane	ND		5.0		ug/Kg			11/29/13 09:43	1
cis-1,3-Dichloropropene	ND		5.0		ug/Kg			11/29/13 09:43	1
trans-1,3-Dichloropropene	ND		5.0		ug/Kg			11/29/13 09:43	1
Ethylbenzene	ND		5.0		ug/Kg			11/29/13 09:43	1
Hexachlorobutadiene	ND		5.0		ug/Kg			11/29/13 09:43	1
2-Hexanone	ND		50		ug/Kg			11/29/13 09:43	1
Isopropylbenzene	ND		5.0		ug/Kg			11/29/13 09:43	1
4-Isopropyltoluene	ND		5.0		ug/Kg			11/29/13 09:43	1
Methylene Chloride	ND		10		ug/Kg			11/29/13 09:43	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/Kg			11/29/13 09:43	1
Naphthalene	ND		10		ug/Kg			11/29/13 09:43	1
N-Propylbenzene	ND		5.0		ug/Kg			11/29/13 09:43	1
Styrene	ND		5.0		ug/Kg			11/29/13 09:43	1
1,1,1,2-Tetrachloroethane	ND		5.0		ug/Kg			11/29/13 09:43	1
1,1,1,2-Tetrachloroethane	ND		5.0		ug/Kg			11/29/13 09:43	1
Tetrachloroethene	ND		5.0		ug/Kg			11/29/13 09:43	1
Toluene	ND		5.0		ug/Kg			11/29/13 09:43	1
1,2,3-Trichlorobenzene	ND		5.0		ug/Kg			11/29/13 09:43	1
1,2,4-Trichlorobenzene	ND		5.0		ug/Kg			11/29/13 09:43	1
1,1,1-Trichloroethane	ND		5.0		ug/Kg			11/29/13 09:43	1
1,1,2-Trichloroethane	ND		5.0		ug/Kg			11/29/13 09:43	1

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

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

Lab Sample ID: MB 720-149194/5

Matrix: Solid

Analysis Batch: 149194

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		5.0		ug/Kg			11/29/13 09:43	1
Trichlorofluoromethane	ND		5.0		ug/Kg			11/29/13 09:43	1
1,2,3-Trichloropropane	ND		5.0		ug/Kg			11/29/13 09:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/Kg			11/29/13 09:43	1
1,2,4-Trimethylbenzene	ND		5.0		ug/Kg			11/29/13 09:43	1
1,3,5-Trimethylbenzene	ND		5.0		ug/Kg			11/29/13 09:43	1
Vinyl acetate	ND		50		ug/Kg			11/29/13 09:43	1
Vinyl chloride	ND		5.0		ug/Kg			11/29/13 09:43	1
Xylenes, Total	ND		10		ug/Kg			11/29/13 09:43	1
2,2-Dichloropropane	ND		5.0		ug/Kg			11/29/13 09:43	1
Gasoline Range Organics (GRO) -C5-C12	ND		250		ug/Kg			11/29/13 09:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		45 - 131		11/29/13 09:43	1
1,2-Dichloroethane-d4 (Surr)	93		60 - 140		11/29/13 09:43	1
Toluene-d8 (Surr)	94		58 - 140		11/29/13 09:43	1

Lab Sample ID: LCS 720-149194/6

Matrix: Solid

Analysis Batch: 149194

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	47.7		ug/Kg		95	70 - 144
Acetone	250	220		ug/Kg		88	30 - 162
Benzene	50.0	48.4		ug/Kg		97	70 - 130
Dichlorobromomethane	50.0	50.6		ug/Kg		101	70 - 131
Bromobenzene	50.0	51.5		ug/Kg		103	70 - 130
Chlorobromomethane	50.0	48.8		ug/Kg		98	70 - 130
Bromoform	50.0	51.7		ug/Kg		103	59 - 158
Bromomethane	50.0	50.9		ug/Kg		102	59 - 132
2-Butanone (MEK)	250	249		ug/Kg		99	53 - 124
n-Butylbenzene	50.0	53.8		ug/Kg		108	70 - 142
sec-Butylbenzene	50.0	53.2		ug/Kg		106	70 - 136
tert-Butylbenzene	50.0	53.0		ug/Kg		106	70 - 130
Carbon disulfide	50.0	50.0		ug/Kg		100	60 - 140
Carbon tetrachloride	50.0	53.0		ug/Kg		106	70 - 138
Chlorobenzene	50.0	51.9		ug/Kg		104	70 - 130
Chloroethane	50.0	48.7		ug/Kg		97	65 - 130
Chloroform	50.0	50.1		ug/Kg		100	77 - 127
Chloromethane	50.0	43.4		ug/Kg		87	55 - 140
2-Chlorotoluene	50.0	52.1		ug/Kg		104	70 - 138
4-Chlorotoluene	50.0	50.9		ug/Kg		102	70 - 136
Chlorodibromomethane	50.0	52.5		ug/Kg		105	70 - 146
1,2-Dichlorobenzene	50.0	51.8		ug/Kg		104	70 - 130
1,3-Dichlorobenzene	50.0	54.2		ug/Kg		108	70 - 131
1,4-Dichlorobenzene	50.0	54.1		ug/Kg		108	70 - 130
1,3-Dichloropropane	50.0	51.3		ug/Kg		103	70 - 140

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

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

**Lab Sample ID: LCS 720-149194/6**

**Matrix: Solid**

**Analysis Batch: 149194**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	50.0	53.5		ug/Kg		107	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	47.3		ug/Kg		95	60 - 145
Ethylene Dibromide	50.0	52.0		ug/Kg		104	70 - 140
Dibromomethane	50.0	50.3		ug/Kg		101	70 - 139
Dichlorodifluoromethane	50.0	42.0		ug/Kg		84	37 - 158
1,1-Dichloroethane	50.0	47.1		ug/Kg		94	70 - 130
1,2-Dichloroethane	50.0	49.8		ug/Kg		100	70 - 130
1,1-Dichloroethene	50.0	38.5		ug/Kg		77	76 - 122
cis-1,2-Dichloroethene	50.0	50.3		ug/Kg		101	70 - 138
trans-1,2-Dichloroethene	50.0	45.5		ug/Kg		91	67 - 130
1,2-Dichloropropane	50.0	48.8		ug/Kg		98	73 - 127
cis-1,3-Dichloropropene	50.0	52.1		ug/Kg		104	68 - 147
trans-1,3-Dichloropropene	50.0	51.7		ug/Kg		103	70 - 136
Ethylbenzene	50.0	52.4		ug/Kg		105	80 - 137
Hexachlorobutadiene	50.0	55.2		ug/Kg		110	70 - 132
2-Hexanone	250	225		ug/Kg		90	44 - 133
Isopropylbenzene	50.0	54.6		ug/Kg		109	88 - 128
4-Isopropyltoluene	50.0	53.3		ug/Kg		107	70 - 133
Methylene Chloride	50.0	48.9		ug/Kg		98	70 - 134
4-Methyl-2-pentanone (MIBK)	250	231		ug/Kg		92	60 - 160
Naphthalene	50.0	50.4		ug/Kg		101	60 - 147
N-Propylbenzene	50.0	53.9		ug/Kg		108	70 - 130
Styrene	50.0	53.0		ug/Kg		106	70 - 130
1,1,1,2-Tetrachloroethane	50.0	53.3		ug/Kg		107	70 - 130
1,1,1,2,2-Tetrachloroethane	50.0	48.1		ug/Kg		96	70 - 146
Tetrachloroethene	50.0	57.6		ug/Kg		115	70 - 132
Toluene	50.0	51.1		ug/Kg		102	80 - 128
1,2,3-Trichlorobenzene	50.0	53.1		ug/Kg		106	60 - 140
1,2,4-Trichlorobenzene	50.0	53.7		ug/Kg		107	60 - 140
1,1,1-Trichloroethane	50.0	52.1		ug/Kg		104	70 - 130
1,1,2-Trichloroethane	50.0	51.1		ug/Kg		102	70 - 130
Trichloroethene	50.0	52.9		ug/Kg		106	70 - 133
Trichlorofluoromethane	50.0	46.9		ug/Kg		94	60 - 140
1,2,3-Trichloropropane	50.0	49.0		ug/Kg		98	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.9		ug/Kg		102	60 - 140
1,2,4-Trimethylbenzene	50.0	53.6		ug/Kg		107	70 - 130
1,3,5-Trimethylbenzene	50.0	53.2		ug/Kg		106	70 - 131
Vinyl acetate	50.0	64.7		ug/Kg		129	38 - 176
Vinyl chloride	50.0	46.5		ug/Kg		93	58 - 125
m-Xylene & p-Xylene	100	104		ug/Kg		104	70 - 146
o-Xylene	50.0	53.5		ug/Kg		107	70 - 140
2,2-Dichloropropane	50.0	50.4		ug/Kg		101	70 - 162

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	93		45 - 131
1,2-Dichloroethane-d4 (Surr)	94		60 - 140
Toluene-d8 (Surr)	96		58 - 140

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

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

**Lab Sample ID: LCS 720-149194/8**

**Matrix: Solid**

**Analysis Batch: 149194**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C5-C12	1000	1090		ug/Kg		109	61 - 128

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	94		45 - 131
1,2-Dichloroethane-d4 (Surr)	94		60 - 140
Toluene-d8 (Surr)	97		58 - 140

**Lab Sample ID: LCSD 720-149194/7**

**Matrix: Solid**

**Analysis Batch: 149194**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	49.9		ug/Kg		100	70 - 144	5	20
Acetone	250	246		ug/Kg		98	30 - 162	11	30
Benzene	50.0	48.5		ug/Kg		97	70 - 130	0	20
Dichlorobromomethane	50.0	52.0		ug/Kg		104	70 - 131	3	20
Bromobenzene	50.0	53.4		ug/Kg		107	70 - 130	3	20
Chlorobromomethane	50.0	49.7		ug/Kg		99	70 - 130	2	20
Bromoform	50.0	58.5		ug/Kg		117	59 - 158	12	20
Bromomethane	50.0	49.7		ug/Kg		99	59 - 132	2	20
2-Butanone (MEK)	250	258		ug/Kg		103	53 - 124	4	20
n-Butylbenzene	50.0	55.2		ug/Kg		110	70 - 142	3	20
sec-Butylbenzene	50.0	54.9		ug/Kg		110	70 - 136	3	20
tert-Butylbenzene	50.0	55.1		ug/Kg		110	70 - 130	4	20
Carbon disulfide	50.0	50.2		ug/Kg		100	60 - 140	0	20
Carbon tetrachloride	50.0	53.9		ug/Kg		108	70 - 138	2	20
Chlorobenzene	50.0	53.0		ug/Kg		106	70 - 130	2	20
Chloroethane	50.0	48.0		ug/Kg		96	65 - 130	2	20
Chloroform	50.0	50.3		ug/Kg		101	77 - 127	0	20
Chloromethane	50.0	42.4		ug/Kg		85	55 - 140	2	20
2-Chlorotoluene	50.0	53.4		ug/Kg		107	70 - 138	2	20
4-Chlorotoluene	50.0	51.9		ug/Kg		104	70 - 136	2	20
Chlorodibromomethane	50.0	55.4		ug/Kg		111	70 - 146	5	20
1,2-Dichlorobenzene	50.0	53.6		ug/Kg		107	70 - 130	3	20
1,3-Dichlorobenzene	50.0	55.9		ug/Kg		112	70 - 131	3	20
1,4-Dichlorobenzene	50.0	56.1		ug/Kg		112	70 - 130	4	20
1,3-Dichloropropane	50.0	54.3		ug/Kg		109	70 - 140	6	20
1,1-Dichloropropene	50.0	54.0		ug/Kg		108	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	52.9		ug/Kg		106	60 - 145	11	20
Ethylene Dibromide	50.0	54.9		ug/Kg		110	70 - 140	5	20
Dibromomethane	50.0	51.5		ug/Kg		103	70 - 139	2	20
Dichlorodifluoromethane	50.0	42.1		ug/Kg		84	37 - 158	0	20
1,1-Dichloroethane	50.0	46.8		ug/Kg		94	70 - 130	1	20
1,2-Dichloroethane	50.0	50.9		ug/Kg		102	70 - 130	2	20
1,1-Dichloroethane	50.0	39.2		ug/Kg		78	76 - 122	2	20
cis-1,2-Dichloroethane	50.0	49.9		ug/Kg		100	70 - 138	1	20
trans-1,2-Dichloroethane	50.0	45.8		ug/Kg		92	67 - 130	1	20

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

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

**Lab Sample ID: LCSD 720-149194/7**

**Matrix: Solid**

**Analysis Batch: 149194**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	Limit
							Limits		
1,2-Dichloropropane	50.0	49.5		ug/Kg		99	73 - 127	1	20
cis-1,3-Dichloropropene	50.0	53.4		ug/Kg		107	68 - 147	2	20
trans-1,3-Dichloropropene	50.0	53.0		ug/Kg		106	70 - 136	2	20
Ethylbenzene	50.0	53.3		ug/Kg		107	80 - 137	2	20
Hexachlorobutadiene	50.0	55.9		ug/Kg		112	70 - 132	1	20
2-Hexanone	250	249		ug/Kg		100	44 - 133	10	20
Isopropylbenzene	50.0	56.4		ug/Kg		113	88 - 128	3	20
4-Isopropyltoluene	50.0	55.0		ug/Kg		110	70 - 133	3	20
Methylene Chloride	50.0	48.7		ug/Kg		97	70 - 134	0	20
4-Methyl-2-pentanone (MIBK)	250	254		ug/Kg		101	60 - 160	9	20
Naphthalene	50.0	54.4		ug/Kg		109	60 - 147	8	20
N-Propylbenzene	50.0	55.0		ug/Kg		110	70 - 130	2	20
Styrene	50.0	55.1		ug/Kg		110	70 - 130	4	20
1,1,1,2-Tetrachloroethane	50.0	55.8		ug/Kg		112	70 - 130	5	20
1,1,1,2-Tetrachloroethane	50.0	52.6		ug/Kg		105	70 - 146	9	20
Tetrachloroethene	50.0	57.9		ug/Kg		116	70 - 132	0	20
Toluene	50.0	51.6		ug/Kg		103	80 - 128	1	20
1,2,3-Trichlorobenzene	50.0	55.0		ug/Kg		110	60 - 140	4	20
1,2,4-Trichlorobenzene	50.0	55.9		ug/Kg		112	60 - 140	4	20
1,1,1-Trichloroethane	50.0	53.1		ug/Kg		106	70 - 130	2	20
1,1,2-Trichloroethane	50.0	54.7		ug/Kg		109	70 - 130	7	20
Trichloroethene	50.0	53.1		ug/Kg		106	70 - 133	0	20
Trichlorofluoromethane	50.0	47.3		ug/Kg		95	60 - 140	1	20
1,2,3-Trichloropropane	50.0	53.7		ug/Kg		107	70 - 146	9	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	51.9		ug/Kg		104	60 - 140	2	20
1,2,4-Trimethylbenzene	50.0	54.7		ug/Kg		109	70 - 130	2	20
1,3,5-Trimethylbenzene	50.0	54.7		ug/Kg		109	70 - 131	3	20
Vinyl acetate	50.0	67.8		ug/Kg		136	38 - 176	5	20
Vinyl chloride	50.0	45.4		ug/Kg		91	58 - 125	2	20
m-Xylene & p-Xylene	100	105		ug/Kg		105	70 - 146	1	20
o-Xylene	50.0	54.8		ug/Kg		110	70 - 140	2	20
2,2-Dichloropropane	50.0	51.4		ug/Kg		103	70 - 162	2	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	94		45 - 131
1,2-Dichloroethane-d4 (Surr)	94		60 - 140
Toluene-d8 (Surr)	97		58 - 140

**Lab Sample ID: LCSD 720-149194/9**

**Matrix: Solid**

**Analysis Batch: 149194**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	Limit
							Limits		
Gasoline Range Organics (GRO) -C5-C12	1000	1080		ug/Kg		108	61 - 128	1	20

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

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

Lab Sample ID: LCSD 720-149194/9

Matrix: Solid

Analysis Batch: 149194

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	94		45 - 131
1,2-Dichloroethane-d4 (Surr)	96		60 - 140
Toluene-d8 (Surr)	96		58 - 140

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

Lab Sample ID: MB 720-149039/1-A

Matrix: Solid

Analysis Batch: 149114

Client Sample ID: Method Blank

Prep Type: Silica Gel Cleanup

Prep Batch: 149039

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		0.99		mg/Kg		11/26/13 11:16	11/27/13 11:30	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		11/26/13 11:16	11/27/13 11:30	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0		0 - 1	11/26/13 11:16	11/27/13 11:30	1
p-Terphenyl	101		38 - 148	11/26/13 11:16	11/27/13 11:30	1

Lab Sample ID: LCS 720-149039/2-A

Matrix: Solid

Analysis Batch: 149114

Client Sample ID: Lab Control Sample

Prep Type: Silica Gel Cleanup

Prep Batch: 149039

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	82.5	75.1		mg/Kg		91	36 - 112

Surrogate	LCS %Recovery	LCS Qualifier	Limits
p-Terphenyl	117		38 - 148

Lab Sample ID: LCSD 720-149039/3-A

Matrix: Solid

Analysis Batch: 149114

Client Sample ID: Lab Control Sample Dup

Prep Type: Silica Gel Cleanup

Prep Batch: 149039

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	83.2	77.5		mg/Kg		93	36 - 112	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
p-Terphenyl	112		38 - 148

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 720-149090/1-A**

**Matrix: Solid**

**Analysis Batch: 149181**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 149090**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		0.50		mg/Kg		11/26/13 18:20	11/27/13 19:07	1
Arsenic	ND		1.0		mg/Kg		11/26/13 18:20	11/27/13 19:07	1
Barium	ND		0.50		mg/Kg		11/26/13 18:20	11/27/13 19:07	1
Beryllium	ND		0.10		mg/Kg		11/26/13 18:20	11/27/13 19:07	1
Cadmium	ND		0.13		mg/Kg		11/26/13 18:20	11/27/13 19:07	1
Chromium	ND		0.50		mg/Kg		11/26/13 18:20	11/27/13 19:07	1
Cobalt	ND		0.20		mg/Kg		11/26/13 18:20	11/27/13 19:07	1
Copper	ND		1.5		mg/Kg		11/26/13 18:20	11/27/13 19:07	1
Lead	ND		0.50		mg/Kg		11/26/13 18:20	11/27/13 19:07	1
Molybdenum	ND		0.50		mg/Kg		11/26/13 18:20	11/27/13 19:07	1
Nickel	ND		0.50		mg/Kg		11/26/13 18:20	11/27/13 19:07	1
Selenium	ND		1.0		mg/Kg		11/26/13 18:20	11/27/13 19:07	1
Thallium	ND		0.50		mg/Kg		11/26/13 18:20	11/27/13 19:07	1
Vanadium	ND		0.50		mg/Kg		11/26/13 18:20	11/27/13 19:07	1
Zinc	ND		1.5		mg/Kg		11/26/13 18:20	11/27/13 19:07	1

**Lab Sample ID: LCS 720-149090/2-A**

**Matrix: Solid**

**Analysis Batch: 149181**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 149090**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	50.0	45.6		mg/Kg		91	80 - 120
Arsenic	50.0	48.0		mg/Kg		96	80 - 120
Barium	50.0	51.3		mg/Kg		103	80 - 120
Beryllium	50.0	48.4		mg/Kg		97	80 - 120
Cadmium	50.0	50.1		mg/Kg		100	80 - 120
Chromium	50.0	48.8		mg/Kg		98	80 - 120
Cobalt	50.0	49.4		mg/Kg		99	80 - 120
Copper	50.0	50.3		mg/Kg		101	80 - 120
Lead	50.0	50.1		mg/Kg		100	80 - 120
Molybdenum	50.0	50.7		mg/Kg		101	80 - 120
Nickel	50.0	50.2		mg/Kg		100	80 - 120
Selenium	50.0	47.1		mg/Kg		94	80 - 120
Thallium	50.0	50.0		mg/Kg		100	80 - 120
Vanadium	50.0	50.1		mg/Kg		100	80 - 120
Zinc	50.0	48.4		mg/Kg		97	80 - 120

**Lab Sample ID: LCSD 720-149090/3-A**

**Matrix: Solid**

**Analysis Batch: 149181**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 149090**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	50.0	47.2		mg/Kg		94	80 - 120	3	20
Arsenic	50.0	48.5		mg/Kg		97	80 - 120	1	20
Barium	50.0	51.8		mg/Kg		104	80 - 120	1	20
Beryllium	50.0	49.5		mg/Kg		99	80 - 120	2	20
Cadmium	50.0	50.4		mg/Kg		101	80 - 120	1	20
Chromium	50.0	50.8		mg/Kg		102	80 - 120	4	20

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# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

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

Lab Sample ID: LCSD 720-149090/3-A  
Matrix: Solid  
Analysis Batch: 149181

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 149090

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD Limit
							Limits	RPD	
Cobalt	50.0	49.9		mg/Kg		100	80 - 120	1	20
Copper	50.0	51.2		mg/Kg		102	80 - 120	2	20
Lead	50.0	50.4		mg/Kg		101	80 - 120	1	20
Molybdenum	50.0	51.1		mg/Kg		102	80 - 120	1	20
Nickel	50.0	50.6		mg/Kg		101	80 - 120	1	20
Selenium	50.0	47.8		mg/Kg		96	80 - 120	2	20
Thallium	50.0	50.4		mg/Kg		101	80 - 120	1	20
Vanadium	50.0	50.2		mg/Kg		100	80 - 120	0	20
Zinc	50.0	48.8		mg/Kg		98	80 - 120	1	20

## Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-149003/1-A  
Matrix: Solid  
Analysis Batch: 149059

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 149003

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	ND		0.010		mg/Kg		11/25/13 22:03	11/26/13 14:28	1

Lab Sample ID: LCS 720-149003/2-A  
Matrix: Solid  
Analysis Batch: 149059

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 149003

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.	
							Limits	RPD
Mercury	0.833	0.850		mg/Kg		102	80 - 120	

Lab Sample ID: LCSD 720-149003/3-A  
Matrix: Solid  
Analysis Batch: 149059

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 149003

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD Limit
							Limits	RPD	
Mercury	0.833	0.867		mg/Kg		104	80 - 120	2	20

# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

## GC/MS VOA

### Analysis Batch: 148978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-10	3-EX2-SPOILS-B	Total/NA	Solid	8260B	148996
720-54016-15	3-EX2-SPOILS-C	Total/NA	Solid	8260B	148996
720-54016-20	3-TR2-SPOILS-A	Total/NA	Solid	8260B	148996
720-54016-25	3-TR2-SPOILS-B	Total/NA	Solid	8260B	148996
720-54016-30	3-TR2-SPOILS-C	Total/NA	Solid	8260B	148996
720-54016-35	3-WR-SPOILS	Total/NA	Solid	8260B	148996
720-54016-40	3-TPT-SPOILS	Total/NA	Solid	8260B	148996
LCS 720-148978/7	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-148978/9	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-148978/10	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-148978/8	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 720-148978/6	Method Blank	Total/NA	Solid	8260B	

### Prep Batch: 148996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-10	3-EX2-SPOILS-B	Total/NA	Solid	5030B	
720-54016-15	3-EX2-SPOILS-C	Total/NA	Solid	5030B	
720-54016-20	3-TR2-SPOILS-A	Total/NA	Solid	5030B	
720-54016-25	3-TR2-SPOILS-B	Total/NA	Solid	5030B	
720-54016-30	3-TR2-SPOILS-C	Total/NA	Solid	5030B	
720-54016-35	3-WR-SPOILS	Total/NA	Solid	5030B	
720-54016-40	3-TPT-SPOILS	Total/NA	Solid	5030B	

### Analysis Batch: 149012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-5	3-EX2-SPOILS-A	Total/NA	Solid	8260B	149047
LCS 720-149012/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-149012/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-149012/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-149012/8	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 720-149012/10	Method Blank	Total/NA	Solid	8260B	

### Prep Batch: 149047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-5	3-EX2-SPOILS-A	Total/NA	Solid	5030B	

### Analysis Batch: 149194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-45	3-TR/EX-SPOILS	Total/NA	Solid	8260B	149220
LCS 720-149194/6	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-149194/8	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-149194/7	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-149194/9	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 720-149194/5	Method Blank	Total/NA	Solid	8260B	

### Prep Batch: 149220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-45	3-TR/EX-SPOILS	Total/NA	Solid	5030B	

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# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

## GC Semi VOA

### Prep Batch: 149039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-5	3-EX2-SPOILS-A	Silica Gel Cleanup	Solid	3546	
720-54016-10	3-EX2-SPOILS-B	Silica Gel Cleanup	Solid	3546	
720-54016-15	3-EX2-SPOILS-C	Silica Gel Cleanup	Solid	3546	
720-54016-20	3-TR2-SPOILS-A	Silica Gel Cleanup	Solid	3546	
720-54016-25	3-TR2-SPOILS-B	Silica Gel Cleanup	Solid	3546	
720-54016-30	3-TR2-SPOILS-C	Silica Gel Cleanup	Solid	3546	
720-54016-35	3-WR-SPOILS	Silica Gel Cleanup	Solid	3546	
720-54016-40	3-TPT-SPOILS	Silica Gel Cleanup	Solid	3546	
720-54016-45	3-TR/EX-SPOILS	Silica Gel Cleanup	Solid	3546	
LCS 720-149039/2-A	Lab Control Sample	Silica Gel Cleanup	Solid	3546	
LCSD 720-149039/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Solid	3546	
MB 720-149039/1-A	Method Blank	Silica Gel Cleanup	Solid	3546	

### Analysis Batch: 149112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-35	3-WR-SPOILS	Silica Gel Cleanup	Solid	8015B	149039

### Analysis Batch: 149113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-40	3-TPT-SPOILS	Silica Gel Cleanup	Solid	8015B	149039

### Analysis Batch: 149114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-5	3-EX2-SPOILS-A	Silica Gel Cleanup	Solid	8015B	149039
720-54016-10	3-EX2-SPOILS-B	Silica Gel Cleanup	Solid	8015B	149039
720-54016-20	3-TR2-SPOILS-A	Silica Gel Cleanup	Solid	8015B	149039
720-54016-25	3-TR2-SPOILS-B	Silica Gel Cleanup	Solid	8015B	149039
720-54016-30	3-TR2-SPOILS-C	Silica Gel Cleanup	Solid	8015B	149039
720-54016-45	3-TR/EX-SPOILS	Silica Gel Cleanup	Solid	8015B	149039
LCS 720-149039/2-A	Lab Control Sample	Silica Gel Cleanup	Solid	8015B	149039
LCSD 720-149039/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Solid	8015B	149039
MB 720-149039/1-A	Method Blank	Silica Gel Cleanup	Solid	8015B	149039

### Analysis Batch: 149188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-15	3-EX2-SPOILS-C	Silica Gel Cleanup	Solid	8015B	149039

## Metals

### Prep Batch: 149003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-5	3-EX2-SPOILS-A	Total/NA	Solid	7471A	
720-54016-10	3-EX2-SPOILS-B	Total/NA	Solid	7471A	
720-54016-15	3-EX2-SPOILS-C	Total/NA	Solid	7471A	
720-54016-20	3-TR2-SPOILS-A	Total/NA	Solid	7471A	
720-54016-25	3-TR2-SPOILS-B	Total/NA	Solid	7471A	
720-54016-30	3-TR2-SPOILS-C	Total/NA	Solid	7471A	
720-54016-35	3-WR-SPOILS	Total/NA	Solid	7471A	
720-54016-40	3-TPT-SPOILS	Total/NA	Solid	7471A	
720-54016-45	3-TR/EX-SPOILS	Total/NA	Solid	7471A	

TestAmerica Pleasanton

# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

## Metals (Continued)

### Prep Batch: 149003 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-149003/2-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 720-149003/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	
MB 720-149003/1-A	Method Blank	Total/NA	Solid	7471A	

### Analysis Batch: 149059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-5	3-EX2-SPOILS-A	Total/NA	Solid	7471A	149003
720-54016-10	3-EX2-SPOILS-B	Total/NA	Solid	7471A	149003
720-54016-15	3-EX2-SPOILS-C	Total/NA	Solid	7471A	149003
720-54016-20	3-TR2-SPOILS-A	Total/NA	Solid	7471A	149003
720-54016-25	3-TR2-SPOILS-B	Total/NA	Solid	7471A	149003
720-54016-30	3-TR2-SPOILS-C	Total/NA	Solid	7471A	149003
720-54016-35	3-WR-SPOILS	Total/NA	Solid	7471A	149003
720-54016-40	3-TPT-SPOILS	Total/NA	Solid	7471A	149003
720-54016-45	3-TR/EX-SPOILS	Total/NA	Solid	7471A	149003
LCS 720-149003/2-A	Lab Control Sample	Total/NA	Solid	7471A	149003
LCSD 720-149003/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	149003
MB 720-149003/1-A	Method Blank	Total/NA	Solid	7471A	149003

### Prep Batch: 149090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-5	3-EX2-SPOILS-A	Total/NA	Solid	3050B	
720-54016-10	3-EX2-SPOILS-B	Total/NA	Solid	3050B	
720-54016-15	3-EX2-SPOILS-C	Total/NA	Solid	3050B	
720-54016-20	3-TR2-SPOILS-A	Total/NA	Solid	3050B	
720-54016-25	3-TR2-SPOILS-B	Total/NA	Solid	3050B	
720-54016-30	3-TR2-SPOILS-C	Total/NA	Solid	3050B	
720-54016-35	3-WR-SPOILS	Total/NA	Solid	3050B	
720-54016-40	3-TPT-SPOILS	Total/NA	Solid	3050B	
720-54016-45	3-TR/EX-SPOILS	Total/NA	Solid	3050B	
LCS 720-149090/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSD 720-149090/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
MB 720-149090/1-A	Method Blank	Total/NA	Solid	3050B	

### Analysis Batch: 149181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-5	3-EX2-SPOILS-A	Total/NA	Solid	6010B	149090
720-54016-10	3-EX2-SPOILS-B	Total/NA	Solid	6010B	149090
720-54016-15	3-EX2-SPOILS-C	Total/NA	Solid	6010B	149090
720-54016-20	3-TR2-SPOILS-A	Total/NA	Solid	6010B	149090
720-54016-25	3-TR2-SPOILS-B	Total/NA	Solid	6010B	149090
720-54016-30	3-TR2-SPOILS-C	Total/NA	Solid	6010B	149090
720-54016-35	3-WR-SPOILS	Total/NA	Solid	6010B	149090
720-54016-40	3-TPT-SPOILS	Total/NA	Solid	6010B	149090
720-54016-45	3-TR/EX-SPOILS	Total/NA	Solid	6010B	149090
LCS 720-149090/2-A	Lab Control Sample	Total/NA	Solid	6010B	149090
LCSD 720-149090/3-A	Lab Control Sample Dup	Total/NA	Solid	6010B	149090
MB 720-149090/1-A	Method Blank	Total/NA	Solid	6010B	149090

TestAmerica Pleasanton

# Lab Chronicle

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

## Client Sample ID: 3-EX2-SPOILS-A

Lab Sample ID: 720-54016-5

Date Collected: 11/25/13 09:50

Matrix: Solid

Date Received: 11/25/13 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			149047	11/26/13 11:00	YYB	TAL PLS
Total/NA	Analysis	8260B		1	149012	11/26/13 16:58	ASC	TAL PLS
Silica Gel Cleanup	Prep	3546			149039	11/26/13 11:16	BB	TAL PLS
Silica Gel Cleanup	Analysis	8015B		20	149114	11/27/13 19:23	JL	TAL PLS
Total/NA	Prep	7471A			149003	11/25/13 22:03	ASB	TAL PLS
Total/NA	Analysis	7471A		1	149059	11/26/13 13:43	EFH	TAL PLS
Total/NA	Prep	3050B			149090	11/26/13 18:20	CTD	TAL PLS
Total/NA	Analysis	6010B		4	149181	11/27/13 19:58	SLK	TAL PLS

## Client Sample ID: 3-EX2-SPOILS-B

Lab Sample ID: 720-54016-10

Date Collected: 11/25/13 10:15

Matrix: Solid

Date Received: 11/25/13 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			148996	11/25/13 20:22	LPL	TAL PLS
Total/NA	Analysis	8260B		1	148978	11/26/13 02:25	ASC	TAL PLS
Silica Gel Cleanup	Prep	3546			149039	11/26/13 11:16	BB	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	149114	11/27/13 18:10	JL	TAL PLS
Total/NA	Prep	7471A			149003	11/25/13 22:03	ASB	TAL PLS
Total/NA	Analysis	7471A		1	149059	11/26/13 13:45	EFH	TAL PLS
Total/NA	Prep	3050B			149090	11/26/13 18:20	CTD	TAL PLS
Total/NA	Analysis	6010B		4	149181	11/27/13 20:02	SLK	TAL PLS

## Client Sample ID: 3-EX2-SPOILS-C

Lab Sample ID: 720-54016-15

Date Collected: 11/25/13 10:20

Matrix: Solid

Date Received: 11/25/13 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			148996	11/25/13 20:22	LPL	TAL PLS
Total/NA	Analysis	8260B		1	148978	11/26/13 02:54	ASC	TAL PLS
Silica Gel Cleanup	Prep	3546			149039	11/26/13 11:16	BB	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	149188	11/29/13 10:00	JL	TAL PLS
Total/NA	Prep	7471A			149003	11/25/13 22:03	ASB	TAL PLS
Total/NA	Analysis	7471A		1	149059	11/26/13 13:48	EFH	TAL PLS
Total/NA	Prep	3050B			149090	11/26/13 18:20	CTD	TAL PLS
Total/NA	Analysis	6010B		4	149181	11/27/13 20:06	SLK	TAL PLS

## Client Sample ID: 3-TR2-SPOILS-A

Lab Sample ID: 720-54016-20

Date Collected: 11/25/13 09:40

Matrix: Solid

Date Received: 11/25/13 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			148996	11/25/13 20:22	LPL	TAL PLS

TestAmerica Pleasanton

# Lab Chronicle

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

## Client Sample ID: 3-TR2-SPOILS-A

Lab Sample ID: 720-54016-20

Date Collected: 11/25/13 09:40

Matrix: Solid

Date Received: 11/25/13 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	148978	11/26/13 03:23	ASC	TAL PLS
Silica Gel Cleanup	Prep	3546			149039	11/26/13 11:16	BB	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	149114	11/27/13 16:08	JL	TAL PLS
Total/NA	Prep	7471A			149003	11/25/13 22:03	ASB	TAL PLS
Total/NA	Analysis	7471A		1	149059	11/26/13 13:50	EFH	TAL PLS
Total/NA	Prep	3050B			149090	11/26/13 18:20	CTD	TAL PLS
Total/NA	Analysis	6010B		4	149181	11/27/13 20:10	SLK	TAL PLS

## Client Sample ID: 3-TR2-SPOILS-B

Lab Sample ID: 720-54016-25

Date Collected: 11/25/13 09:45

Matrix: Solid

Date Received: 11/25/13 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			148996	11/25/13 20:22	LPL	TAL PLS
Total/NA	Analysis	8260B		1	148978	11/26/13 03:50	ASC	TAL PLS
Silica Gel Cleanup	Prep	3546			149039	11/26/13 11:16	BB	TAL PLS
Silica Gel Cleanup	Analysis	8015B		2	149114	11/27/13 18:34	JL	TAL PLS
Total/NA	Prep	7471A			149003	11/25/13 22:03	ASB	TAL PLS
Total/NA	Analysis	7471A		1	149059	11/26/13 13:52	EFH	TAL PLS
Total/NA	Prep	3050B			149090	11/26/13 18:20	CTD	TAL PLS
Total/NA	Analysis	6010B		4	149181	11/27/13 20:15	SLK	TAL PLS

## Client Sample ID: 3-TR2-SPOILS-C

Lab Sample ID: 720-54016-30

Date Collected: 11/25/13 10:25

Matrix: Solid

Date Received: 11/25/13 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			148996	11/25/13 20:22	LPL	TAL PLS
Total/NA	Analysis	8260B		1	148978	11/26/13 04:19	ASC	TAL PLS
Silica Gel Cleanup	Prep	3546			149039	11/26/13 11:16	BB	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	149114	11/27/13 14:07	JL	TAL PLS
Total/NA	Prep	7471A			149003	11/25/13 22:03	ASB	TAL PLS
Total/NA	Analysis	7471A		1	149059	11/26/13 13:54	EFH	TAL PLS
Total/NA	Prep	3050B			149090	11/26/13 18:20	CTD	TAL PLS
Total/NA	Analysis	6010B		4	149181	11/27/13 20:19	SLK	TAL PLS

## Client Sample ID: 3-WR-SPOILS

Lab Sample ID: 720-54016-35

Date Collected: 11/25/13 09:30

Matrix: Solid

Date Received: 11/25/13 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			148996	11/25/13 20:22	LPL	TAL PLS
Total/NA	Analysis	8260B		1	148978	11/26/13 04:48	ASC	TAL PLS

TestAmerica Pleasanton

# Lab Chronicle

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

## Client Sample ID: 3-WR-SPOILS

Lab Sample ID: 720-54016-35

Date Collected: 11/25/13 09:30

Matrix: Solid

Date Received: 11/25/13 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			149039	11/26/13 11:16	BB	TAL PLS
Silica Gel Cleanup	Analysis	8015B		3	149112	11/27/13 19:57	JL	TAL PLS
Total/NA	Prep	7471A			149003	11/25/13 22:03	ASB	TAL PLS
Total/NA	Analysis	7471A		1	149059	11/26/13 13:57	EFH	TAL PLS
Total/NA	Prep	3050B			149090	11/26/13 18:20	CTD	TAL PLS
Total/NA	Analysis	6010B		4	149181	11/27/13 20:23	SLK	TAL PLS

## Client Sample ID: 3-TPT-SPOILS

Lab Sample ID: 720-54016-40

Date Collected: 11/25/13 10:10

Matrix: Solid

Date Received: 11/25/13 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			148996	11/25/13 20:22	LPL	TAL PLS
Total/NA	Analysis	8260B		1	148978	11/26/13 05:16	ASC	TAL PLS
Silica Gel Cleanup	Prep	3546			149039	11/26/13 11:16	BB	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	149113	11/27/13 18:34	DCH	TAL PLS
Total/NA	Prep	7471A			149003	11/25/13 22:03	ASB	TAL PLS
Total/NA	Analysis	7471A		1	149059	11/26/13 14:04	EFH	TAL PLS
Total/NA	Prep	3050B			149090	11/26/13 18:20	CTD	TAL PLS
Total/NA	Analysis	6010B		4	149181	11/27/13 20:27	SLK	TAL PLS

## Client Sample ID: 3-TR/EX-SPOILS

Lab Sample ID: 720-54016-45

Date Collected: 11/25/13 10:00

Matrix: Solid

Date Received: 11/25/13 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			149220	11/29/13 08:00	ASC	TAL PLS
Total/NA	Analysis	8260B		1	149194	11/29/13 14:08	ASC	TAL PLS
Silica Gel Cleanup	Prep	3546			149039	11/26/13 11:16	BB	TAL PLS
Silica Gel Cleanup	Analysis	8015B		10	149114	11/27/13 18:59	JL	TAL PLS
Total/NA	Prep	7471A			149003	11/25/13 22:03	ASB	TAL PLS
Total/NA	Analysis	7471A		1	149059	11/26/13 14:07	EFH	TAL PLS
Total/NA	Prep	3050B			149090	11/26/13 18:20	CTD	TAL PLS
Total/NA	Analysis	6010B		4	149181	11/27/13 20:31	SLK	TAL PLS

**Laboratory References:**

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

# Certification Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

## Laboratory: TestAmerica Pleasanton

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

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-14

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# Method Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

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

**Protocol References:**

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

**Laboratory References:**

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



# Sample Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-54016-5	3-EX2-SPOILS-A	Solid	11/25/13 09:50	11/25/13 11:09
720-54016-10	3-EX2-SPOILS-B	Solid	11/25/13 10:15	11/25/13 11:09
720-54016-15	3-EX2-SPOILS-C	Solid	11/25/13 10:20	11/25/13 11:09
720-54016-20	3-TR2-SPOILS-A	Solid	11/25/13 09:40	11/25/13 11:09
720-54016-25	3-TR2-SPOILS-B	Solid	11/25/13 09:45	11/25/13 11:09
720-54016-30	3-TR2-SPOILS-C	Solid	11/25/13 10:25	11/25/13 11:09
720-54016-35	3-WR-SPOILS	Solid	11/25/13 09:30	11/25/13 11:09
720-54016-40	3-TPT-SPOILS	Solid	11/25/13 10:10	11/25/13 11:09
720-54016-45	3-TR/EX-SPOILS	Solid	11/25/13 10:00	11/25/13 11:09



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TESTAMERICA Pleasanton Chain of Custody  
 1220 Quarry Lane • Pleasanton CA 94566-4756  
 Phone: (925) 484-1919 • Fax: (925) 600-3002  
**720-54016**

Reference #: 150325

Date 11/25/13 Page 1 of 1

12/2/2013

## Report To

Attn: **James Schwartz**  
 Company: **Haley & Alarick**  
 Address: **7033 N. Main St., Walnut Creek, CA**  
 Email: **j.schwartz@haleyalarick.com**  
 Bill To: **Haley & Alarick**  
 Attn: **Accounting Dept**  
 Phone: **925-359-9355**  
 Sampled By: **VT/BSM**

Sample ID	Date	Time	Met	Preserv	Analysis Request
3-EX1-Spoils-A	11/25/13	09:50	So	N/A	<input checked="" type="checkbox"/> Volatile Organics GC/MS (VOGs) --- EPA 8260B <input type="checkbox"/> HVOCs by EPA 8260B <input checked="" type="checkbox"/> EPA 8260B: <input checked="" type="checkbox"/> Gas <input type="checkbox"/> BTEX <input type="checkbox"/> 5 Oxygenates <input type="checkbox"/> DCA, EDB <input type="checkbox"/> Ethanol <input checked="" type="checkbox"/> TEPH EPA 8015B <input checked="" type="checkbox"/> Silica Gel <input type="checkbox"/> Diesel <input type="checkbox"/> Motor Oil <input type="checkbox"/> Other <input type="checkbox"/> SemiVolatile Organics GC/MS EPA 8270C <input type="checkbox"/> PNA/PAH's by EPA 8270C <input type="checkbox"/> EPA 8270C SIM <input type="checkbox"/> Oil and Grease (EPA 1664/9071) <input type="checkbox"/> Petroleum <input type="checkbox"/> Total <input type="checkbox"/> Pesticides EPA 8081 <input type="checkbox"/> EPA 8082 <input type="checkbox"/> PCBs <input checked="" type="checkbox"/> CAM17 Metals (EPA 6010/7470/7471) <input type="checkbox"/> Metals: EPA 8010B <input type="checkbox"/> 200.7 <input type="checkbox"/> Lead <input type="checkbox"/> LUFT <input type="checkbox"/> RCRA <input type="checkbox"/> Other <input type="checkbox"/> Metals: EPA 6020 <input type="checkbox"/> 200.8 (ICP-MS) <input type="checkbox"/> W.E.T (STLC) <input type="checkbox"/> W.E.T (Di) <input type="checkbox"/> TCLP <input type="checkbox"/> Hex. Chrom by EPA 7196 <input type="checkbox"/> or EPA 7199 <input type="checkbox"/> pH EPA 9040 <input type="checkbox"/> SM4500 <input type="checkbox"/> Spec. Cond. <input type="checkbox"/> Alkalinity <input type="checkbox"/> TSS <input type="checkbox"/> SS <input type="checkbox"/> TDS <input type="checkbox"/> Anions: <input type="checkbox"/> Cl <input type="checkbox"/> SO <sub>4</sub> <input type="checkbox"/> NO <sub>3</sub> <input type="checkbox"/> F <input type="checkbox"/> Br <input type="checkbox"/> NO <sub>2</sub> <input type="checkbox"/> PO <sub>4</sub> <input type="checkbox"/> Perchlorate by EPA 314.0 <input type="checkbox"/> COD EPA 410.4 <input type="checkbox"/> SM5220D <input type="checkbox"/> Turbidity please composite 4 jars in lab
3-EX2-Spoils-B		10:15			X
3-EX2-Spoils-C		10:20			X
3-TEL2-Spoils-A		09:40			X
3-TEL2-Spoils-B		09:45			X
3-TEL2-Spoils-C		10:25			X
3-TEL-Spoils		09:30			X
3-TPT-Spoils		10:10			X
3-TEL-EX-Spoils		10:00			X

Project Info	Sample Receipt
Project Name: <b>Former Hanson Aggregates Radium Facility</b>	# of Containers: <b>1104</b>
PO#: <b>39992-011</b>	Temp: <b>16.42/16.42</b>
Credit Card: <b>Y/N</b>	If Yes, please call with payment information ASAP
Head Space:	

1) Relinquished by:	Signature: <i>[Signature]</i>	Time: <b>11:04</b>
2) Relinquished by:	Signature: <i>[Signature]</i>	Time: <b>11:25/13</b>
3) Relinquished by:	Signature: <i>[Signature]</i>	Time: <b>11:09</b>

Received by:	Signature: <i>[Signature]</i>	Time: <b>11:09</b>
Received by:	Signature: <i>[Signature]</i>	Time: <b>11:25/13</b>
Received by:	Signature: <i>[Signature]</i>	Time: <b>11:09</b>

Printed Name: <b>James Schwartz</b>	Date: <b>11/25/13</b>
Printed Name: <b>James Schwartz</b>	Date: <b>11/25/13</b>
Printed Name: <b>James Schwartz</b>	Date: <b>11/25/13</b>

Report: <input type="checkbox"/> Routine <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4 <input type="checkbox"/> EDD <input type="checkbox"/> EDF
Special Instructions / Comments: <input type="checkbox"/> Global ID
See Terms and Conditions on reverse

## Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 720-54016-1

**Login Number: 54016**

**List Source: TestAmerica Pleasanton**

**List Number: 1**

**Creator: Gonzales, Justinn**

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



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

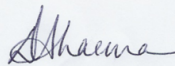
## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Pleasanton  
1220 Quarry Lane  
Pleasanton, CA 94566  
Tel: (925)484-1919

TestAmerica Job ID: 720-54016-2  
Client Project/Site: Hanson

For:  
Haley & Aldrich, Inc.  
2033 North Main Street  
Suite 309  
Walnut Creek, California 94596

Attn: James Schwartz



Authorized for release by:  
1/7/2014 9:17:51 AM

Dimple Sharma, Senior Project Manager  
(925)484-1919  
[dimple.sharma@testamericainc.com](mailto:dimple.sharma@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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# Definitions/Glossary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

## Qualifiers

### GC/MS Semi VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

### GC Semi VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

## Glossary

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

# Case Narrative

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

**Job ID: 720-54016-2**

**Laboratory: TestAmerica Pleasanton**

## Narrative

### Job Narrative 720-54016-2

#### Comments

No additional comments.

#### Receipt

The samples were received on 11/25/2013 11:09 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 16.4° C and 16.4° C.

#### GC/MS Semi VOA

Method 8270C: The following sample was diluted due to the abundance of non-target analytes: 3-TPT-SPOILS (720-54016-40). Elevated reporting limits (RLs) are provided.

No other analytical or quality issues were noted.

#### GC Semi VOA

Method 8081A: The following samples was prepared outside the method defined holding time because the request for the test was made after the holding time for the sample expired: 3-TPT-SPOILS (720-54016-40).

Method 8270C: The following sample was prepared and/or analyzed outside the method defined holding time because the request for the test was made after the holding time for the sample expired :3-TPT-SPOILS (720-54016-40).

Method 8082: The following samples was prepared outside the method defined holding time because the request for the test was made after the holding time for the sample expired: 3-TPT-SPOILS (720-54016-40).

No other analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### Organic Prep

No analytical or quality issues were noted.



# Detection Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

## Client Sample ID: 3-EX2-SPOILS-B

Lab Sample ID: 720-54016-10

No Detections.

## Client Sample ID: 3-EX2-SPOILS-C

Lab Sample ID: 720-54016-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.18		0.10		mg/L	1		6010B	STLC Citrate

## Client Sample ID: 3-TR2-SPOILS-B

Lab Sample ID: 720-54016-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.18		0.10		mg/L	1		6010B	STLC Citrate

## Client Sample ID: 3-TPT-SPOILS

Lab Sample ID: 720-54016-40

No Detections.

## Client Sample ID: 3-TR/EX-SPOILS

Lab Sample ID: 720-54016-45

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.18		0.10		mg/L	1		6010B	STLC Citrate

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

**Client Sample ID: 3-EX2-SPOILS-B**

**Lab Sample ID: 720-54016-10**

**Date Collected: 11/25/13 10:15**

**Matrix: Solid**

**Date Received: 11/25/13 11:09**

**Method: 6010B - Metals (ICP) - STLC Citrate**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.10		mg/L		01/06/14 10:24	01/06/14 16:17	1

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

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

**Client Sample ID: 3-EX2-SPOILS-C**

**Lab Sample ID: 720-54016-15**

**Date Collected: 11/25/13 10:20**

**Matrix: Solid**

**Date Received: 11/25/13 11:09**

**Method: 6010B - Metals (ICP) - STLC Citrate**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.18		0.10		mg/L		01/06/14 10:24	01/06/14 16:22	1

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

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

**Client Sample ID: 3-TR2-SPOILS-B**

**Lab Sample ID: 720-54016-25**

**Date Collected: 11/25/13 09:45**

**Matrix: Solid**

**Date Received: 11/25/13 11:09**

**Method: 6010B - Metals (ICP) - STLC Citrate**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.18		0.10		mg/L		01/06/14 10:24	01/06/14 16:26	1

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

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

**Client Sample ID: 3-TPT-SPOILS**

**Lab Sample ID: 720-54016-40**

**Date Collected: 11/25/13 10:10**

**Matrix: Solid**

**Date Received: 11/25/13 11:09**

**Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Bis(2-chloroethyl)ether	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
2-Chlorophenol	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
1,3-Dichlorobenzene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
1,4-Dichlorobenzene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Benzyl alcohol	ND	H	0.67		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
1,2-Dichlorobenzene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
2-Methylphenol	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Methylphenol, 3 & 4	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
N-Nitrosodi-n-propylamine	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Hexachloroethane	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Nitrobenzene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Isophorone	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
2-Nitrophenol	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
2,4-Dimethylphenol	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Bis(2-chloroethoxy)methane	ND	H	0.67		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
2,4-Dichlorophenol	ND	H	1.3		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
1,2,4-Trichlorobenzene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Naphthalene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
4-Chloroaniline	ND	H	0.67		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Hexachlorobutadiene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
4-Chloro-3-methylphenol	ND	H	0.67		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
2-Methylnaphthalene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Hexachlorocyclopentadiene	ND	H	0.67		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
2,4,6-Trichlorophenol	ND	H	0.67		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
2,4,5-Trichlorophenol	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
2-Chloronaphthalene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
2-Nitroaniline	ND	H	1.3		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Dimethyl phthalate	ND	H	0.67		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Acenaphthylene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
3-Nitroaniline	ND	H	0.67		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Acenaphthene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
2,4-Dinitrophenol	ND	H	2.6		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
4-Nitrophenol	ND	H	1.3		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Dibenzofuran	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
2,4-Dinitrotoluene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
2,6-Dinitrotoluene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Diethyl phthalate	ND	H	0.67		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
4-Chlorophenyl phenyl ether	ND	H	0.67		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Fluorene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
4-Nitroaniline	ND	H	1.3		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
2-Methyl-4,6-dinitrophenol	ND	H	1.3		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
N-Nitrosodiphenylamine	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
4-Bromophenyl phenyl ether	ND	H	0.67		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Hexachlorobenzene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Pentachlorophenol	ND	H	1.3		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Phenanthrene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Anthracene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Di-n-butyl phthalate	ND	H	0.67		mg/Kg		01/03/14 10:02	01/03/14 17:28	2

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# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

**Client Sample ID: 3-TPT-SPOILS**

**Lab Sample ID: 720-54016-40**

Date Collected: 11/25/13 10:10

Matrix: Solid

Date Received: 11/25/13 11:09

**Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Pyrene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Butyl benzyl phthalate	ND	H	0.67		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
3,3'-Dichlorobenzidine	ND	H	0.67		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Benzo[a]anthracene	ND	H	1.3		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Bis(2-ethylhexyl) phthalate	ND	H	1.3		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Chrysene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Di-n-octyl phthalate	ND	H	0.67		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Benzo[b]fluoranthene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Benzo[a]pyrene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Benzo[k]fluoranthene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Indeno[1,2,3-cd]pyrene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Benzo[g,h,i]perylene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Benzoic acid	ND	H	1.3		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Azobenzene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2
Dibenz(a,h)anthracene	ND	H	0.27		mg/Kg		01/03/14 10:02	01/03/14 17:28	2

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	74		21 - 98	01/03/14 10:02	01/03/14 17:28	2
2-Fluorobiphenyl	92		30 - 112	01/03/14 10:02	01/03/14 17:28	2
Terphenyl-d14	98		32 - 117	01/03/14 10:02	01/03/14 17:28	2
2-Fluorophenol	63		28 - 98	01/03/14 10:02	01/03/14 17:28	2
Phenol-d5	70		23 - 101	01/03/14 10:02	01/03/14 17:28	2
2,4,6-Tribromophenol	81		37 - 114	01/03/14 10:02	01/03/14 17:28	2

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
Dieldrin	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
Endrin aldehyde	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
Endrin	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
Endrin ketone	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
Heptachlor	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
Heptachlor epoxide	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
4,4'-DDT	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
4,4'-DDE	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
4,4'-DDD	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
Endosulfan I	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
Endosulfan II	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
alpha-BHC	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
beta-BHC	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
gamma-BHC (Lindane)	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
delta-BHC	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
Endosulfan sulfate	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
Methoxychlor	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
Toxaphene	ND	H	39		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
Chlordane (technical)	ND	H	39		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
alpha-Chlordane	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1
gamma-Chlordane	ND	H	1.9		ug/Kg		01/03/14 09:54	01/04/14 01:44	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

**Client Sample ID: 3-TPT-SPOILS**

**Lab Sample ID: 720-54016-40**

Date Collected: 11/25/13 10:10

Matrix: Solid

Date Received: 11/25/13 11:09

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	105		57 - 122	01/03/14 09:54	01/04/14 01:44	1
DCB Decachlorobiphenyl	105		21 - 136	01/03/14 09:54	01/04/14 01:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	H	49		ug/Kg		01/03/14 09:58	01/03/14 21:01	1
PCB-1221	ND	H	49		ug/Kg		01/03/14 09:58	01/03/14 21:01	1
PCB-1232	ND	H	49		ug/Kg		01/03/14 09:58	01/03/14 21:01	1
PCB-1242	ND	H	49		ug/Kg		01/03/14 09:58	01/03/14 21:01	1
PCB-1248	ND	H	49		ug/Kg		01/03/14 09:58	01/03/14 21:01	1
PCB-1254	ND	H	49		ug/Kg		01/03/14 09:58	01/03/14 21:01	1
PCB-1260	ND	H	49		ug/Kg		01/03/14 09:58	01/03/14 21:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	80		45 - 132	01/03/14 09:58	01/03/14 21:01	1
DCB Decachlorobiphenyl	89		42 - 146	01/03/14 09:58	01/03/14 21:01	1

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

**Client Sample ID: 3-TR/EX-SPOILS**

**Lab Sample ID: 720-54016-45**

Date Collected: 11/25/13 10:00

Matrix: Solid

Date Received: 11/25/13 11:09

Method: 6010B - Metals (ICP) - STLC Citrate

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.18		0.10		mg/L		01/06/14 10:24	01/06/14 16:31	1



# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

## Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

**Lab Sample ID: MB 720-151100/1-A**

**Matrix: Solid**

**Analysis Batch: 151118**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 151100**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Bis(2-chloroethyl)ether	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2-Chlorophenol	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
1,3-Dichlorobenzene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
1,4-Dichlorobenzene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Benzyl alcohol	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
1,2-Dichlorobenzene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2-Methylphenol	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Methylphenol, 3 & 4	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
N-Nitrosodi-n-propylamine	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Hexachloroethane	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Nitrobenzene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Isophorone	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2-Nitrophenol	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2,4-Dimethylphenol	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Bis(2-chloroethoxy)methane	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2,4-Dichlorophenol	ND		0.33		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
1,2,4-Trichlorobenzene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Naphthalene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
4-Chloroaniline	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Hexachlorobutadiene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
4-Chloro-3-methylphenol	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2-Methylnaphthalene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Hexachlorocyclopentadiene	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2,4,6-Trichlorophenol	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2,4,5-Trichlorophenol	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2-Chloronaphthalene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2-Nitroaniline	ND		0.33		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Dimethyl phthalate	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Acenaphthylene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
3-Nitroaniline	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Acenaphthene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2,4-Dinitrophenol	ND		0.65		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
4-Nitrophenol	ND		0.33		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Dibenzofuran	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2,4-Dinitrotoluene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2,6-Dinitrotoluene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Diethyl phthalate	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
4-Chlorophenyl phenyl ether	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Fluorene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
4-Nitroaniline	ND		0.33		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2-Methyl-4,6-dinitrophenol	ND		0.33		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
N-Nitrosodiphenylamine	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
4-Bromophenyl phenyl ether	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Hexachlorobenzene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Pentachlorophenol	ND		0.33		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Phenanthrene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Anthracene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

## Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

(Continued)

Lab Sample ID: MB 720-151100/1-A

Matrix: Solid

Analysis Batch: 151118

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 151100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Fluoranthene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Pyrene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Butyl benzyl phthalate	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
3,3'-Dichlorobenzidine	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Benzo[a]anthracene	ND		0.33		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Bis(2-ethylhexyl) phthalate	ND		0.33		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Chrysene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Di-n-octyl phthalate	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Benzo[b]fluoranthene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Benzo[a]pyrene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Benzo[k]fluoranthene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Indeno[1,2,3-cd]pyrene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Benzo[g,h,i]perylene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Benzoic acid	ND		0.33		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Azobenzene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Dibenz(a,h)anthracene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	64		21 - 98	01/03/14 10:02	01/03/14 15:52	1
2-Fluorobiphenyl	71		30 - 112	01/03/14 10:02	01/03/14 15:52	1
Terphenyl-d14	75		32 - 117	01/03/14 10:02	01/03/14 15:52	1
2-Fluorophenol	53		28 - 98	01/03/14 10:02	01/03/14 15:52	1
Phenol-d5	64		23 - 101	01/03/14 10:02	01/03/14 15:52	1
2,4,6-Tribromophenol	63		37 - 114	01/03/14 10:02	01/03/14 15:52	1

Lab Sample ID: LCS 720-151100/2-A

Matrix: Solid

Analysis Batch: 151118

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 151100

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	1.33	0.930		mg/Kg		70	48 - 115
Bis(2-chloroethyl)ether	1.33	0.827		mg/Kg		62	45 - 115
2-Chlorophenol	1.33	0.921		mg/Kg		69	48 - 115
1,3-Dichlorobenzene	1.33	0.823		mg/Kg		62	41 - 115
1,4-Dichlorobenzene	1.33	0.880		mg/Kg		66	40 - 115
Benzyl alcohol	1.33	0.880		mg/Kg		66	54 - 115
1,2-Dichlorobenzene	1.33	0.880		mg/Kg		66	44 - 115
2-Methylphenol	1.33	0.986		mg/Kg		74	54 - 115
Methylphenol, 3 & 4	1.33	0.965		mg/Kg		73	42 - 115
N-Nitrosodi-n-propylamine	1.33	0.910		mg/Kg		68	46 - 115
Hexachloroethane	1.33	0.831		mg/Kg		63	44 - 115
Nitrobenzene	1.33	0.899		mg/Kg		68	48 - 115
Isophorone	1.33	0.892		mg/Kg		67	54 - 115
2-Nitrophenol	1.33	0.933		mg/Kg		70	48 - 115
2,4-Dimethylphenol	1.33	0.968		mg/Kg		73	52 - 115
Bis(2-chloroethoxy)methane	1.33	0.897		mg/Kg		67	46 - 115

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

## Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

(Continued)

**Lab Sample ID: LCS 720-151100/2-A**

**Matrix: Solid**

**Analysis Batch: 151118**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 151100**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dichlorophenol	1.33	0.962		mg/Kg		72	49 - 100
1,2,4-Trichlorobenzene	1.33	0.904		mg/Kg		68	47 - 115
Naphthalene	1.33	0.987		mg/Kg		74	44 - 115
4-Chloroaniline	1.33	0.789		mg/Kg		59	30 - 115
Hexachlorobutadiene	1.33	0.925		mg/Kg		70	44 - 115
4-Chloro-3-methylphenol	1.33	0.996		mg/Kg		75	58 - 115
2-Methylnaphthalene	1.33	0.949		mg/Kg		71	49 - 115
Hexachlorocyclopentadiene	1.33	0.836		mg/Kg		63	42 - 132
2,4,6-Trichlorophenol	1.33	0.965		mg/Kg		73	45 - 115
2,4,5-Trichlorophenol	1.33	1.02		mg/Kg		77	48 - 115
2-Chloronaphthalene	1.33	0.977		mg/Kg		73	52 - 115
2-Nitroaniline	1.33	1.01		mg/Kg		76	54 - 115
Dimethyl phthalate	1.33	1.05		mg/Kg		79	64 - 119
Acenaphthylene	1.33	0.960		mg/Kg		72	61 - 129
3-Nitroaniline	1.33	0.875		mg/Kg		66	50 - 115
Acenaphthene	1.33	1.01		mg/Kg		76	50 - 115
2,4-Dinitrophenol	2.66	0.668		mg/Kg		25	15 - 115
4-Nitrophenol	2.66	2.32		mg/Kg		87	54 - 125
Dibenzofuran	1.33	1.01		mg/Kg		76	55 - 115
2,4-Dinitrotoluene	1.33	1.07		mg/Kg		80	57 - 115
2,6-Dinitrotoluene	1.33	1.04		mg/Kg		78	54 - 119
Diethyl phthalate	1.33	1.03		mg/Kg		78	49 - 117
4-Chlorophenyl phenyl ether	1.33	1.07		mg/Kg		80	57 - 115
Fluorene	1.33	1.03		mg/Kg		78	54 - 115
4-Nitroaniline	1.33	1.04		mg/Kg		78	59 - 115
2-Methyl-4,6-dinitrophenol	2.66	1.56		mg/Kg		59	39 - 115
N-Nitrosodiphenylamine	1.33	1.08		mg/Kg		81	56 - 115
4-Bromophenyl phenyl ether	1.33	1.03		mg/Kg		77	53 - 115
Hexachlorobenzene	1.33	1.01		mg/Kg		76	55 - 115
Pentachlorophenol	2.66	1.92		mg/Kg		72	35 - 115
Phenanthrene	1.33	1.05		mg/Kg		79	54 - 115
Anthracene	1.33	1.07		mg/Kg		81	55 - 115
Di-n-butyl phthalate	1.33	1.02		mg/Kg		77	55 - 115
Fluoranthene	1.33	1.00		mg/Kg		75	52 - 130
Pyrene	1.33	1.17		mg/Kg		88	48 - 115
Butyl benzyl phthalate	1.33	1.15		mg/Kg		87	53 - 115
3,3'-Dichlorobenzidine	1.33	0.912		mg/Kg		69	42 - 115
Benzo[a]anthracene	1.33	1.08		mg/Kg		81	55 - 115
Bis(2-ethylhexyl) phthalate	1.33	1.24		mg/Kg		93	53 - 115
Chrysene	1.33	1.14		mg/Kg		85	58 - 115
Di-n-octyl phthalate	1.33	1.13		mg/Kg		85	53 - 115
Benzo[b]fluoranthene	1.33	1.12		mg/Kg		84	50 - 119
Benzo[a]pyrene	1.33	1.11		mg/Kg		83	57 - 122
Benzo[k]fluoranthene	1.33	1.06		mg/Kg		79	55 - 120
Indeno[1,2,3-cd]pyrene	1.33	0.981		mg/Kg		74	56 - 115
Benzo[g,h,i]perylene	1.33	0.932		mg/Kg		70	56 - 115
Benzoic acid	1.33	0.461		mg/Kg		35	10 - 115

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

## Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

(Continued)

**Lab Sample ID: LCS 720-151100/2-A**

**Matrix: Solid**

**Analysis Batch: 151118**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 151100**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Azobenzene	1.33	0.979		mg/Kg		74	52 - 115
Dibenz(a,h)anthracene	1.33	0.995		mg/Kg		75	57 - 121

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	68		21 - 98
2-Fluorobiphenyl	71		30 - 112
Terphenyl-d14	81		32 - 117
2-Fluorophenol	56		28 - 98
Phenol-d5	68		23 - 101
2,4,6-Tribromophenol	76		37 - 114

**Lab Sample ID: LCSD 720-151100/3-A**

**Matrix: Solid**

**Analysis Batch: 151118**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 151100**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	1.33	0.921		mg/Kg		69	48 - 115	1	35
Bis(2-chloroethyl)ether	1.33	0.810		mg/Kg		61	45 - 115	2	35
2-Chlorophenol	1.33	0.907		mg/Kg		68	48 - 115	2	35
1,3-Dichlorobenzene	1.33	0.810		mg/Kg		61	41 - 115	2	35
1,4-Dichlorobenzene	1.33	0.849		mg/Kg		64	40 - 115	4	35
Benzyl alcohol	1.33	0.856		mg/Kg		64	54 - 115	3	35
1,2-Dichlorobenzene	1.33	0.863		mg/Kg		65	44 - 115	2	35
2-Methylphenol	1.33	0.964		mg/Kg		72	54 - 115	2	35
Methylphenol, 3 & 4	1.33	0.950		mg/Kg		71	42 - 115	2	35
N-Nitrosodi-n-propylamine	1.33	0.882		mg/Kg		66	46 - 115	3	35
Hexachloroethane	1.33	0.829		mg/Kg		62	44 - 115	0	35
Nitrobenzene	1.33	0.886		mg/Kg		67	48 - 115	1	35
Isophorone	1.33	0.856		mg/Kg		64	54 - 115	4	35
2-Nitrophenol	1.33	0.928		mg/Kg		70	48 - 115	0	35
2,4-Dimethylphenol	1.33	0.896		mg/Kg		67	52 - 115	8	35
Bis(2-chloroethoxy)methane	1.33	0.865		mg/Kg		65	46 - 115	4	35
2,4-Dichlorophenol	1.33	0.951		mg/Kg		72	49 - 100	1	35
1,2,4-Trichlorobenzene	1.33	0.896		mg/Kg		67	47 - 115	1	35
Naphthalene	1.33	0.971		mg/Kg		73	44 - 115	2	35
4-Chloroaniline	1.33	0.784		mg/Kg		59	30 - 115	1	35
Hexachlorobutadiene	1.33	0.943		mg/Kg		71	44 - 115	2	35
4-Chloro-3-methylphenol	1.33	0.988		mg/Kg		74	58 - 115	1	35
2-Methylnaphthalene	1.33	0.944		mg/Kg		71	49 - 115	1	35
Hexachlorocyclopentadiene	1.33	0.825		mg/Kg		62	42 - 132	1	35
2,4,6-Trichlorophenol	1.33	0.952		mg/Kg		72	45 - 115	1	35
2,4,5-Trichlorophenol	1.33	0.967		mg/Kg		73	48 - 115	5	35
2-Chloronaphthalene	1.33	0.965		mg/Kg		73	52 - 115	1	35
2-Nitroaniline	1.33	0.992		mg/Kg		75	54 - 115	2	35
Dimethyl phthalate	1.33	1.01		mg/Kg		76	64 - 119	4	35
Acenaphthylene	1.33	0.941		mg/Kg		71	61 - 129	2	35
3-Nitroaniline	1.33	0.899		mg/Kg		68	50 - 115	3	35

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

## Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

(Continued)

Lab Sample ID: LCS D 720-151100/3-A

Matrix: Solid

Analysis Batch: 151118

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 151100

Analyte	Spike Added	LCS D Result	LCS D Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	1.33	0.991		mg/Kg		75	50 - 115	2	35
2,4-Dinitrophenol	2.66	ND		mg/Kg		23	15 - 115	10	35
4-Nitrophenol	2.66	2.28		mg/Kg		86	54 - 125	2	35
Dibenzofuran	1.33	0.991		mg/Kg		75	55 - 115	2	35
2,4-Dinitrotoluene	1.33	1.05		mg/Kg		79	57 - 115	1	35
2,6-Dinitrotoluene	1.33	1.02		mg/Kg		77	54 - 119	2	35
Diethyl phthalate	1.33	1.03		mg/Kg		77	49 - 117	0	35
4-Chlorophenyl phenyl ether	1.33	1.03		mg/Kg		77	57 - 115	4	35
Fluorene	1.33	1.02		mg/Kg		76	54 - 115	2	35
4-Nitroaniline	1.33	1.04		mg/Kg		78	59 - 115	0	35
2-Methyl-4,6-dinitrophenol	2.66	1.49		mg/Kg		56	39 - 115	4	35
N-Nitrosodiphenylamine	1.33	1.07		mg/Kg		80	56 - 115	1	35
4-Bromophenyl phenyl ether	1.33	1.01		mg/Kg		76	53 - 115	2	35
Hexachlorobenzene	1.33	1.01		mg/Kg		76	55 - 115	0	35
Pentachlorophenol	2.66	1.88		mg/Kg		71	35 - 115	2	35
Phenanthrene	1.33	1.06		mg/Kg		80	54 - 115	1	35
Anthracene	1.33	1.07		mg/Kg		80	55 - 115	1	35
Di-n-butyl phthalate	1.33	1.02		mg/Kg		77	55 - 115	0	35
Fluoranthene	1.33	1.02		mg/Kg		77	52 - 130	2	35
Pyrene	1.33	1.14		mg/Kg		86	48 - 115	3	35
Butyl benzyl phthalate	1.33	1.14		mg/Kg		86	53 - 115	1	35
3,3'-Dichlorobenzidine	1.33	0.919		mg/Kg		69	42 - 115	1	35
Benzo[a]anthracene	1.33	1.10		mg/Kg		82	55 - 115	1	35
Bis(2-ethylhexyl) phthalate	1.33	1.22		mg/Kg		92	53 - 115	1	35
Chrysene	1.33	1.14		mg/Kg		86	58 - 115	0	35
Di-n-octyl phthalate	1.33	1.12		mg/Kg		84	53 - 115	2	35
Benzo[b]fluoranthene	1.33	1.07		mg/Kg		80	50 - 119	4	35
Benzo[a]pyrene	1.33	1.12		mg/Kg		84	57 - 122	1	35
Benzo[k]fluoranthene	1.33	1.11		mg/Kg		84	55 - 120	5	35
Indeno[1,2,3-cd]pyrene	1.33	0.990		mg/Kg		74	56 - 115	1	35
Benzo[g,h,i]perylene	1.33	0.965		mg/Kg		73	56 - 115	3	35
Benzoic acid	1.33	0.392		mg/Kg		29	10 - 115	16	35
Azobenzene	1.33	0.974		mg/Kg		73	52 - 115	0	35
Dibenz(a,h)anthracene	1.33	1.00		mg/Kg		75	57 - 121	1	35

Surrogate	LCS D %Recovery	LCS D Qualifier	Limits
Nitrobenzene-d5	66		21 - 98
2-Fluorobiphenyl	70		30 - 112
Terphenyl-d14	79		32 - 117
2-Fluorophenol	60		28 - 98
Phenol-d5	67		23 - 101
2,4,6-Tribromophenol	74		37 - 114

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

## Method: 8081A - Organochlorine Pesticides (GC)

**Lab Sample ID: MB 720-151097/1-A**

**Matrix: Solid**

**Analysis Batch: 151132**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 151097**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Dieldrin	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Endrin aldehyde	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Endrin	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Endrin ketone	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Heptachlor	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Heptachlor epoxide	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
4,4'-DDT	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
4,4'-DDE	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
4,4'-DDD	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Endosulfan I	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Endosulfan II	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
alpha-BHC	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
beta-BHC	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
delta-BHC	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Endosulfan sulfate	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Methoxychlor	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Toxaphene	ND		40		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Chlordane (technical)	ND		40		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
alpha-Chlordane	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
gamma-Chlordane	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	110		57 - 122	01/03/14 09:54	01/03/14 23:29	1
DCB Decachlorobiphenyl	121		21 - 136	01/03/14 09:54	01/03/14 23:29	1

**Lab Sample ID: LCS 720-151097/2-A**

**Matrix: Solid**

**Analysis Batch: 151132**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 151097**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	16.5	14.5		ug/Kg		87	65 - 120
Dieldrin	16.5	14.4		ug/Kg		87	72 - 120
Endrin aldehyde	16.5	14.6		ug/Kg		88	68 - 120
Endrin	16.5	14.4		ug/Kg		87	68 - 120
Endrin ketone	16.5	14.4		ug/Kg		87	67 - 120
Heptachlor	16.5	14.0		ug/Kg		85	69 - 120
Heptachlor epoxide	16.5	14.8		ug/Kg		89	68 - 120
4,4'-DDT	16.5	14.3		ug/Kg		86	63 - 127
4,4'-DDE	16.5	15.0		ug/Kg		91	70 - 120
4,4'-DDD	16.5	14.6		ug/Kg		89	69 - 120
Endosulfan I	16.5	14.5		ug/Kg		87	62 - 120
Endosulfan II	16.5	14.6		ug/Kg		88	65 - 120
alpha-BHC	16.5	14.2		ug/Kg		86	62 - 120
beta-BHC	16.5	15.4		ug/Kg		93	74 - 124
gamma-BHC (Lindane)	16.5	14.3		ug/Kg		87	72 - 120
delta-BHC	16.5	14.3		ug/Kg		87	64 - 120

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCS 720-151097/2-A**

**Matrix: Solid**

**Analysis Batch: 151132**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 151097**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Endosulfan sulfate	16.5	14.7		ug/Kg		89	67 - 120
Methoxychlor	16.5	15.1		ug/Kg		92	71 - 132
alpha-Chlordane	16.5	14.6		ug/Kg		88	70 - 120
gamma-Chlordane	16.5	14.7		ug/Kg		89	68 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	91		57 - 122
DCB Decachlorobiphenyl	102		21 - 136

**Lab Sample ID: LCSD 720-151097/3-A**

**Matrix: Solid**

**Analysis Batch: 151132**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 151097**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aldrin	16.5	16.2		ug/Kg		98	65 - 120	11	20
Dieldrin	16.5	16.7		ug/Kg		102	72 - 120	15	20
Endrin aldehyde	16.5	17.1		ug/Kg		104	68 - 120	16	20
Endrin	16.5	16.9		ug/Kg		102	68 - 120	16	20
Endrin ketone	16.5	16.8		ug/Kg		102	67 - 120	15	20
Heptachlor	16.5	15.7		ug/Kg		95	69 - 120	11	20
Heptachlor epoxide	16.5	16.9		ug/Kg		102	68 - 120	13	20
4,4'-DDT	16.5	16.8		ug/Kg		102	63 - 127	16	20
4,4'-DDE	16.5	17.7		ug/Kg		107	70 - 120	16	20
4,4'-DDD	16.5	17.1		ug/Kg		104	69 - 120	15	20
Endosulfan I	16.5	16.8		ug/Kg		102	62 - 120	15	20
Endosulfan II	16.5	17.1		ug/Kg		104	65 - 120	16	35
alpha-BHC	16.5	15.9		ug/Kg		96	62 - 120	11	20
beta-BHC	16.5	17.2		ug/Kg		104	74 - 124	11	20
gamma-BHC (Lindane)	16.5	16.1		ug/Kg		98	72 - 120	12	20
delta-BHC	16.5	16.4		ug/Kg		100	64 - 120	14	20
Endosulfan sulfate	16.5	17.2		ug/Kg		104	67 - 120	15	20
Methoxychlor	16.5	17.8		ug/Kg		108	71 - 132	16	20
alpha-Chlordane	16.5	16.7		ug/Kg		101	70 - 120	13	20
gamma-Chlordane	16.5	16.9		ug/Kg		103	68 - 120	13	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	99		57 - 122
DCB Decachlorobiphenyl	111		21 - 136

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

**Lab Sample ID: MB 720-151099/1-A**

**Matrix: Solid**

**Analysis Batch: 151107**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 151099**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		50		ug/Kg		01/03/14 09:58	01/03/14 19:37	1

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

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

**Lab Sample ID: MB 720-151099/1-A**  
**Matrix: Solid**  
**Analysis Batch: 151107**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 151099**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1221	ND		50		ug/Kg		01/03/14 09:58	01/03/14 19:37	1
PCB-1232	ND		50		ug/Kg		01/03/14 09:58	01/03/14 19:37	1
PCB-1242	ND		50		ug/Kg		01/03/14 09:58	01/03/14 19:37	1
PCB-1248	ND		50		ug/Kg		01/03/14 09:58	01/03/14 19:37	1
PCB-1254	ND		50		ug/Kg		01/03/14 09:58	01/03/14 19:37	1
PCB-1260	ND		50		ug/Kg		01/03/14 09:58	01/03/14 19:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	70		45 - 132	01/03/14 09:58	01/03/14 19:37	1
DCB Decachlorobiphenyl	79		42 - 146	01/03/14 09:58	01/03/14 19:37	1

**Lab Sample ID: LCS 720-151099/2-A**  
**Matrix: Solid**  
**Analysis Batch: 151107**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 151099**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
PCB-1016	132	116		ug/Kg		88	72 - 127
PCB-1260	132	110		ug/Kg		84	74 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	76		45 - 132
DCB Decachlorobiphenyl	86		42 - 146

**Lab Sample ID: LCSD 720-151099/3-A**  
**Matrix: Solid**  
**Analysis Batch: 151107**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 151099**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	132	109		ug/Kg		83	72 - 127	6	20
PCB-1260	132	110		ug/Kg		83	74 - 129	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	68		45 - 132
DCB Decachlorobiphenyl	84		42 - 146

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 720-151163/1-A**  
**Matrix: Solid**  
**Analysis Batch: 151192**

**Client Sample ID: Method Blank**  
**Prep Type: Total Recoverable**  
**Prep Batch: 151163**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.010		mg/L		01/06/14 10:24	01/06/14 14:58	1

TestAmerica Pleasanton



# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

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

**Lab Sample ID: LCS 720-151163/2-A**  
**Matrix: Solid**  
**Analysis Batch: 151192**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 151163**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	1.00	0.942		mg/L		94	80 - 120

**Lab Sample ID: LCSD 720-151163/3-A**  
**Matrix: Solid**  
**Analysis Batch: 151192**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total Recoverable**  
**Prep Batch: 151163**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	1.00	0.984		mg/L		98	80 - 120	4	20

**Lab Sample ID: LB4 720-151056/1-B**  
**Matrix: Solid**  
**Analysis Batch: 151192**

**Client Sample ID: Method Blank**  
**Prep Type: STLC Citrate**  
**Prep Batch: 151163**

Analyte	LB4 Result	LB4 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.10		mg/L		01/06/14 10:24	01/06/14 15:11	1

# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

## GC/MS Semi VOA

### Prep Batch: 151100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-40	3-TPT-SPOILS	Total/NA	Solid	3546	
LCS 720-151100/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 720-151100/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 720-151100/1-A	Method Blank	Total/NA	Solid	3546	

### Analysis Batch: 151118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-40	3-TPT-SPOILS	Total/NA	Solid	8270C	151100
LCS 720-151100/2-A	Lab Control Sample	Total/NA	Solid	8270C	151100
LCSD 720-151100/3-A	Lab Control Sample Dup	Total/NA	Solid	8270C	151100
MB 720-151100/1-A	Method Blank	Total/NA	Solid	8270C	151100

## GC Semi VOA

### Analysis Batch: 151092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-40	3-TPT-SPOILS	Total/NA	Solid	8082	151099

### Prep Batch: 151097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-40	3-TPT-SPOILS	Total/NA	Solid	3546	
LCS 720-151097/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 720-151097/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 720-151097/1-A	Method Blank	Total/NA	Solid	3546	

### Prep Batch: 151099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-40	3-TPT-SPOILS	Total/NA	Solid	3546	
LCS 720-151099/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 720-151099/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 720-151099/1-A	Method Blank	Total/NA	Solid	3546	

### Analysis Batch: 151107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-151099/2-A	Lab Control Sample	Total/NA	Solid	8082	151099
LCSD 720-151099/3-A	Lab Control Sample Dup	Total/NA	Solid	8082	151099
MB 720-151099/1-A	Method Blank	Total/NA	Solid	8082	151099

### Analysis Batch: 151132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-40	3-TPT-SPOILS	Total/NA	Solid	8081A	151097
LCS 720-151097/2-A	Lab Control Sample	Total/NA	Solid	8081A	151097
LCSD 720-151097/3-A	Lab Control Sample Dup	Total/NA	Solid	8081A	151097
MB 720-151097/1-A	Method Blank	Total/NA	Solid	8081A	151097

## Metals

### Leach Batch: 151056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-10	3-EX2-SPOILS-B	STLC Citrate	Solid	CA WET Citrate	

TestAmerica Pleasanton

# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

## Metals (Continued)

### Leach Batch: 151056 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-15	3-EX2-SPOILS-C	STLC Citrate	Solid	CA WET Citrate	
720-54016-25	3-TR2-SPOILS-B	STLC Citrate	Solid	CA WET Citrate	
720-54016-45	3-TR/EX-SPOILS	STLC Citrate	Solid	CA WET Citrate	
LB4 720-151056/1-B	Method Blank	STLC Citrate	Solid	CA WET Citrate	

### Prep Batch: 151163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-10	3-EX2-SPOILS-B	STLC Citrate	Solid	3005A	151056
720-54016-15	3-EX2-SPOILS-C	STLC Citrate	Solid	3005A	151056
720-54016-25	3-TR2-SPOILS-B	STLC Citrate	Solid	3005A	151056
720-54016-45	3-TR/EX-SPOILS	STLC Citrate	Solid	3005A	151056
LB4 720-151056/1-B	Method Blank	STLC Citrate	Solid	3005A	151056
LCS 720-151163/2-A	Lab Control Sample	Total Recoverable	Solid	3005A	
LCSD 720-151163/3-A	Lab Control Sample Dup	Total Recoverable	Solid	3005A	
MB 720-151163/1-A	Method Blank	Total Recoverable	Solid	3005A	

### Analysis Batch: 151192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54016-10	3-EX2-SPOILS-B	STLC Citrate	Solid	6010B	151163
720-54016-15	3-EX2-SPOILS-C	STLC Citrate	Solid	6010B	151163
720-54016-25	3-TR2-SPOILS-B	STLC Citrate	Solid	6010B	151163
720-54016-45	3-TR/EX-SPOILS	STLC Citrate	Solid	6010B	151163
LB4 720-151056/1-B	Method Blank	STLC Citrate	Solid	6010B	151163
LCS 720-151163/2-A	Lab Control Sample	Total Recoverable	Solid	6010B	151163
LCSD 720-151163/3-A	Lab Control Sample Dup	Total Recoverable	Solid	6010B	151163
MB 720-151163/1-A	Method Blank	Total Recoverable	Solid	6010B	151163

# Lab Chronicle

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

## Client Sample ID: 3-EX2-SPOILS-B

Lab Sample ID: 720-54016-10

Date Collected: 11/25/13 10:15

Matrix: Solid

Date Received: 11/25/13 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			151056	01/04/14 09:16	ECT	TAL PLS
STLC Citrate	Prep	3005A			151163	01/06/14 10:24	JCR	TAL PLS
STLC Citrate	Analysis	6010B		1	151192	01/06/14 16:17	EFH	TAL PLS

## Client Sample ID: 3-EX2-SPOILS-C

Lab Sample ID: 720-54016-15

Date Collected: 11/25/13 10:20

Matrix: Solid

Date Received: 11/25/13 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			151056	01/04/14 09:16	ECT	TAL PLS
STLC Citrate	Prep	3005A			151163	01/06/14 10:24	JCR	TAL PLS
STLC Citrate	Analysis	6010B		1	151192	01/06/14 16:22	EFH	TAL PLS

## Client Sample ID: 3-TR2-SPOILS-B

Lab Sample ID: 720-54016-25

Date Collected: 11/25/13 09:45

Matrix: Solid

Date Received: 11/25/13 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			151056	01/04/14 09:16	ECT	TAL PLS
STLC Citrate	Prep	3005A			151163	01/06/14 10:24	JCR	TAL PLS
STLC Citrate	Analysis	6010B		1	151192	01/06/14 16:26	EFH	TAL PLS

## Client Sample ID: 3-TPT-SPOILS

Lab Sample ID: 720-54016-40

Date Collected: 11/25/13 10:10

Matrix: Solid

Date Received: 11/25/13 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			151100	01/03/14 10:02	NDU	TAL PLS
Total/NA	Analysis	8270C		2	151118	01/03/14 17:28	MQL	TAL PLS
Total/NA	Prep	3546			151099	01/03/14 09:58	MRP	TAL PLS
Total/NA	Analysis	8082		1	151092	01/03/14 21:01	JZT	TAL PLS
Total/NA	Prep	3546			151097	01/03/14 09:54	MRP	TAL PLS
Total/NA	Analysis	8081A		1	151132	01/04/14 01:44	JZT	TAL PLS

## Client Sample ID: 3-TR/EX-SPOILS

Lab Sample ID: 720-54016-45

Date Collected: 11/25/13 10:00

Matrix: Solid

Date Received: 11/25/13 11:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			151056	01/04/14 09:16	ECT	TAL PLS
STLC Citrate	Prep	3005A			151163	01/06/14 10:24	JCR	TAL PLS
STLC Citrate	Analysis	6010B		1	151192	01/06/14 16:31	EFH	TAL PLS

TestAmerica Pleasanton

# Lab Chronicle

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

**Laboratory References:**

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

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# Certification Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

## Laboratory: TestAmerica Pleasanton

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

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-14

- 1
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# Method Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS

**Protocol References:**

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

**Laboratory References:**

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



# Sample Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54016-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-54016-10	3-EX2-SPOILS-B	Solid	11/25/13 10:15	11/25/13 11:09
720-54016-15	3-EX2-SPOILS-C	Solid	11/25/13 10:20	11/25/13 11:09
720-54016-25	3-TR2-SPOILS-B	Solid	11/25/13 09:45	11/25/13 11:09
720-54016-40	3-TPT-SPOILS	Solid	11/25/13 10:10	11/25/13 11:09
720-54016-45	3-TR/EX-SPOILS	Solid	11/25/13 10:00	11/25/13 11:09

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- 6
- 7
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- 10
- 11
- 12
- 13
- 14



Sharma, Dimple

720-54016-2

**From:** Tilotta, Vincent [VTilotta@haleyaldrich.com]  
**Sent:** Tuesday, December 31, 2013 11:39 AM  
**To:** Sharma, Dimple  
**Cc:** Schwartz, James; Green, James; Sebik, Joanna  
**Subject:** RE: Extra analysis

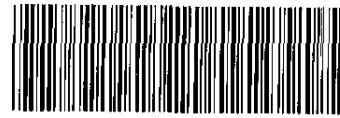
Good morning Dimple,

Would you please arrange for a W.E.T. STLC chromium analysis for the following sample? A standard five day turnaround is fine.

Sample ID	Sample ID number	Notes
FHARF-9-Spoils-Composite	720-54487-5	W.E.T. STLC for Cr

If possible, could you include the results of this analysis in the same report as the analyses listed in the email below?

Thank you,  
 Vince



720-54016 Chain of Custody

**From:** Tilotta, Vincent  
**Sent:** Tuesday, December 24, 2013 9:55 AM  
**To:** Sharma, Dimple <dimple.sharma@testamericainc.com> (dimple.sharma@testamericainc.com)  
**Cc:** Schwartz, James; Green, James; Sebik, Joanna  
**Subject:** Extra analysis

Good morning Dimple,

I would like to formally request some extra testing be done on some samples collected in the last month.

Sample ID	Sample ID number	Notes
SL-SPOILS COMP	720-54027-27	W.E.T. STLC for Cr
3-TR/EX-SPOILS	720-54016-45	W.E.T. STLC for Cr
3-EX2-SPOILS-B	720-54016-10	W.E.T. STLC for Cr
3-EX2-SPOILS-C	720-54016-15	W.E.T. STLC for Cr
3-TR2-SPOILS-B	720-54016-25	W.E.T. STLC for Cr
FHARF-7/8-SPOILS-A	720-54017-10	W.E.T. STLC for Cr
FHARF-7/8-SPOILS-B	720-54017-15	W.E.T. STLC for Cr
LF-SPOILSC COMP	720-54027-22	W.E.T. STLC for Cr, BTEX (8260B), SVOC (8270C), Pesticides (8081A), I
LF-SPOILSA COMP	720-54027-12	W.E.T. STLC for Cr, BTEX (8260B), SVOC (8270C), Pesticides (8081A), I
LF-SPOILSB COMP	720-54027-17	W.E.T. STLC for Cr, BTEX (8260B), SVOC (8270C), Pesticides (8081A), I
3-TPT-SPOILS	720-54016-40	BTEX (8260B), SVOC (8270C), Pesticides (8081A), PCBs (8082), Pheno

## Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 720-54016-2

**Login Number: 54016**

**List Source: TestAmerica Pleasanton**

**List Number: 1**

**Creator: Gonzales, Justinn**

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



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

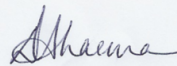
## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Pleasanton  
1220 Quarry Lane  
Pleasanton, CA 94566  
Tel: (925)484-1919

TestAmerica Job ID: 720-54027-1  
Client Project/Site: Hanson

For:  
Haley & Aldrich, Inc.  
2033 North Main Street  
Suite 309  
Walnut Creek, California 94596

Attn: James Schwartz



Authorized for release by:  
12/3/2013 5:45:46 PM

Dimple Sharma, Senior Project Manager  
(925)484-1919  
[dimple.sharma@testamericainc.com](mailto:dimple.sharma@testamericainc.com)

### LINKS

Review your project  
results through  
**Total Access**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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## Definitions/Glossary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

### Glossary

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

# Case Narrative

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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**Job ID: 720-54027-1**

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**Laboratory: TestAmerica Pleasanton**

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**Narrative**

**Job Narrative**  
**720-54027-1**

**Comments**

No additional comments.

**Receipt**

The samples were received on 11/25/2013 3:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.2° C.

**GC/MS VOA**

Method 8260B: Internal standard response for the following sample 54036-1MS exceeded the lower control limit due to matrix.

No other analytical or quality issues were noted.

**GC/MS Semi VOA**

No analytical or quality issues were noted.

**GC VOA**

No analytical or quality issues were noted.

**GC Semi VOA**

No analytical or quality issues were noted.

**Metals**

No analytical or quality issues were noted.

**Organic Prep**

No analytical or quality issues were noted.



# Detection Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

## Client Sample ID: TS1-B1

Lab Sample ID: 720-54027-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	52		0.99		mg/Kg	1		8015B	Silica Gel Cleanup
Motor Oil Range Organics [C24-C36]	170		49		mg/Kg	1		8015B	Silica Gel Cleanup

## Client Sample ID: TS2-B1

Lab Sample ID: 720-54027-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	8.8		1.0		mg/Kg	1		8015B	Silica Gel Cleanup

## Client Sample ID: TS3-B1

Lab Sample ID: 720-54027-3

No Detections.

## Client Sample ID: TS3-S1(5.0)

Lab Sample ID: 720-54027-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	4.0		0.99		mg/Kg	1		8015B	Silica Gel Cleanup

## Client Sample ID: TS4-B1

Lab Sample ID: 720-54027-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	68		3.0		mg/Kg	3		8015B	Silica Gel Cleanup
Motor Oil Range Organics [C24-C36]	280		150		mg/Kg	3		8015B	Silica Gel Cleanup

## Client Sample ID: CS-B10

Lab Sample ID: 720-54027-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	14		0.99		mg/Kg	1		8015B	Silica Gel Cleanup

## Client Sample ID: CS-B11

Lab Sample ID: 720-54027-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	1.5		0.99		mg/Kg	1		8015B	Silica Gel Cleanup

## Client Sample ID: LF-SPOILSA COMP

Lab Sample ID: 720-54027-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	4.4		0.99		mg/Kg	1		8015B	Silica Gel Cleanup
Arsenic	5.2		3.6		mg/Kg	4		6010B	Total/NA
Barium	160		1.8		mg/Kg	4		6010B	Total/NA
Chromium	58		1.8		mg/Kg	4		6010B	Total/NA
Cobalt	12		0.71		mg/Kg	4		6010B	Total/NA
Copper	28		5.4		mg/Kg	4		6010B	Total/NA
Lead	8.2		1.8		mg/Kg	4		6010B	Total/NA
Nickel	82		1.8		mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Detection Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

## Client Sample ID: LF-SPOILSA COMP (Continued)

Lab Sample ID: 720-54027-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vanadium	34		1.8		mg/Kg	4		6010B	Total/NA
Zinc	63		5.4		mg/Kg	4		6010B	Total/NA
Mercury	0.024		0.0098		mg/Kg	1		7471A	Total/NA

## Client Sample ID: LF-SPOILSB COMP

Lab Sample ID: 720-54027-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	13		0.99		mg/Kg	1		8015B	Silica Gel Cleanup
Motor Oil Range Organics [C24-C36]	57		50		mg/Kg	1		8015B	Silica Gel Cleanup
Arsenic	4.0		3.7		mg/Kg	4		6010B	Total/NA
Barium	160		1.9		mg/Kg	4		6010B	Total/NA
Chromium	52		1.9		mg/Kg	4		6010B	Total/NA
Cobalt	11		0.74		mg/Kg	4		6010B	Total/NA
Copper	26		5.6		mg/Kg	4		6010B	Total/NA
Lead	7.3		1.9		mg/Kg	4		6010B	Total/NA
Nickel	75		1.9		mg/Kg	4		6010B	Total/NA
Vanadium	33		1.9		mg/Kg	4		6010B	Total/NA
Zinc	49		5.6		mg/Kg	4		6010B	Total/NA
Mercury	0.028		0.0087		mg/Kg	1		7471A	Total/NA

## Client Sample ID: LF-SPOILSC COMP

Lab Sample ID: 720-54027-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	20		1.0		mg/Kg	1		8015B	Silica Gel Cleanup
Motor Oil Range Organics [C24-C36]	81		50		mg/Kg	1		8015B	Silica Gel Cleanup
Barium	150		1.9		mg/Kg	4		6010B	Total/NA
Chromium	51		1.9		mg/Kg	4		6010B	Total/NA
Cobalt	10		0.77		mg/Kg	4		6010B	Total/NA
Copper	23		5.8		mg/Kg	4		6010B	Total/NA
Lead	6.5		1.9		mg/Kg	4		6010B	Total/NA
Nickel	72		1.9		mg/Kg	4		6010B	Total/NA
Vanadium	29		1.9		mg/Kg	4		6010B	Total/NA
Zinc	50		5.8		mg/Kg	4		6010B	Total/NA
Mercury	0.028		0.0091		mg/Kg	1		7471A	Total/NA

## Client Sample ID: SL-SPOILS COMP

Lab Sample ID: 720-54027-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel Range Organics [C10-C28]	52		1.0		mg/Kg	1		8015B	Silica Gel Cleanup
Motor Oil Range Organics [C24-C36]	140		50		mg/Kg	1		8015B	Silica Gel Cleanup
Arsenic	4.7		3.9		mg/Kg	4		6010B	Total/NA
Barium	140		1.9		mg/Kg	4		6010B	Total/NA
Chromium	53		1.9		mg/Kg	4		6010B	Total/NA
Cobalt	12		0.78		mg/Kg	4		6010B	Total/NA
Copper	29		5.8		mg/Kg	4		6010B	Total/NA
Lead	9.1		1.9		mg/Kg	4		6010B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton



# Detection Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: SL-SPOILS COMP (Continued)**

**Lab Sample ID: 720-54027-27**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	79		1.9		mg/Kg	4		6010B	Total/NA
Vanadium	29		1.9		mg/Kg	4		6010B	Total/NA
Zinc	100		5.8		mg/Kg	4		6010B	Total/NA
Mercury	0.058		0.0092		mg/Kg	1		7471A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

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# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: TS1-B1**  
**Date Collected: 11/25/13 13:30**  
**Date Received: 11/25/13 15:25**

**Lab Sample ID: 720-54027-1**  
**Matrix: Solid**

**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]	52		0.99		mg/Kg		11/26/13 11:16	11/27/13 16:08	1
Motor Oil Range Organics [C24-C36]	170		49		mg/Kg		11/26/13 11:16	11/27/13 16:08	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)	0.2		0 - 1				11/26/13 11:16	11/27/13 16:08	1
p-Terphenyl	76		38 - 148				11/26/13 11:16	11/27/13 16:08	1



# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: TS2-B1**

**Lab Sample ID: 720-54027-2**

**Date Collected: 11/25/13 13:35**

**Matrix: Solid**

**Date Received: 11/25/13 15:25**

**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>8.8</b>		1.0		mg/Kg		11/26/13 11:16	11/27/13 15:44	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		11/26/13 11:16	11/27/13 15:44	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)	0.002		0 - 1				11/26/13 11:16	11/27/13 15:44	1
p-Terphenyl	96		38 - 148				11/26/13 11:16	11/27/13 15:44	1



# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: TS3-B1**

**Lab Sample ID: 720-54027-3**

**Date Collected: 11/25/13 13:37**

**Matrix: Solid**

**Date Received: 11/25/13 15:25**

**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]	ND		1.0		mg/Kg		11/26/13 11:16	11/27/13 14:07	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		11/26/13 11:16	11/27/13 14:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.002		0 - 1				11/26/13 11:16	11/27/13 14:07	1
p-Terphenyl	99		38 - 148				11/26/13 11:16	11/27/13 14:07	1

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: TS3-S1(5.0)**

**Lab Sample ID: 720-54027-4**

**Date Collected: 11/25/13 13:40**

**Matrix: Solid**

**Date Received: 11/25/13 15:25**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		4.9		ug/Kg		12/02/13 14:02	12/02/13 21:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	73		33 - 120				12/02/13 14:02	12/02/13 21:56	1
Terphenyl-d14	83		35 - 146				12/02/13 14:02	12/02/13 21:56	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>4.0</b>		0.99		mg/Kg		11/26/13 11:16	11/27/13 18:10	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		11/26/13 11:16	11/27/13 18:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.002		0 - 1				11/26/13 11:16	11/27/13 18:10	1
p-Terphenyl	103		38 - 148				11/26/13 11:16	11/27/13 18:10	1

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: TS4-B1**  
**Date Collected: 11/25/13 13:45**  
**Date Received: 11/25/13 15:25**

**Lab Sample ID: 720-54027-5**  
**Matrix: Solid**

**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>68</b>		3.0		mg/Kg		11/26/13 11:16	11/27/13 19:23	3
<b>Motor Oil Range Organics [C24-C36]</b>	<b>280</b>		150		mg/Kg		11/26/13 11:16	11/27/13 19:23	3
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0		0 - 1				11/26/13 11:16	11/27/13 19:23	3
p-Terphenyl	75		38 - 148				11/26/13 11:16	11/27/13 19:23	3

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# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: CS-B10**

**Lab Sample ID: 720-54027-6**

**Date Collected: 11/25/13 13:50**

**Matrix: Solid**

**Date Received: 11/25/13 15:25**

**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>14</b>		0.99		mg/Kg		11/27/13 08:29	11/29/13 15:44	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		11/27/13 08:29	11/29/13 15:44	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Capric Acid (Surr)	0		0 - 1				11/27/13 08:29	11/29/13 15:44	1
p-Terphenyl	112		38 - 148				11/27/13 08:29	11/29/13 15:44	1



# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: CS-B11**

**Lab Sample ID: 720-54027-7**

**Date Collected: 11/25/13 13:55**

**Matrix: Solid**

**Date Received: 11/25/13 15:25**

**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>1.5</b>		0.99		mg/Kg		11/27/13 08:29	11/29/13 14:56	1
Motor Oil Range Organics [C24-C36]	ND		49		mg/Kg		11/27/13 08:29	11/29/13 14:56	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.007		0 - 1				11/27/13 08:29	11/29/13 14:56	1
p-Terphenyl	97		38 - 148				11/27/13 08:29	11/29/13 14:56	1





# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: LF-SPOILSA COMP**

**Lab Sample ID: 720-54027-12**

**Date Collected: 11/25/13 11:50**

**Matrix: Solid**

**Date Received: 11/25/13 15:25**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Acetone	ND		46		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Benzene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Dichlorobromomethane	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Bromobenzene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Chlorobromomethane	ND		18		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Bromoform	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Bromomethane	ND		9.1		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
2-Butanone (MEK)	ND		46		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
n-Butylbenzene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
sec-Butylbenzene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
tert-Butylbenzene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Carbon disulfide	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Carbon tetrachloride	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Chlorobenzene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Chloroethane	ND		9.1		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Chloroform	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Chloromethane	ND		9.1		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
2-Chlorotoluene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
4-Chlorotoluene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Chlorodibromomethane	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
1,2-Dichlorobenzene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
1,3-Dichlorobenzene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
1,4-Dichlorobenzene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
1,3-Dichloropropane	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
1,1-Dichloropropene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
1,2-Dibromo-3-Chloropropane	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Ethylene Dibromide	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Dibromomethane	ND		9.1		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Dichlorodifluoromethane	ND		9.1		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
1,1-Dichloroethane	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
1,2-Dichloroethane	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
1,1-Dichloroethene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
cis-1,2-Dichloroethene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
trans-1,2-Dichloroethene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
1,2-Dichloropropane	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
cis-1,3-Dichloropropene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
trans-1,3-Dichloropropene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Ethylbenzene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Hexachlorobutadiene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
2-Hexanone	ND		46		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Isopropylbenzene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
4-Isopropyltoluene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Methylene Chloride	ND		9.1		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
4-Methyl-2-pentanone (MIBK)	ND		46		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Naphthalene	ND		9.1		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
N-Propylbenzene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Styrene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
1,1,1,2-Tetrachloroethane	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: LF-SPOILSA COMP**

**Lab Sample ID: 720-54027-12**

Date Collected: 11/25/13 11:50

Matrix: Solid

Date Received: 11/25/13 15:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Tetrachloroethane	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Toluene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
1,2,3-Trichlorobenzene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
1,2,4-Trichlorobenzene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
1,1,1-Trichloroethane	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
1,1,2-Trichloroethane	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Trichloroethene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Trichlorofluoromethane	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
1,2,3-Trichloropropane	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
1,2,4-Trimethylbenzene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
1,3,5-Trimethylbenzene	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Vinyl acetate	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Vinyl chloride	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Xylenes, Total	ND		9.1		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
2,2-Dichloropropane	ND		4.6		ug/Kg		11/27/13 16:22	11/27/13 21:24	1
Gasoline Range Organics (GRO) -C5-C12	ND		230		ug/Kg		11/27/13 16:22	11/27/13 21:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	102		45 - 131	11/27/13 16:22	11/27/13 21:24	1
1,2-Dichloroethane-d4 (Surr)	107		60 - 140	11/27/13 16:22	11/27/13 21:24	1
Toluene-d8 (Surr)	98		58 - 140	11/27/13 16:22	11/27/13 21:24	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>4.4</b>		0.99		mg/Kg		11/27/13 08:29	11/29/13 17:21	1
Motor Oil Range Organics [C24-C36]	ND		49		mg/Kg		11/27/13 08:29	11/29/13 17:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0		0 - 1	11/27/13 08:29	11/29/13 17:21	1
p-Terphenyl	102		38 - 148	11/27/13 08:29	11/29/13 17:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.8		mg/Kg		11/27/13 20:36	12/03/13 14:23	4
<b>Arsenic</b>	<b>5.2</b>		3.6		mg/Kg		11/27/13 20:36	12/03/13 14:23	4
<b>Barium</b>	<b>160</b>		1.8		mg/Kg		11/27/13 20:36	12/03/13 14:23	4
Beryllium	ND		0.36		mg/Kg		11/27/13 20:36	12/03/13 14:23	4
Cadmium	ND		0.45		mg/Kg		11/27/13 20:36	12/03/13 14:23	4
<b>Chromium</b>	<b>58</b>		1.8		mg/Kg		11/27/13 20:36	12/03/13 14:23	4
<b>Cobalt</b>	<b>12</b>		0.71		mg/Kg		11/27/13 20:36	12/03/13 14:23	4
<b>Copper</b>	<b>28</b>		5.4		mg/Kg		11/27/13 20:36	12/03/13 14:23	4
<b>Lead</b>	<b>8.2</b>		1.8		mg/Kg		11/27/13 20:36	12/03/13 14:23	4
Molybdenum	ND		1.8		mg/Kg		11/27/13 20:36	12/03/13 14:23	4
<b>Nickel</b>	<b>82</b>		1.8		mg/Kg		11/27/13 20:36	12/03/13 14:23	4
Selenium	ND		3.6		mg/Kg		11/27/13 20:36	12/03/13 14:23	4
Silver	ND		0.89		mg/Kg		11/27/13 20:36	12/03/13 14:23	4
Thallium	ND		1.8		mg/Kg		11/27/13 20:36	12/03/13 14:23	4
<b>Vanadium</b>	<b>34</b>		1.8		mg/Kg		11/27/13 20:36	12/03/13 14:23	4

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: LF-SPOILSA COMP**

**Lab Sample ID: 720-54027-12**

Date Collected: 11/25/13 11:50

Matrix: Solid

Date Received: 11/25/13 15:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	63		5.4		mg/Kg		11/27/13 20:36	12/03/13 14:23	4

## Method: 7471A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.0098		mg/Kg		11/29/13 11:52	11/30/13 12:42	1

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: LF-SPOILSB COMP**

**Lab Sample ID: 720-54027-17**

**Date Collected: 11/25/13 11:55**

**Matrix: Solid**

**Date Received: 11/25/13 15:25**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Acetone	ND		48		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Benzene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Dichlorobromomethane	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Bromobenzene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Chlorobromomethane	ND		19		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Bromoform	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Bromomethane	ND		9.6		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
2-Butanone (MEK)	ND		48		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
n-Butylbenzene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
sec-Butylbenzene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
tert-Butylbenzene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Carbon disulfide	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Carbon tetrachloride	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Chlorobenzene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Chloroethane	ND		9.6		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Chloroform	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Chloromethane	ND		9.6		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
2-Chlorotoluene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
4-Chlorotoluene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Chlorodibromomethane	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
1,2-Dichlorobenzene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
1,3-Dichlorobenzene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
1,4-Dichlorobenzene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
1,3-Dichloropropane	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
1,1-Dichloropropene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
1,2-Dibromo-3-Chloropropane	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Ethylene Dibromide	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Dibromomethane	ND		9.6		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Dichlorodifluoromethane	ND		9.6		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
1,1-Dichloroethane	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
1,2-Dichloroethane	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
1,1-Dichloroethene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
cis-1,2-Dichloroethene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
trans-1,2-Dichloroethene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
1,2-Dichloropropane	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
cis-1,3-Dichloropropene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
trans-1,3-Dichloropropene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Ethylbenzene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Hexachlorobutadiene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
2-Hexanone	ND		48		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Isopropylbenzene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
4-Isopropyltoluene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Methylene Chloride	ND		9.6		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
4-Methyl-2-pentanone (MIBK)	ND		48		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Naphthalene	ND		9.6		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
N-Propylbenzene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Styrene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
1,1,1,2-Tetrachloroethane	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: LF-SPOILSB COMP**

**Lab Sample ID: 720-54027-17**

Date Collected: 11/25/13 11:55

Matrix: Solid

Date Received: 11/25/13 15:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Tetrachloroethene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Toluene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
1,2,3-Trichlorobenzene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
1,2,4-Trichlorobenzene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
1,1,1-Trichloroethane	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
1,1,2-Trichloroethane	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Trichloroethene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Trichlorofluoromethane	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
1,2,3-Trichloropropane	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
1,2,4-Trimethylbenzene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
1,3,5-Trimethylbenzene	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Vinyl acetate	ND		48		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Vinyl chloride	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Xylenes, Total	ND		9.6		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
2,2-Dichloropropane	ND		4.8		ug/Kg		11/26/13 17:46	11/27/13 01:51	1
Gasoline Range Organics (GRO) -C5-C12	ND		240		ug/Kg		11/26/13 17:46	11/27/13 01:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	87		45 - 131	11/26/13 17:46	11/27/13 01:51	1
1,2-Dichloroethane-d4 (Surr)	99		60 - 140	11/26/13 17:46	11/27/13 01:51	1
Toluene-d8 (Surr)	92		58 - 140	11/26/13 17:46	11/27/13 01:51	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>13</b>		0.99		mg/Kg		11/27/13 08:29	11/29/13 13:43	1
<b>Motor Oil Range Organics [C24-C36]</b>	<b>57</b>		50		mg/Kg		11/27/13 08:29	11/29/13 13:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.007		0 - 1	11/27/13 08:29	11/29/13 13:43	1
p-Terphenyl	113		38 - 148	11/27/13 08:29	11/29/13 13:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:28	4
<b>Arsenic</b>	<b>4.0</b>		3.7		mg/Kg		11/27/13 20:36	12/03/13 14:28	4
<b>Barium</b>	<b>160</b>		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:28	4
Beryllium	ND		0.37		mg/Kg		11/27/13 20:36	12/03/13 14:28	4
Cadmium	ND		0.46		mg/Kg		11/27/13 20:36	12/03/13 14:28	4
<b>Chromium</b>	<b>52</b>		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:28	4
<b>Cobalt</b>	<b>11</b>		0.74		mg/Kg		11/27/13 20:36	12/03/13 14:28	4
<b>Copper</b>	<b>26</b>		5.6		mg/Kg		11/27/13 20:36	12/03/13 14:28	4
<b>Lead</b>	<b>7.3</b>		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:28	4
Molybdenum	ND		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:28	4
<b>Nickel</b>	<b>75</b>		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:28	4
Selenium	ND		3.7		mg/Kg		11/27/13 20:36	12/03/13 14:28	4
Silver	ND		0.93		mg/Kg		11/27/13 20:36	12/03/13 14:28	4
Thallium	ND		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:28	4

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: LF-SPOILSB COMP**

**Lab Sample ID: 720-54027-17**

Date Collected: 11/25/13 11:55

Matrix: Solid

Date Received: 11/25/13 15:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	33		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:28	4
Zinc	49		5.6		mg/Kg		11/27/13 20:36	12/03/13 14:28	4

**Method: 7471A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028		0.0087		mg/Kg		11/29/13 11:52	11/30/13 12:44	1

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

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: LF-SPOILSC COMP**

**Lab Sample ID: 720-54027-22**

**Date Collected: 11/25/13 12:00**

**Matrix: Solid**

**Date Received: 11/25/13 15:25**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Acetone	ND		50		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Benzene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Dichlorobromomethane	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Bromobenzene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Chlorobromomethane	ND		20		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Bromoform	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Bromomethane	ND		9.9		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
2-Butanone (MEK)	ND		50		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
n-Butylbenzene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
sec-Butylbenzene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
tert-Butylbenzene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Carbon disulfide	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Carbon tetrachloride	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Chlorobenzene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Chloroethane	ND		9.9		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Chloroform	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Chloromethane	ND		9.9		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
2-Chlorotoluene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
4-Chlorotoluene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Chlorodibromomethane	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
1,2-Dichlorobenzene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
1,3-Dichlorobenzene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
1,4-Dichlorobenzene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
1,3-Dichloropropane	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
1,1-Dichloropropene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Ethylene Dibromide	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Dibromomethane	ND		9.9		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Dichlorodifluoromethane	ND		9.9		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
1,1-Dichloroethane	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
1,2-Dichloroethane	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
1,1-Dichloroethene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
cis-1,2-Dichloroethene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
trans-1,2-Dichloroethene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
1,2-Dichloropropane	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
cis-1,3-Dichloropropene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
trans-1,3-Dichloropropene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Ethylbenzene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Hexachlorobutadiene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
2-Hexanone	ND		50		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Isopropylbenzene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
4-Isopropyltoluene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Methylene Chloride	ND		9.9		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Naphthalene	ND		9.9		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
N-Propylbenzene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Styrene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
1,1,1,2-Tetrachloroethane	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: LF-SPOILSC COMP**

**Lab Sample ID: 720-54027-22**

Date Collected: 11/25/13 12:00

Matrix: Solid

Date Received: 11/25/13 15:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Tetrachloroethene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Toluene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
1,2,3-Trichlorobenzene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
1,2,4-Trichlorobenzene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
1,1,1-Trichloroethane	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
1,1,2-Trichloroethane	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Trichloroethene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Trichlorofluoromethane	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
1,2,3-Trichloropropane	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
1,2,4-Trimethylbenzene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
1,3,5-Trimethylbenzene	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Vinyl acetate	ND		50		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Vinyl chloride	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Xylenes, Total	ND		9.9		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
2,2-Dichloropropane	ND		5.0		ug/Kg		11/27/13 10:00	11/27/13 18:47	1
Gasoline Range Organics (GRO) -C5-C12	ND		250		ug/Kg		11/27/13 10:00	11/27/13 18:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	89		45 - 131	11/27/13 10:00	11/27/13 18:47	1
1,2-Dichloroethane-d4 (Surr)	103		60 - 140	11/27/13 10:00	11/27/13 18:47	1
Toluene-d8 (Surr)	95		58 - 140	11/27/13 10:00	11/27/13 18:47	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>20</b>		1.0		mg/Kg		11/29/13 14:12	11/30/13 00:39	1
<b>Motor Oil Range Organics [C24-C36]</b>	<b>81</b>		50		mg/Kg		11/29/13 14:12	11/30/13 00:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.03		0 - 1	11/29/13 14:12	11/30/13 00:39	1
p-Terphenyl	91		38 - 148	11/29/13 14:12	11/30/13 00:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:32	4
Arsenic	ND		3.8		mg/Kg		11/27/13 20:36	12/03/13 14:32	4
<b>Barium</b>	<b>150</b>		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:32	4
Beryllium	ND		0.38		mg/Kg		11/27/13 20:36	12/03/13 14:32	4
Cadmium	ND		0.48		mg/Kg		11/27/13 20:36	12/03/13 14:32	4
<b>Chromium</b>	<b>51</b>		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:32	4
<b>Cobalt</b>	<b>10</b>		0.77		mg/Kg		11/27/13 20:36	12/03/13 14:32	4
<b>Copper</b>	<b>23</b>		5.8		mg/Kg		11/27/13 20:36	12/03/13 14:32	4
<b>Lead</b>	<b>6.5</b>		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:32	4
Molybdenum	ND		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:32	4
<b>Nickel</b>	<b>72</b>		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:32	4
Selenium	ND		3.8		mg/Kg		11/27/13 20:36	12/03/13 14:32	4
Silver	ND		0.96		mg/Kg		11/27/13 20:36	12/03/13 14:32	4
Thallium	ND		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:32	4

TestAmerica Pleasanton



# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: LF-SPOILSC COMP**

**Lab Sample ID: 720-54027-22**

Date Collected: 11/25/13 12:00

Matrix: Solid

Date Received: 11/25/13 15:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	29		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:32	4
Zinc	50		5.8		mg/Kg		11/27/13 20:36	12/03/13 14:32	4

**Method: 7471A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.028		0.0091		mg/Kg		11/29/13 11:52	11/30/13 12:47	1



# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: SL-SPOILS COMP**

**Lab Sample ID: 720-54027-27**

**Date Collected: 11/25/13 12:10**

**Matrix: Solid**

**Date Received: 11/25/13 15:25**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Acetone	ND		48		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Benzene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Dichlorobromomethane	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Bromobenzene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Chlorobromomethane	ND		19		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Bromoform	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Bromomethane	ND		9.7		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
2-Butanone (MEK)	ND		48		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
n-Butylbenzene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
sec-Butylbenzene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
tert-Butylbenzene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Carbon disulfide	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Carbon tetrachloride	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Chlorobenzene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Chloroethane	ND		9.7		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Chloroform	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Chloromethane	ND		9.7		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
2-Chlorotoluene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
4-Chlorotoluene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Chlorodibromomethane	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
1,2-Dichlorobenzene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
1,3-Dichlorobenzene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
1,4-Dichlorobenzene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
1,3-Dichloropropane	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
1,1-Dichloropropene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
1,2-Dibromo-3-Chloropropane	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Ethylene Dibromide	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Dibromomethane	ND		9.7		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Dichlorodifluoromethane	ND		9.7		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
1,1-Dichloroethane	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
1,2-Dichloroethane	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
1,1-Dichloroethene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
cis-1,2-Dichloroethene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
trans-1,2-Dichloroethene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
1,2-Dichloropropane	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
cis-1,3-Dichloropropene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
trans-1,3-Dichloropropene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Ethylbenzene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Hexachlorobutadiene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
2-Hexanone	ND		48		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Isopropylbenzene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
4-Isopropyltoluene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Methylene Chloride	ND		9.7		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
4-Methyl-2-pentanone (MIBK)	ND		48		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Naphthalene	ND		9.7		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
N-Propylbenzene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Styrene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
1,1,1,2-Tetrachloroethane	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: SL-SPOILS COMP**

**Lab Sample ID: 720-54027-27**

Date Collected: 11/25/13 12:10

Matrix: Solid

Date Received: 11/25/13 15:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Tetrachloroethene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Toluene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
1,2,3-Trichlorobenzene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
1,2,4-Trichlorobenzene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
1,1,1-Trichloroethane	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
1,1,2-Trichloroethane	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Trichloroethene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Trichlorofluoromethane	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
1,2,3-Trichloropropane	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
1,2,4-Trimethylbenzene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
1,3,5-Trimethylbenzene	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Vinyl acetate	ND		48		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Vinyl chloride	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Xylenes, Total	ND		9.7		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
2,2-Dichloropropane	ND		4.8		ug/Kg		11/27/13 10:00	11/27/13 19:15	1
Gasoline Range Organics (GRO) -C5-C12	ND		240		ug/Kg		11/27/13 10:00	11/27/13 19:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	89		45 - 131	11/27/13 10:00	11/27/13 19:15	1
1,2-Dichloroethane-d4 (Surr)	100		60 - 140	11/27/13 10:00	11/27/13 19:15	1
Toluene-d8 (Surr)	94		58 - 140	11/27/13 10:00	11/27/13 19:15	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>52</b>		1.0		mg/Kg		11/29/13 14:12	11/29/13 23:26	1
<b>Motor Oil Range Organics [C24-C36]</b>	<b>140</b>		50		mg/Kg		11/29/13 14:12	11/29/13 23:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0.2		0 - 1	11/29/13 14:12	11/29/13 23:26	1
p-Terphenyl	94		38 - 148	11/29/13 14:12	11/29/13 23:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:36	4
<b>Arsenic</b>	<b>4.7</b>		3.9		mg/Kg		11/27/13 20:36	12/03/13 14:36	4
<b>Barium</b>	<b>140</b>		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:36	4
Beryllium	ND		0.39		mg/Kg		11/27/13 20:36	12/03/13 14:36	4
Cadmium	ND		0.49		mg/Kg		11/27/13 20:36	12/03/13 14:36	4
<b>Chromium</b>	<b>53</b>		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:36	4
<b>Cobalt</b>	<b>12</b>		0.78		mg/Kg		11/27/13 20:36	12/03/13 14:36	4
<b>Copper</b>	<b>29</b>		5.8		mg/Kg		11/27/13 20:36	12/03/13 14:36	4
<b>Lead</b>	<b>9.1</b>		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:36	4
Molybdenum	ND		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:36	4
<b>Nickel</b>	<b>79</b>		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:36	4
Selenium	ND		3.9		mg/Kg		11/27/13 20:36	12/03/13 14:36	4
Silver	ND		0.97		mg/Kg		11/27/13 20:36	12/03/13 14:36	4
Thallium	ND		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:36	4

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

**Client Sample ID: SL-SPOILS COMP**

**Lab Sample ID: 720-54027-27**

Date Collected: 11/25/13 12:10

Matrix: Solid

Date Received: 11/25/13 15:25

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium	29		1.9		mg/Kg		11/27/13 20:36	12/03/13 14:36	4
Zinc	100		5.8		mg/Kg		11/27/13 20:36	12/03/13 14:36	4

**Method: 7471A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.058		0.0092		mg/Kg		11/29/13 11:52	11/30/13 12:49	1

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

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

**Lab Sample ID: MB 720-149057/4**

**Matrix: Solid**

**Analysis Batch: 149057**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/Kg			11/26/13 15:52	1
Acetone	ND		50		ug/Kg			11/26/13 15:52	1
Benzene	ND		5.0		ug/Kg			11/26/13 15:52	1
Dichlorobromomethane	ND		5.0		ug/Kg			11/26/13 15:52	1
Bromobenzene	ND		5.0		ug/Kg			11/26/13 15:52	1
Chlorobromomethane	ND		20		ug/Kg			11/26/13 15:52	1
Bromoform	ND		5.0		ug/Kg			11/26/13 15:52	1
Bromomethane	ND		10		ug/Kg			11/26/13 15:52	1
2-Butanone (MEK)	ND		50		ug/Kg			11/26/13 15:52	1
n-Butylbenzene	ND		5.0		ug/Kg			11/26/13 15:52	1
sec-Butylbenzene	ND		5.0		ug/Kg			11/26/13 15:52	1
tert-Butylbenzene	ND		5.0		ug/Kg			11/26/13 15:52	1
Carbon disulfide	ND		5.0		ug/Kg			11/26/13 15:52	1
Carbon tetrachloride	ND		5.0		ug/Kg			11/26/13 15:52	1
Chlorobenzene	ND		5.0		ug/Kg			11/26/13 15:52	1
Chloroethane	ND		10		ug/Kg			11/26/13 15:52	1
Chloroform	ND		5.0		ug/Kg			11/26/13 15:52	1
Chloromethane	ND		10		ug/Kg			11/26/13 15:52	1
2-Chlorotoluene	ND		5.0		ug/Kg			11/26/13 15:52	1
4-Chlorotoluene	ND		5.0		ug/Kg			11/26/13 15:52	1
Chlorodibromomethane	ND		5.0		ug/Kg			11/26/13 15:52	1
1,2-Dichlorobenzene	ND		5.0		ug/Kg			11/26/13 15:52	1
1,3-Dichlorobenzene	ND		5.0		ug/Kg			11/26/13 15:52	1
1,4-Dichlorobenzene	ND		5.0		ug/Kg			11/26/13 15:52	1
1,3-Dichloropropane	ND		5.0		ug/Kg			11/26/13 15:52	1
1,1-Dichloropropene	ND		5.0		ug/Kg			11/26/13 15:52	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/Kg			11/26/13 15:52	1
Ethylene Dibromide	ND		5.0		ug/Kg			11/26/13 15:52	1
Dibromomethane	ND		10		ug/Kg			11/26/13 15:52	1
Dichlorodifluoromethane	ND		10		ug/Kg			11/26/13 15:52	1
1,1-Dichloroethane	ND		5.0		ug/Kg			11/26/13 15:52	1
1,2-Dichloroethane	ND		5.0		ug/Kg			11/26/13 15:52	1
1,1-Dichloroethene	ND		5.0		ug/Kg			11/26/13 15:52	1
cis-1,2-Dichloroethene	ND		5.0		ug/Kg			11/26/13 15:52	1
trans-1,2-Dichloroethene	ND		5.0		ug/Kg			11/26/13 15:52	1
1,2-Dichloropropane	ND		5.0		ug/Kg			11/26/13 15:52	1
cis-1,3-Dichloropropene	ND		5.0		ug/Kg			11/26/13 15:52	1
trans-1,3-Dichloropropene	ND		5.0		ug/Kg			11/26/13 15:52	1
Ethylbenzene	ND		5.0		ug/Kg			11/26/13 15:52	1
Hexachlorobutadiene	ND		5.0		ug/Kg			11/26/13 15:52	1
2-Hexanone	ND		50		ug/Kg			11/26/13 15:52	1
Isopropylbenzene	ND		5.0		ug/Kg			11/26/13 15:52	1
4-Isopropyltoluene	ND		5.0		ug/Kg			11/26/13 15:52	1
Methylene Chloride	ND		10		ug/Kg			11/26/13 15:52	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/Kg			11/26/13 15:52	1
Naphthalene	ND		10		ug/Kg			11/26/13 15:52	1
N-Propylbenzene	ND		5.0		ug/Kg			11/26/13 15:52	1
Styrene	ND		5.0		ug/Kg			11/26/13 15:52	1

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

**Lab Sample ID: MB 720-149057/4**

**Matrix: Solid**

**Analysis Batch: 149057**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0		ug/Kg			11/26/13 15:52	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/Kg			11/26/13 15:52	1
Tetrachloroethene	ND		5.0		ug/Kg			11/26/13 15:52	1
Toluene	ND		5.0		ug/Kg			11/26/13 15:52	1
1,2,3-Trichlorobenzene	ND		5.0		ug/Kg			11/26/13 15:52	1
1,2,4-Trichlorobenzene	ND		5.0		ug/Kg			11/26/13 15:52	1
1,1,1-Trichloroethane	ND		5.0		ug/Kg			11/26/13 15:52	1
1,1,2-Trichloroethane	ND		5.0		ug/Kg			11/26/13 15:52	1
Trichloroethene	ND		5.0		ug/Kg			11/26/13 15:52	1
Trichlorofluoromethane	ND		5.0		ug/Kg			11/26/13 15:52	1
1,2,3-Trichloropropane	ND		5.0		ug/Kg			11/26/13 15:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/Kg			11/26/13 15:52	1
1,2,4-Trimethylbenzene	ND		5.0		ug/Kg			11/26/13 15:52	1
1,3,5-Trimethylbenzene	ND		5.0		ug/Kg			11/26/13 15:52	1
Vinyl acetate	ND		50		ug/Kg			11/26/13 15:52	1
Vinyl chloride	ND		5.0		ug/Kg			11/26/13 15:52	1
Xylenes, Total	ND		10		ug/Kg			11/26/13 15:52	1
2,2-Dichloropropane	ND		5.0		ug/Kg			11/26/13 15:52	1
Gasoline Range Organics (GRO) -C5-C12	ND		250		ug/Kg			11/26/13 15:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	93		45 - 131		11/26/13 15:52	1
1,2-Dichloroethane-d4 (Surr)	101		60 - 140		11/26/13 15:52	1
Toluene-d8 (Surr)	96		58 - 140		11/26/13 15:52	1

**Lab Sample ID: LCS 720-149057/5**

**Matrix: Solid**

**Analysis Batch: 149057**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	55.5		ug/Kg		111	70 - 144
Acetone	250	256		ug/Kg		103	30 - 162
Benzene	50.0	50.4		ug/Kg		101	70 - 130
Dichlorobromomethane	50.0	52.4		ug/Kg		105	70 - 131
Bromobenzene	50.0	50.3		ug/Kg		101	70 - 130
Chlorobromomethane	50.0	52.7		ug/Kg		105	70 - 130
Bromoform	50.0	57.0		ug/Kg		114	59 - 158
Bromomethane	50.0	49.9		ug/Kg		100	59 - 132
2-Butanone (MEK)	250	300		ug/Kg		120	53 - 124
n-Butylbenzene	50.0	50.9		ug/Kg		102	70 - 142
sec-Butylbenzene	50.0	50.2		ug/Kg		100	70 - 136
tert-Butylbenzene	50.0	50.4		ug/Kg		101	70 - 130
Carbon disulfide	50.0	49.5		ug/Kg		99	60 - 140
Carbon tetrachloride	50.0	53.3		ug/Kg		107	70 - 138
Chlorobenzene	50.0	51.4		ug/Kg		103	70 - 130
Chloroethane	50.0	47.6		ug/Kg		95	65 - 130
Chloroform	50.0	50.8		ug/Kg		102	77 - 127

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

**Lab Sample ID: LCS 720-149057/5**

**Matrix: Solid**

**Analysis Batch: 149057**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	42.1		ug/Kg		84	55 - 140
2-Chlorotoluene	50.0	49.8		ug/Kg		100	70 - 138
4-Chlorotoluene	50.0	49.0		ug/Kg		98	70 - 136
Chlorodibromomethane	50.0	55.9		ug/Kg		112	70 - 146
1,2-Dichlorobenzene	50.0	51.1		ug/Kg		102	70 - 130
1,3-Dichlorobenzene	50.0	52.3		ug/Kg		105	70 - 131
1,4-Dichlorobenzene	50.0	52.8		ug/Kg		106	70 - 130
1,3-Dichloropropane	50.0	55.4		ug/Kg		111	70 - 140
1,1-Dichloropropene	50.0	55.3		ug/Kg		111	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	53.7		ug/Kg		107	60 - 145
Ethylene Dibromide	50.0	56.7		ug/Kg		113	70 - 140
Dibromomethane	50.0	54.9		ug/Kg		110	70 - 139
Dichlorodifluoromethane	50.0	39.1		ug/Kg		78	37 - 158
1,1-Dichloroethane	50.0	49.4		ug/Kg		99	70 - 130
1,2-Dichloroethane	50.0	53.2		ug/Kg		106	70 - 130
1,1-Dichloroethene	50.0	47.7		ug/Kg		95	76 - 122
cis-1,2-Dichloroethene	50.0	51.9		ug/Kg		104	70 - 138
trans-1,2-Dichloroethene	50.0	50.8		ug/Kg		102	67 - 130
1,2-Dichloropropane	50.0	50.0		ug/Kg		100	73 - 127
cis-1,3-Dichloropropene	50.0	54.3		ug/Kg		109	68 - 147
trans-1,3-Dichloropropene	50.0	53.9		ug/Kg		108	70 - 136
Ethylbenzene	50.0	51.2		ug/Kg		102	80 - 137
Hexachlorobutadiene	50.0	52.2		ug/Kg		104	70 - 132
2-Hexanone	250	282		ug/Kg		113	44 - 133
Isopropylbenzene	50.0	53.1		ug/Kg		106	88 - 128
4-Isopropyltoluene	50.0	50.7		ug/Kg		101	70 - 133
Methylene Chloride	50.0	54.9		ug/Kg		110	70 - 134
4-Methyl-2-pentanone (MIBK)	250	283		ug/Kg		113	60 - 160
Naphthalene	50.0	55.1		ug/Kg		110	60 - 147
N-Propylbenzene	50.0	51.0		ug/Kg		102	70 - 130
Styrene	50.0	53.4		ug/Kg		107	70 - 130
1,1,1,2-Tetrachloroethane	50.0	53.3		ug/Kg		107	70 - 130
1,1,2,2-Tetrachloroethane	50.0	51.9		ug/Kg		104	70 - 146
Tetrachloroethene	50.0	56.8		ug/Kg		114	70 - 132
Toluene	50.0	50.1		ug/Kg		100	80 - 128
1,2,3-Trichlorobenzene	50.0	53.3		ug/Kg		107	60 - 140
1,2,4-Trichlorobenzene	50.0	53.7		ug/Kg		107	60 - 140
1,1,1-Trichloroethane	50.0	52.5		ug/Kg		105	70 - 130
1,1,2-Trichloroethane	50.0	55.4		ug/Kg		111	70 - 130
Trichloroethene	50.0	52.6		ug/Kg		105	70 - 133
Trichlorofluoromethane	50.0	46.7		ug/Kg		93	60 - 140
1,2,3-Trichloropropane	50.0	52.4		ug/Kg		105	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	56.6		ug/Kg		113	60 - 140
1,2,4-Trimethylbenzene	50.0	51.5		ug/Kg		103	70 - 130
1,3,5-Trimethylbenzene	50.0	50.8		ug/Kg		102	70 - 131
Vinyl acetate	50.0	72.7		ug/Kg		145	38 - 176
Vinyl chloride	50.0	42.0		ug/Kg		84	58 - 125

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

**Lab Sample ID: LCS 720-149057/5**

**Matrix: Solid**

**Analysis Batch: 149057**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	100	101		ug/Kg		101	70 - 146
o-Xylene	50.0	52.9		ug/Kg		106	70 - 140
2,2-Dichloropropane	50.0	49.6		ug/Kg		99	70 - 162

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	95		45 - 131
1,2-Dichloroethane-d4 (Surr)	100		60 - 140
Toluene-d8 (Surr)	97		58 - 140

**Lab Sample ID: LCS 720-149057/7**

**Matrix: Solid**

**Analysis Batch: 149057**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C5-C12	1000	1000		ug/Kg		100	61 - 128

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	94		45 - 131
1,2-Dichloroethane-d4 (Surr)	94		60 - 140
Toluene-d8 (Surr)	96		58 - 140

**Lab Sample ID: LCSD 720-149057/6**

**Matrix: Solid**

**Analysis Batch: 149057**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	53.2		ug/Kg		106	70 - 144	4	20
Acetone	250	241		ug/Kg		96	30 - 162	6	30
Benzene	50.0	50.0		ug/Kg		100	70 - 130	1	20
Dichlorobromomethane	50.0	51.9		ug/Kg		104	70 - 131	1	20
Bromobenzene	50.0	49.5		ug/Kg		99	70 - 130	2	20
Chlorobromomethane	50.0	50.8		ug/Kg		102	70 - 130	4	20
Bromoform	50.0	55.5		ug/Kg		111	59 - 158	3	20
Bromomethane	50.0	47.6		ug/Kg		95	59 - 132	5	20
2-Butanone (MEK)	250	264		ug/Kg		106	53 - 124	13	20
n-Butylbenzene	50.0	50.4		ug/Kg		101	70 - 142	1	20
sec-Butylbenzene	50.0	49.9		ug/Kg		100	70 - 136	1	20
tert-Butylbenzene	50.0	49.7		ug/Kg		99	70 - 130	1	20
Carbon disulfide	50.0	49.1		ug/Kg		98	60 - 140	1	20
Carbon tetrachloride	50.0	53.6		ug/Kg		107	70 - 138	0	20
Chlorobenzene	50.0	51.1		ug/Kg		102	70 - 130	1	20
Chloroethane	50.0	46.3		ug/Kg		93	65 - 130	3	20
Chloroform	50.0	50.3		ug/Kg		101	77 - 127	1	20
Chloromethane	50.0	39.9		ug/Kg		80	55 - 140	5	20
2-Chlorotoluene	50.0	49.0		ug/Kg		98	70 - 138	2	20
4-Chlorotoluene	50.0	48.2		ug/Kg		96	70 - 136	2	20
Chlorodibromomethane	50.0	55.6		ug/Kg		111	70 - 146	0	20

TestAmerica Pleasanton



# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

Lab Sample ID: LCSD 720-149057/6

Matrix: Solid

Analysis Batch: 149057

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Added	Result	Qualifier				Limits		
1,2-Dichlorobenzene	50.0	49.6		ug/Kg		99	70 - 130	3	20
1,3-Dichlorobenzene	50.0	51.7		ug/Kg		103	70 - 131	1	20
1,4-Dichlorobenzene	50.0	52.1		ug/Kg		104	70 - 130	1	20
1,3-Dichloropropane	50.0	54.1		ug/Kg		108	70 - 140	2	20
1,1-Dichloropropene	50.0	54.7		ug/Kg		109	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	50.2		ug/Kg		100	60 - 145	7	20
Ethylene Dibromide	50.0	55.1		ug/Kg		110	70 - 140	3	20
Dibromomethane	50.0	53.7		ug/Kg		107	70 - 139	2	20
Dichlorodifluoromethane	50.0	38.0		ug/Kg		76	37 - 158	3	20
1,1-Dichloroethane	50.0	48.6		ug/Kg		97	70 - 130	2	20
1,2-Dichloroethane	50.0	51.9		ug/Kg		104	70 - 130	3	20
1,1-Dichloroethene	50.0	46.8		ug/Kg		94	76 - 122	2	20
cis-1,2-Dichloroethene	50.0	51.4		ug/Kg		103	70 - 138	1	20
trans-1,2-Dichloroethene	50.0	49.5		ug/Kg		99	67 - 130	3	20
1,2-Dichloropropane	50.0	50.0		ug/Kg		100	73 - 127	0	20
cis-1,3-Dichloropropene	50.0	53.7		ug/Kg		107	68 - 147	1	20
trans-1,3-Dichloropropene	50.0	53.3		ug/Kg		107	70 - 136	1	20
Ethylbenzene	50.0	51.3		ug/Kg		103	80 - 137	0	20
Hexachlorobutadiene	50.0	51.7		ug/Kg		103	70 - 132	1	20
2-Hexanone	250	261		ug/Kg		104	44 - 133	8	20
Isopropylbenzene	50.0	53.5		ug/Kg		107	88 - 128	1	20
4-Isopropyltoluene	50.0	50.3		ug/Kg		101	70 - 133	1	20
Methylene Chloride	50.0	52.9		ug/Kg		106	70 - 134	4	20
4-Methyl-2-pentanone (MIBK)	250	261		ug/Kg		105	60 - 160	8	20
Naphthalene	50.0	52.1		ug/Kg		104	60 - 147	6	20
N-Propylbenzene	50.0	50.4		ug/Kg		101	70 - 130	1	20
Styrene	50.0	53.2		ug/Kg		106	70 - 130	0	20
1,1,1,2-Tetrachloroethane	50.0	53.7		ug/Kg		107	70 - 130	1	20
1,1,1,2,2-Tetrachloroethane	50.0	48.2		ug/Kg		96	70 - 146	7	20
Tetrachloroethene	50.0	57.0		ug/Kg		114	70 - 132	0	20
Toluene	50.0	50.3		ug/Kg		101	80 - 128	0	20
1,2,3-Trichlorobenzene	50.0	52.2		ug/Kg		104	60 - 140	2	20
1,2,4-Trichlorobenzene	50.0	53.1		ug/Kg		106	60 - 140	1	20
1,1,1-Trichloroethane	50.0	52.5		ug/Kg		105	70 - 130	0	20
1,1,2-Trichloroethane	50.0	54.0		ug/Kg		108	70 - 130	3	20
Trichloroethene	50.0	52.6		ug/Kg		105	70 - 133	0	20
Trichlorofluoromethane	50.0	45.8		ug/Kg		92	60 - 140	2	20
1,2,3-Trichloropropane	50.0	48.5		ug/Kg		97	70 - 146	8	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	55.3		ug/Kg		111	60 - 140	2	20
1,2,4-Trimethylbenzene	50.0	50.9		ug/Kg		102	70 - 130	1	20
1,3,5-Trimethylbenzene	50.0	50.5		ug/Kg		101	70 - 131	1	20
Vinyl acetate	50.0	69.2		ug/Kg		138	38 - 176	5	20
Vinyl chloride	50.0	41.5		ug/Kg		83	58 - 125	1	20
m-Xylene & p-Xylene	100	101		ug/Kg		101	70 - 146	1	20
o-Xylene	50.0	53.1		ug/Kg		106	70 - 140	0	20
2,2-Dichloropropane	50.0	49.8		ug/Kg		100	70 - 162	0	20

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

Lab Sample ID: LCSD 720-149057/6

Matrix: Solid

Analysis Batch: 149057

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	96		45 - 131
1,2-Dichloroethane-d4 (Surr)	98		60 - 140
Toluene-d8 (Surr)	97		58 - 140

Lab Sample ID: LCSD 720-149057/8

Matrix: Solid

Analysis Batch: 149057

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
		Result	Qualifier						
Gasoline Range Organics (GRO) -C5-C12	1000	1030		ug/Kg		103	61 - 128	3	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	94		45 - 131
1,2-Dichloroethane-d4 (Surr)	95		60 - 140
Toluene-d8 (Surr)	96		58 - 140

Lab Sample ID: MB 720-149110/4

Matrix: Solid

Analysis Batch: 149110

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Methyl tert-butyl ether	ND		5.0		ug/Kg			11/27/13 10:57	1
Acetone	ND		50		ug/Kg			11/27/13 10:57	1
Benzene	ND		5.0		ug/Kg			11/27/13 10:57	1
Dichlorobromomethane	ND		5.0		ug/Kg			11/27/13 10:57	1
Bromobenzene	ND		5.0		ug/Kg			11/27/13 10:57	1
Chlorobromomethane	ND		20		ug/Kg			11/27/13 10:57	1
Bromoform	ND		5.0		ug/Kg			11/27/13 10:57	1
Bromomethane	ND		10		ug/Kg			11/27/13 10:57	1
2-Butanone (MEK)	ND		50		ug/Kg			11/27/13 10:57	1
n-Butylbenzene	ND		5.0		ug/Kg			11/27/13 10:57	1
sec-Butylbenzene	ND		5.0		ug/Kg			11/27/13 10:57	1
tert-Butylbenzene	ND		5.0		ug/Kg			11/27/13 10:57	1
Carbon disulfide	ND		5.0		ug/Kg			11/27/13 10:57	1
Carbon tetrachloride	ND		5.0		ug/Kg			11/27/13 10:57	1
Chlorobenzene	ND		5.0		ug/Kg			11/27/13 10:57	1
Chloroethane	ND		10		ug/Kg			11/27/13 10:57	1
Chloroform	ND		5.0		ug/Kg			11/27/13 10:57	1
Chloromethane	ND		10		ug/Kg			11/27/13 10:57	1
2-Chlorotoluene	ND		5.0		ug/Kg			11/27/13 10:57	1
4-Chlorotoluene	ND		5.0		ug/Kg			11/27/13 10:57	1
Chlorodibromomethane	ND		5.0		ug/Kg			11/27/13 10:57	1
1,2-Dichlorobenzene	ND		5.0		ug/Kg			11/27/13 10:57	1
1,3-Dichlorobenzene	ND		5.0		ug/Kg			11/27/13 10:57	1
1,4-Dichlorobenzene	ND		5.0		ug/Kg			11/27/13 10:57	1
1,3-Dichloropropane	ND		5.0		ug/Kg			11/27/13 10:57	1
1,1-Dichloropropene	ND		5.0		ug/Kg			11/27/13 10:57	1

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

Lab Sample ID: MB 720-149110/4

Matrix: Solid

Analysis Batch: 149110

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/Kg			11/27/13 10:57	1
Ethylene Dibromide	ND		5.0		ug/Kg			11/27/13 10:57	1
Dibromomethane	ND		10		ug/Kg			11/27/13 10:57	1
Dichlorodifluoromethane	ND		10		ug/Kg			11/27/13 10:57	1
1,1-Dichloroethane	ND		5.0		ug/Kg			11/27/13 10:57	1
1,2-Dichloroethane	ND		5.0		ug/Kg			11/27/13 10:57	1
1,1-Dichloroethene	ND		5.0		ug/Kg			11/27/13 10:57	1
cis-1,2-Dichloroethene	ND		5.0		ug/Kg			11/27/13 10:57	1
trans-1,2-Dichloroethene	ND		5.0		ug/Kg			11/27/13 10:57	1
1,2-Dichloropropane	ND		5.0		ug/Kg			11/27/13 10:57	1
cis-1,3-Dichloropropene	ND		5.0		ug/Kg			11/27/13 10:57	1
trans-1,3-Dichloropropene	ND		5.0		ug/Kg			11/27/13 10:57	1
Ethylbenzene	ND		5.0		ug/Kg			11/27/13 10:57	1
Hexachlorobutadiene	ND		5.0		ug/Kg			11/27/13 10:57	1
2-Hexanone	ND		50		ug/Kg			11/27/13 10:57	1
Isopropylbenzene	ND		5.0		ug/Kg			11/27/13 10:57	1
4-Isopropyltoluene	ND		5.0		ug/Kg			11/27/13 10:57	1
Methylene Chloride	ND		10		ug/Kg			11/27/13 10:57	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/Kg			11/27/13 10:57	1
Naphthalene	ND		10		ug/Kg			11/27/13 10:57	1
N-Propylbenzene	ND		5.0		ug/Kg			11/27/13 10:57	1
Styrene	ND		5.0		ug/Kg			11/27/13 10:57	1
1,1,1,2-Tetrachloroethane	ND		5.0		ug/Kg			11/27/13 10:57	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/Kg			11/27/13 10:57	1
Tetrachloroethene	ND		5.0		ug/Kg			11/27/13 10:57	1
Toluene	ND		5.0		ug/Kg			11/27/13 10:57	1
1,2,3-Trichlorobenzene	ND		5.0		ug/Kg			11/27/13 10:57	1
1,2,4-Trichlorobenzene	ND		5.0		ug/Kg			11/27/13 10:57	1
1,1,1-Trichloroethane	ND		5.0		ug/Kg			11/27/13 10:57	1
1,1,2-Trichloroethane	ND		5.0		ug/Kg			11/27/13 10:57	1
Trichloroethene	ND		5.0		ug/Kg			11/27/13 10:57	1
Trichlorofluoromethane	ND		5.0		ug/Kg			11/27/13 10:57	1
1,2,3-Trichloropropane	ND		5.0		ug/Kg			11/27/13 10:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/Kg			11/27/13 10:57	1
1,2,4-Trimethylbenzene	ND		5.0		ug/Kg			11/27/13 10:57	1
1,3,5-Trimethylbenzene	ND		5.0		ug/Kg			11/27/13 10:57	1
Vinyl acetate	ND		50		ug/Kg			11/27/13 10:57	1
Vinyl chloride	ND		5.0		ug/Kg			11/27/13 10:57	1
Xylenes, Total	ND		10		ug/Kg			11/27/13 10:57	1
2,2-Dichloropropane	ND		5.0		ug/Kg			11/27/13 10:57	1
Gasoline Range Organics (GRO) -C5-C12	ND		250		ug/Kg			11/27/13 10:57	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	92		45 - 131		11/27/13 10:57	1
1,2-Dichloroethane-d4 (Surr)	97		60 - 140		11/27/13 10:57	1
Toluene-d8 (Surr)	96		58 - 140		11/27/13 10:57	1

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

**Lab Sample ID: LCS 720-149110/13**

**Matrix: Solid**

**Analysis Batch: 149110**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	51.8		ug/Kg		104	70 - 144
Acetone	250	246		ug/Kg		98	30 - 162
Benzene	50.0	50.3		ug/Kg		101	70 - 130
Dichlorobromomethane	50.0	50.8		ug/Kg		102	70 - 131
Bromobenzene	50.0	49.8		ug/Kg		100	70 - 130
Chlorobromomethane	50.0	51.2		ug/Kg		102	70 - 130
Bromoform	50.0	54.5		ug/Kg		109	59 - 158
Bromomethane	50.0	49.0		ug/Kg		98	59 - 132
2-Butanone (MEK)	250	275		ug/Kg		110	53 - 124
n-Butylbenzene	50.0	51.2		ug/Kg		102	70 - 142
sec-Butylbenzene	50.0	50.3		ug/Kg		101	70 - 136
tert-Butylbenzene	50.0	50.2		ug/Kg		100	70 - 130
Carbon disulfide	50.0	49.8		ug/Kg		100	60 - 140
Carbon tetrachloride	50.0	54.2		ug/Kg		108	70 - 138
Chlorobenzene	50.0	50.9		ug/Kg		102	70 - 130
Chloroethane	50.0	47.2		ug/Kg		94	65 - 130
Chloroform	50.0	50.4		ug/Kg		101	77 - 127
Chloromethane	50.0	41.4		ug/Kg		83	55 - 140
2-Chlorotoluene	50.0	49.4		ug/Kg		99	70 - 138
4-Chlorotoluene	50.0	48.3		ug/Kg		97	70 - 136
Chlorodibromomethane	50.0	53.9		ug/Kg		108	70 - 146
1,2-Dichlorobenzene	50.0	49.7		ug/Kg		99	70 - 130
1,3-Dichlorobenzene	50.0	51.7		ug/Kg		103	70 - 131
1,4-Dichlorobenzene	50.0	52.0		ug/Kg		104	70 - 130
1,3-Dichloropropane	50.0	52.7		ug/Kg		105	70 - 140
1,1-Dichloropropene	50.0	55.4		ug/Kg		111	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	47.7		ug/Kg		95	60 - 145
Ethylene Dibromide	50.0	53.8		ug/Kg		108	70 - 140
Dibromomethane	50.0	52.3		ug/Kg		105	70 - 139
Dichlorodifluoromethane	50.0	38.2		ug/Kg		76	37 - 158
1,1-Dichloroethane	50.0	48.8		ug/Kg		98	70 - 130
1,2-Dichloroethane	50.0	50.6		ug/Kg		101	70 - 130
1,1-Dichloroethene	50.0	47.3		ug/Kg		95	76 - 122
cis-1,2-Dichloroethene	50.0	51.4		ug/Kg		103	70 - 138
trans-1,2-Dichloroethene	50.0	50.0		ug/Kg		100	67 - 130
1,2-Dichloropropane	50.0	49.2		ug/Kg		98	73 - 127
cis-1,3-Dichloropropene	50.0	53.1		ug/Kg		106	68 - 147
trans-1,3-Dichloropropene	50.0	52.7		ug/Kg		105	70 - 136
Ethylbenzene	50.0	51.3		ug/Kg		103	80 - 137
Hexachlorobutadiene	50.0	51.7		ug/Kg		103	70 - 132
2-Hexanone	250	257		ug/Kg		103	44 - 133
Isopropylbenzene	50.0	53.5		ug/Kg		107	88 - 128
4-Isopropyltoluene	50.0	50.5		ug/Kg		101	70 - 133
Methylene Chloride	50.0	55.9		ug/Kg		112	70 - 134
4-Methyl-2-pentanone (MIBK)	250	260		ug/Kg		104	60 - 160
Naphthalene	50.0	50.6		ug/Kg		101	60 - 147
N-Propylbenzene	50.0	51.1		ug/Kg		102	70 - 130
Styrene	50.0	53.0		ug/Kg		106	70 - 130

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

Lab Sample ID: LCS 720-149110/13

Matrix: Solid

Analysis Batch: 149110

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	52.5		ug/Kg		105	70 - 130
1,1,2,2-Tetrachloroethane	50.0	47.7		ug/Kg		95	70 - 146
Tetrachloroethene	50.0	56.9		ug/Kg		114	70 - 132
Toluene	50.0	50.4		ug/Kg		101	80 - 128
1,2,3-Trichlorobenzene	50.0	51.1		ug/Kg		102	60 - 140
1,2,4-Trichlorobenzene	50.0	52.7		ug/Kg		105	60 - 140
1,1,1-Trichloroethane	50.0	53.2		ug/Kg		106	70 - 130
1,1,2-Trichloroethane	50.0	52.7		ug/Kg		105	70 - 130
Trichloroethene	50.0	53.2		ug/Kg		106	70 - 133
Trichlorofluoromethane	50.0	45.9		ug/Kg		92	60 - 140
1,2,3-Trichloropropane	50.0	47.7		ug/Kg		95	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	56.3		ug/Kg		113	60 - 140
1,2,4-Trimethylbenzene	50.0	50.9		ug/Kg		102	70 - 130
1,3,5-Trimethylbenzene	50.0	51.1		ug/Kg		102	70 - 131
Vinyl acetate	50.0	69.1		ug/Kg		138	38 - 176
Vinyl chloride	50.0	43.0		ug/Kg		86	58 - 125
m-Xylene & p-Xylene	100	101		ug/Kg		101	70 - 146
o-Xylene	50.0	52.7		ug/Kg		105	70 - 140
2,2-Dichloropropane	50.0	51.5		ug/Kg		103	70 - 162

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	95		45 - 131
1,2-Dichloroethane-d4 (Surr)	96		60 - 140
Toluene-d8 (Surr)	97		58 - 140

Lab Sample ID: LCS 720-149110/7

Matrix: Solid

Analysis Batch: 149110

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C5-C12	1000	985		ug/Kg		98	61 - 128

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	97		45 - 131
1,2-Dichloroethane-d4 (Surr)	97		60 - 140
Toluene-d8 (Surr)	96		58 - 140

Lab Sample ID: LCSD 720-149110/14

Matrix: Solid

Analysis Batch: 149110

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	53.2		ug/Kg		106	70 - 144	3	20
Acetone	250	244		ug/Kg		98	30 - 162	1	30
Benzene	50.0	50.6		ug/Kg		101	70 - 130	1	20
Dichlorobromomethane	50.0	51.5		ug/Kg		103	70 - 131	1	20

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

Lab Sample ID: LCSD 720-149110/14

Matrix: Solid

Analysis Batch: 149110

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	RPD
	Added	Result	Qualifier				Limits		Limit
Bromobenzene	50.0	50.5		ug/Kg		101	70 - 130	1	20
Chlorobromomethane	50.0	51.6		ug/Kg		103	70 - 130	1	20
Bromoform	50.0	54.0		ug/Kg		108	59 - 158	1	20
Bromomethane	50.0	48.2		ug/Kg		96	59 - 132	2	20
2-Butanone (MEK)	250	284		ug/Kg		114	53 - 124	3	20
n-Butylbenzene	50.0	50.7		ug/Kg		101	70 - 142	1	20
sec-Butylbenzene	50.0	50.5		ug/Kg		101	70 - 136	0	20
tert-Butylbenzene	50.0	50.1		ug/Kg		100	70 - 130	0	20
Carbon disulfide	50.0	49.0		ug/Kg		98	60 - 140	2	20
Carbon tetrachloride	50.0	54.6		ug/Kg		109	70 - 138	1	20
Chlorobenzene	50.0	50.4		ug/Kg		101	70 - 130	1	20
Chloroethane	50.0	46.3		ug/Kg		93	65 - 130	2	20
Chloroform	50.0	51.1		ug/Kg		102	77 - 127	2	20
Chloromethane	50.0	41.4		ug/Kg		83	55 - 140	0	20
2-Chlorotoluene	50.0	49.8		ug/Kg		100	70 - 138	1	20
4-Chlorotoluene	50.0	48.7		ug/Kg		97	70 - 136	1	20
Chlorodibromomethane	50.0	55.0		ug/Kg		110	70 - 146	2	20
1,2-Dichlorobenzene	50.0	50.5		ug/Kg		101	70 - 130	2	20
1,3-Dichlorobenzene	50.0	51.9		ug/Kg		104	70 - 131	0	20
1,4-Dichlorobenzene	50.0	52.6		ug/Kg		105	70 - 130	1	20
1,3-Dichloropropane	50.0	53.9		ug/Kg		108	70 - 140	2	20
1,1-Dichloropropene	50.0	55.9		ug/Kg		112	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	49.3		ug/Kg		99	60 - 145	3	20
Ethylene Dibromide	50.0	55.2		ug/Kg		110	70 - 140	3	20
Dibromomethane	50.0	53.4		ug/Kg		107	70 - 139	2	20
Dichlorodifluoromethane	50.0	37.5		ug/Kg		75	37 - 158	2	20
1,1-Dichloroethane	50.0	49.5		ug/Kg		99	70 - 130	1	20
1,2-Dichloroethane	50.0	52.1		ug/Kg		104	70 - 130	3	20
1,1-Dichloroethene	50.0	47.3		ug/Kg		95	76 - 122	0	20
cis-1,2-Dichloroethene	50.0	52.4		ug/Kg		105	70 - 138	2	20
trans-1,2-Dichloroethene	50.0	50.6		ug/Kg		101	67 - 130	1	20
1,2-Dichloropropane	50.0	50.3		ug/Kg		101	73 - 127	2	20
cis-1,3-Dichloropropene	50.0	54.0		ug/Kg		108	68 - 147	2	20
trans-1,3-Dichloropropene	50.0	53.6		ug/Kg		107	70 - 136	2	20
Ethylbenzene	50.0	50.4		ug/Kg		101	80 - 137	2	20
Hexachlorobutadiene	50.0	51.7		ug/Kg		103	70 - 132	0	20
2-Hexanone	250	260		ug/Kg		104	44 - 133	1	20
Isopropylbenzene	50.0	52.5		ug/Kg		105	88 - 128	2	20
4-Isopropyltoluene	50.0	50.4		ug/Kg		101	70 - 133	0	20
Methylene Chloride	50.0	56.1		ug/Kg		112	70 - 134	0	20
4-Methyl-2-pentanone (MIBK)	250	264		ug/Kg		105	60 - 160	1	20
Naphthalene	50.0	51.5		ug/Kg		103	60 - 147	2	20
N-Propylbenzene	50.0	50.7		ug/Kg		101	70 - 130	1	20
Styrene	50.0	52.5		ug/Kg		105	70 - 130	1	20
1,1,1,2-Tetrachloroethane	50.0	52.8		ug/Kg		106	70 - 130	1	20
1,1,2,2-Tetrachloroethane	50.0	48.9		ug/Kg		98	70 - 146	2	20
Tetrachloroethene	50.0	57.4		ug/Kg		115	70 - 132	1	20
Toluene	50.0	49.8		ug/Kg		100	80 - 128	1	20

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

**Lab Sample ID: LCSD 720-149110/14**

**Matrix: Solid**

**Analysis Batch: 149110**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,3-Trichlorobenzene	50.0	52.3		ug/Kg		105	60 - 140	2	20
1,2,4-Trichlorobenzene	50.0	52.9		ug/Kg		106	60 - 140	0	20
1,1,1-Trichloroethane	50.0	53.4		ug/Kg		107	70 - 130	0	20
1,1,2-Trichloroethane	50.0	54.3		ug/Kg		109	70 - 130	3	20
Trichloroethene	50.0	53.4		ug/Kg		107	70 - 133	0	20
Trichlorofluoromethane	50.0	45.8		ug/Kg		92	60 - 140	0	20
1,2,3-Trichloropropane	50.0	48.8		ug/Kg		98	70 - 146	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	56.8		ug/Kg		114	60 - 140	1	20
1,2,4-Trimethylbenzene	50.0	51.5		ug/Kg		103	70 - 130	1	20
1,3,5-Trimethylbenzene	50.0	50.9		ug/Kg		102	70 - 131	0	20
Vinyl acetate	50.0	70.2		ug/Kg		140	38 - 176	2	20
Vinyl chloride	50.0	41.6		ug/Kg		83	58 - 125	3	20
m-Xylene & p-Xylene	100	99.4		ug/Kg		99	70 - 146	2	20
o-Xylene	50.0	52.2		ug/Kg		104	70 - 140	1	20
2,2-Dichloropropane	50.0	50.7		ug/Kg		101	70 - 162	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	94		45 - 131
1,2-Dichloroethane-d4 (Surr)	95		60 - 140
Toluene-d8 (Surr)	97		58 - 140

**Lab Sample ID: LCSD 720-149110/8**

**Matrix: Solid**

**Analysis Batch: 149110**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Gasoline Range Organics (GRO) -C5-C12	1000	1070		ug/Kg		107	61 - 128	8	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	94		45 - 131
1,2-Dichloroethane-d4 (Surr)	96		60 - 140
Toluene-d8 (Surr)	96		58 - 140

**Lab Sample ID: MB 720-149153/4**

**Matrix: Solid**

**Analysis Batch: 149153**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		5.0		ug/Kg			11/27/13 14:52	1
Acetone	ND		50		ug/Kg			11/27/13 14:52	1
Benzene	ND		5.0		ug/Kg			11/27/13 14:52	1
Dichlorobromomethane	ND		5.0		ug/Kg			11/27/13 14:52	1
Bromobenzene	ND		5.0		ug/Kg			11/27/13 14:52	1
Chlorobromomethane	ND		20		ug/Kg			11/27/13 14:52	1
Bromoform	ND		5.0		ug/Kg			11/27/13 14:52	1
Bromomethane	ND		10		ug/Kg			11/27/13 14:52	1

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

Lab Sample ID: MB 720-149153/4

Matrix: Solid

Analysis Batch: 149153

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
2-Butanone (MEK)	ND		50		ug/Kg			11/27/13 14:52	1
n-Butylbenzene	ND		5.0		ug/Kg			11/27/13 14:52	1
sec-Butylbenzene	ND		5.0		ug/Kg			11/27/13 14:52	1
tert-Butylbenzene	ND		5.0		ug/Kg			11/27/13 14:52	1
Carbon disulfide	ND		5.0		ug/Kg			11/27/13 14:52	1
Carbon tetrachloride	ND		5.0		ug/Kg			11/27/13 14:52	1
Chlorobenzene	ND		5.0		ug/Kg			11/27/13 14:52	1
Chloroethane	ND		10		ug/Kg			11/27/13 14:52	1
Chloroform	ND		5.0		ug/Kg			11/27/13 14:52	1
Chloromethane	ND		10		ug/Kg			11/27/13 14:52	1
2-Chlorotoluene	ND		5.0		ug/Kg			11/27/13 14:52	1
4-Chlorotoluene	ND		5.0		ug/Kg			11/27/13 14:52	1
Chlorodibromomethane	ND		5.0		ug/Kg			11/27/13 14:52	1
1,2-Dichlorobenzene	ND		5.0		ug/Kg			11/27/13 14:52	1
1,3-Dichlorobenzene	ND		5.0		ug/Kg			11/27/13 14:52	1
1,4-Dichlorobenzene	ND		5.0		ug/Kg			11/27/13 14:52	1
1,3-Dichloropropane	ND		5.0		ug/Kg			11/27/13 14:52	1
1,1-Dichloropropene	ND		5.0		ug/Kg			11/27/13 14:52	1
1,2-Dibromo-3-Chloropropane	ND		5.0		ug/Kg			11/27/13 14:52	1
Ethylene Dibromide	ND		5.0		ug/Kg			11/27/13 14:52	1
Dibromomethane	ND		10		ug/Kg			11/27/13 14:52	1
Dichlorodifluoromethane	ND		10		ug/Kg			11/27/13 14:52	1
1,1-Dichloroethane	ND		5.0		ug/Kg			11/27/13 14:52	1
1,2-Dichloroethane	ND		5.0		ug/Kg			11/27/13 14:52	1
1,1-Dichloroethene	ND		5.0		ug/Kg			11/27/13 14:52	1
cis-1,2-Dichloroethene	ND		5.0		ug/Kg			11/27/13 14:52	1
trans-1,2-Dichloroethene	ND		5.0		ug/Kg			11/27/13 14:52	1
1,2-Dichloropropane	ND		5.0		ug/Kg			11/27/13 14:52	1
cis-1,3-Dichloropropene	ND		5.0		ug/Kg			11/27/13 14:52	1
trans-1,3-Dichloropropene	ND		5.0		ug/Kg			11/27/13 14:52	1
Ethylbenzene	ND		5.0		ug/Kg			11/27/13 14:52	1
Hexachlorobutadiene	ND		5.0		ug/Kg			11/27/13 14:52	1
2-Hexanone	ND		50		ug/Kg			11/27/13 14:52	1
Isopropylbenzene	ND		5.0		ug/Kg			11/27/13 14:52	1
4-Isopropyltoluene	ND		5.0		ug/Kg			11/27/13 14:52	1
Methylene Chloride	ND		10		ug/Kg			11/27/13 14:52	1
4-Methyl-2-pentanone (MIBK)	ND		50		ug/Kg			11/27/13 14:52	1
Naphthalene	ND		10		ug/Kg			11/27/13 14:52	1
N-Propylbenzene	ND		5.0		ug/Kg			11/27/13 14:52	1
Styrene	ND		5.0		ug/Kg			11/27/13 14:52	1
1,1,1,2-Tetrachloroethane	ND		5.0		ug/Kg			11/27/13 14:52	1
1,1,2,2-Tetrachloroethane	ND		5.0		ug/Kg			11/27/13 14:52	1
Tetrachloroethene	ND		5.0		ug/Kg			11/27/13 14:52	1
Toluene	ND		5.0		ug/Kg			11/27/13 14:52	1
1,2,3-Trichlorobenzene	ND		5.0		ug/Kg			11/27/13 14:52	1
1,2,4-Trichlorobenzene	ND		5.0		ug/Kg			11/27/13 14:52	1
1,1,1-Trichloroethane	ND		5.0		ug/Kg			11/27/13 14:52	1
1,1,2-Trichloroethane	ND		5.0		ug/Kg			11/27/13 14:52	1

TestAmerica Pleasanton



# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

**Lab Sample ID: MB 720-149153/4**

**Matrix: Solid**

**Analysis Batch: 149153**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		5.0		ug/Kg			11/27/13 14:52	1
Trichlorofluoromethane	ND		5.0		ug/Kg			11/27/13 14:52	1
1,2,3-Trichloropropane	ND		5.0		ug/Kg			11/27/13 14:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0		ug/Kg			11/27/13 14:52	1
1,2,4-Trimethylbenzene	ND		5.0		ug/Kg			11/27/13 14:52	1
1,3,5-Trimethylbenzene	ND		5.0		ug/Kg			11/27/13 14:52	1
Vinyl acetate	ND		50		ug/Kg			11/27/13 14:52	1
Vinyl chloride	ND		5.0		ug/Kg			11/27/13 14:52	1
Xylenes, Total	ND		10		ug/Kg			11/27/13 14:52	1
2,2-Dichloropropane	ND		5.0		ug/Kg			11/27/13 14:52	1
Gasoline Range Organics (GRO) -C5-C12	ND		250		ug/Kg			11/27/13 14:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	104		45 - 131		11/27/13 14:52	1
1,2-Dichloroethane-d4 (Surr)	94		60 - 140		11/27/13 14:52	1
Toluene-d8 (Surr)	101		58 - 140		11/27/13 14:52	1

**Lab Sample ID: LCS 720-149153/5**

**Matrix: Solid**

**Analysis Batch: 149153**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	50.0	51.6		ug/Kg		103	70 - 144
Acetone	250	251		ug/Kg		100	30 - 162
Benzene	50.0	49.5		ug/Kg		99	70 - 130
Dichlorobromomethane	50.0	49.5		ug/Kg		99	70 - 131
Bromobenzene	50.0	54.5		ug/Kg		109	70 - 130
Chlorobromomethane	50.0	48.5		ug/Kg		97	70 - 130
Bromoform	50.0	57.3		ug/Kg		115	59 - 158
Bromomethane	50.0	42.5		ug/Kg		85	59 - 132
2-Butanone (MEK)	250	257		ug/Kg		103	53 - 124
n-Butylbenzene	50.0	58.3		ug/Kg		117	70 - 142
sec-Butylbenzene	50.0	56.1		ug/Kg		112	70 - 136
tert-Butylbenzene	50.0	55.1		ug/Kg		110	70 - 130
Carbon disulfide	50.0	50.7		ug/Kg		101	60 - 140
Carbon tetrachloride	50.0	47.2		ug/Kg		94	70 - 138
Chlorobenzene	50.0	55.6		ug/Kg		111	70 - 130
Chloroethane	50.0	40.4		ug/Kg		81	65 - 130
Chloroform	50.0	48.3		ug/Kg		97	77 - 127
Chloromethane	50.0	47.3		ug/Kg		95	55 - 140
2-Chlorotoluene	50.0	56.2		ug/Kg		112	70 - 138
4-Chlorotoluene	50.0	55.6		ug/Kg		111	70 - 136
Chlorodibromomethane	50.0	53.4		ug/Kg		107	70 - 146
1,2-Dichlorobenzene	50.0	54.6		ug/Kg		109	70 - 130
1,3-Dichlorobenzene	50.0	55.5		ug/Kg		111	70 - 131
1,4-Dichlorobenzene	50.0	55.8		ug/Kg		112	70 - 130
1,3-Dichloropropane	50.0	55.6		ug/Kg		111	70 - 140

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

**Lab Sample ID: LCS 720-149153/5**

**Matrix: Solid**

**Analysis Batch: 149153**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	50.0	53.6		ug/Kg		107	70 - 130
1,2-Dibromo-3-Chloropropane	50.0	54.7		ug/Kg		109	60 - 145
Ethylene Dibromide	50.0	57.8		ug/Kg		116	70 - 140
Dibromomethane	50.0	53.2		ug/Kg		106	70 - 139
Dichlorodifluoromethane	50.0	36.4		ug/Kg		73	37 - 158
1,1-Dichloroethane	50.0	48.9		ug/Kg		98	70 - 130
1,2-Dichloroethane	50.0	47.6		ug/Kg		95	70 - 130
1,1-Dichloroethene	50.0	39.9		ug/Kg		80	76 - 122
cis-1,2-Dichloroethene	50.0	50.9		ug/Kg		102	70 - 138
trans-1,2-Dichloroethene	50.0	47.3		ug/Kg		95	67 - 130
1,2-Dichloropropane	50.0	52.7		ug/Kg		105	73 - 127
cis-1,3-Dichloropropene	50.0	55.8		ug/Kg		112	68 - 147
trans-1,3-Dichloropropene	50.0	58.0		ug/Kg		116	70 - 136
Ethylbenzene	50.0	55.7		ug/Kg		111	80 - 137
Hexachlorobutadiene	50.0	44.4		ug/Kg		89	70 - 132
2-Hexanone	250	255		ug/Kg		102	44 - 133
Isopropylbenzene	50.0	59.2		ug/Kg		118	88 - 128
4-Isopropyltoluene	50.0	54.3		ug/Kg		109	70 - 133
Methylene Chloride	50.0	51.2		ug/Kg		102	70 - 134
4-Methyl-2-pentanone (MIBK)	250	248		ug/Kg		99	60 - 160
Naphthalene	50.0	51.5		ug/Kg		103	60 - 147
N-Propylbenzene	50.0	57.8		ug/Kg		116	70 - 130
Styrene	50.0	59.0		ug/Kg		118	70 - 130
1,1,1,2-Tetrachloroethane	50.0	54.2		ug/Kg		108	70 - 130
1,1,1,2,2-Tetrachloroethane	50.0	55.9		ug/Kg		112	70 - 146
Tetrachloroethene	50.0	54.8		ug/Kg		110	70 - 132
Toluene	50.0	53.3		ug/Kg		107	80 - 128
1,2,3-Trichlorobenzene	50.0	49.1		ug/Kg		98	60 - 140
1,2,4-Trichlorobenzene	50.0	50.0		ug/Kg		100	60 - 140
1,1,1-Trichloroethane	50.0	47.5		ug/Kg		95	70 - 130
1,1,2-Trichloroethane	50.0	57.0		ug/Kg		114	70 - 130
Trichloroethene	50.0	52.4		ug/Kg		105	70 - 133
Trichlorofluoromethane	50.0	45.1		ug/Kg		90	60 - 140
1,2,3-Trichloropropane	50.0	55.3		ug/Kg		111	70 - 146
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	47.6		ug/Kg		95	60 - 140
1,2,4-Trimethylbenzene	50.0	57.3		ug/Kg		115	70 - 130
1,3,5-Trimethylbenzene	50.0	55.1		ug/Kg		110	70 - 131
Vinyl acetate	50.0	59.8		ug/Kg		120	38 - 176
Vinyl chloride	50.0	47.5		ug/Kg		95	58 - 125
m-Xylene & p-Xylene	100	112		ug/Kg		112	70 - 146
o-Xylene	50.0	58.5		ug/Kg		117	70 - 140
2,2-Dichloropropane	50.0	49.6		ug/Kg		99	70 - 162

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	107		45 - 131
1,2-Dichloroethane-d4 (Surr)	93		60 - 140
Toluene-d8 (Surr)	102		58 - 140

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

**Lab Sample ID: LCS 720-149153/7**

**Matrix: Solid**

**Analysis Batch: 149153**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Gasoline Range Organics (GRO) -C5-C12	1000	902		ug/Kg		90	61 - 128

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene	108		45 - 131
1,2-Dichloroethane-d4 (Surr)	100		60 - 140
Toluene-d8 (Surr)	102		58 - 140

**Lab Sample ID: LCSD 720-149153/6**

**Matrix: Solid**

**Analysis Batch: 149153**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	50.0	52.9		ug/Kg		106	70 - 144	3	20
Acetone	250	253		ug/Kg		101	30 - 162	1	30
Benzene	50.0	49.6		ug/Kg		99	70 - 130	0	20
Dichlorobromomethane	50.0	50.1		ug/Kg		100	70 - 131	1	20
Bromobenzene	50.0	50.7		ug/Kg		101	70 - 130	7	20
Chlorobromomethane	50.0	48.8		ug/Kg		98	70 - 130	1	20
Bromoform	50.0	53.0		ug/Kg		106	59 - 158	8	20
Bromomethane	50.0	42.0		ug/Kg		84	59 - 132	1	20
2-Butanone (MEK)	250	264		ug/Kg		106	53 - 124	3	20
n-Butylbenzene	50.0	55.4		ug/Kg		111	70 - 142	5	20
sec-Butylbenzene	50.0	53.0		ug/Kg		106	70 - 136	6	20
tert-Butylbenzene	50.0	51.5		ug/Kg		103	70 - 130	7	20
Carbon disulfide	50.0	50.5		ug/Kg		101	60 - 140	0	20
Carbon tetrachloride	50.0	46.2		ug/Kg		92	70 - 138	2	20
Chlorobenzene	50.0	52.8		ug/Kg		106	70 - 130	5	20
Chloroethane	50.0	38.6		ug/Kg		77	65 - 130	5	20
Chloroform	50.0	48.9		ug/Kg		98	77 - 127	1	20
Chloromethane	50.0	44.9		ug/Kg		90	55 - 140	5	20
2-Chlorotoluene	50.0	52.8		ug/Kg		106	70 - 138	6	20
4-Chlorotoluene	50.0	52.1		ug/Kg		104	70 - 136	6	20
Chlorodibromomethane	50.0	52.0		ug/Kg		104	70 - 146	3	20
1,2-Dichlorobenzene	50.0	52.5		ug/Kg		105	70 - 130	4	20
1,3-Dichlorobenzene	50.0	53.2		ug/Kg		106	70 - 131	4	20
1,4-Dichlorobenzene	50.0	52.5		ug/Kg		105	70 - 130	6	20
1,3-Dichloropropane	50.0	55.3		ug/Kg		111	70 - 140	1	20
1,1-Dichloropropene	50.0	54.0		ug/Kg		108	70 - 130	1	20
1,2-Dibromo-3-Chloropropane	50.0	52.3		ug/Kg		105	60 - 145	5	20
Ethylene Dibromide	50.0	56.7		ug/Kg		113	70 - 140	2	20
Dibromomethane	50.0	53.5		ug/Kg		107	70 - 139	0	20
Dichlorodifluoromethane	50.0	35.9		ug/Kg		72	37 - 158	1	20
1,1-Dichloroethane	50.0	48.6		ug/Kg		97	70 - 130	1	20
1,2-Dichloroethane	50.0	48.1		ug/Kg		96	70 - 130	1	20
1,1-Dichloroethane	50.0	38.3		ug/Kg		77	76 - 122	4	20
cis-1,2-Dichloroethane	50.0	50.2		ug/Kg		100	70 - 138	1	20
trans-1,2-Dichloroethane	50.0	46.6		ug/Kg		93	67 - 130	2	20

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

**Lab Sample ID: LCSD 720-149153/6**

**Matrix: Solid**

**Analysis Batch: 149153**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD
							Limits		
1,2-Dichloropropane	50.0	52.6		ug/Kg		105	73 - 127	0	20
cis-1,3-Dichloropropene	50.0	55.1		ug/Kg		110	68 - 147	1	20
trans-1,3-Dichloropropene	50.0	58.6		ug/Kg		117	70 - 136	1	20
Ethylbenzene	50.0	53.5		ug/Kg		107	80 - 137	4	20
Hexachlorobutadiene	50.0	44.7		ug/Kg		89	70 - 132	1	20
2-Hexanone	250	257		ug/Kg		103	44 - 133	1	20
Isopropylbenzene	50.0	55.2		ug/Kg		110	88 - 128	7	20
4-Isopropyltoluene	50.0	52.3		ug/Kg		105	70 - 133	4	20
Methylene Chloride	50.0	50.4		ug/Kg		101	70 - 134	2	20
4-Methyl-2-pentanone (MIBK)	250	257		ug/Kg		103	60 - 160	4	20
Naphthalene	50.0	51.0		ug/Kg		102	60 - 147	1	20
N-Propylbenzene	50.0	53.9		ug/Kg		108	70 - 130	7	20
Styrene	50.0	55.8		ug/Kg		112	70 - 130	6	20
1,1,1,2-Tetrachloroethane	50.0	51.1		ug/Kg		102	70 - 130	6	20
1,1,1,2-Tetrachloroethane	50.0	52.4		ug/Kg		105	70 - 146	7	20
Tetrachloroethene	50.0	54.4		ug/Kg		109	70 - 132	1	20
Toluene	50.0	52.1		ug/Kg		104	80 - 128	2	20
1,2,3-Trichlorobenzene	50.0	48.5		ug/Kg		97	60 - 140	1	20
1,2,4-Trichlorobenzene	50.0	50.2		ug/Kg		100	60 - 140	0	20
1,1,1-Trichloroethane	50.0	46.5		ug/Kg		93	70 - 130	2	20
1,1,2-Trichloroethane	50.0	56.0		ug/Kg		112	70 - 130	2	20
Trichloroethene	50.0	51.7		ug/Kg		103	70 - 133	1	20
Trichlorofluoromethane	50.0	44.3		ug/Kg		89	60 - 140	2	20
1,2,3-Trichloropropane	50.0	51.4		ug/Kg		103	70 - 146	7	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	44.8		ug/Kg		90	60 - 140	6	20
1,2,4-Trimethylbenzene	50.0	54.8		ug/Kg		110	70 - 130	4	20
1,3,5-Trimethylbenzene	50.0	52.1		ug/Kg		104	70 - 131	6	20
Vinyl acetate	50.0	61.5		ug/Kg		123	38 - 176	3	20
Vinyl chloride	50.0	47.2		ug/Kg		94	58 - 125	1	20
m-Xylene & p-Xylene	100	107		ug/Kg		107	70 - 146	4	20
o-Xylene	50.0	55.5		ug/Kg		111	70 - 140	5	20
2,2-Dichloropropane	50.0	47.1		ug/Kg		94	70 - 162	5	20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene	105		45 - 131
1,2-Dichloroethane-d4 (Surr)	94		60 - 140
Toluene-d8 (Surr)	102		58 - 140

**Lab Sample ID: LCSD 720-149153/8**

**Matrix: Solid**

**Analysis Batch: 149153**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.	RPD	RPD
							Limits		
Gasoline Range Organics (GRO) -C5-C12	1000	880		ug/Kg		88	61 - 128	3	20

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

Lab Sample ID: LCSD 720-149153/8

Matrix: Solid

Analysis Batch: 149153

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene	105		45 - 131
1,2-Dichloroethane-d4 (Surr)	98		60 - 140
Toluene-d8 (Surr)	102		58 - 140

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

Lab Sample ID: MB 720-149305/1-A

Matrix: Solid

Analysis Batch: 149316

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 149305

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		5.0		ug/Kg		12/02/13 14:02	12/02/13 21:33	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	63		33 - 120				12/02/13 14:02	12/02/13 21:33	1
Terphenyl-d14	82		35 - 146				12/02/13 14:02	12/02/13 21:33	1

Lab Sample ID: LCS 720-149305/2-A

Matrix: Solid

Analysis Batch: 149316

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 149305

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	332	235		ug/Kg		71	46 - 120
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
2-Fluorobiphenyl	73		33 - 120				
Terphenyl-d14	85		35 - 146				

Lab Sample ID: LCSD 720-149305/3-A

Matrix: Solid

Analysis Batch: 149316

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 149305

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Naphthalene	329	243		ug/Kg		74	46 - 120	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
2-Fluorobiphenyl	75		33 - 120						
Terphenyl-d14	85		35 - 146						

Lab Sample ID: 720-54027-4 MS

Matrix: Solid

Analysis Batch: 149316

Client Sample ID: TS3-S1(5.0)

Prep Type: Total/NA

Prep Batch: 149305

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Naphthalene	ND		332	243		ug/Kg		73	32 - 120

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

**Lab Sample ID: 720-54027-4 MS**

**Matrix: Solid**

**Analysis Batch: 149316**

**Client Sample ID: TS3-S1(5.0)**

**Prep Type: Total/NA**

**Prep Batch: 149305**

<i>Surrogate</i>	<i>MS</i> %Recovery	<i>MS</i> Qualifier	<i>Limits</i>
2-Fluorobiphenyl	72		33 - 120
Terphenyl-d14	87		35 - 146

**Lab Sample ID: 720-54027-4 MSD**

**Matrix: Solid**

**Analysis Batch: 149316**

**Client Sample ID: TS3-S1(5.0)**

**Prep Type: Total/NA**

**Prep Batch: 149305**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Naphthalene	ND		331	242		ug/Kg		73	32 - 120	0	20

<i>Surrogate</i>	<i>MSD</i> %Recovery	<i>MSD</i> Qualifier	<i>Limits</i>
2-Fluorobiphenyl	72		33 - 120
Terphenyl-d14	88		35 - 146

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

**Lab Sample ID: MB 720-149039/1-A**

**Matrix: Solid**

**Analysis Batch: 149114**

**Client Sample ID: Method Blank**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 149039**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		0.99		mg/Kg		11/26/13 11:16	11/27/13 11:30	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		11/26/13 11:16	11/27/13 11:30	1

<i>Surrogate</i>	<i>MB</i> %Recovery	<i>MB</i> Qualifier	<i>Limits</i>	Prepared	Analyzed	Dil Fac
Capric Acid (Surr)	0		0 - 1	11/26/13 11:16	11/27/13 11:30	1
p-Terphenyl	101		38 - 148	11/26/13 11:16	11/27/13 11:30	1

**Lab Sample ID: LCS 720-149039/2-A**

**Matrix: Solid**

**Analysis Batch: 149114**

**Client Sample ID: Lab Control Sample**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 149039**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics [C10-C28]	82.5	75.1		mg/Kg		91	36 - 112

<i>Surrogate</i>	<i>LCS</i> %Recovery	<i>LCS</i> Qualifier	<i>Limits</i>
p-Terphenyl	117		38 - 148

**Lab Sample ID: LCSD 720-149039/3-A**

**Matrix: Solid**

**Analysis Batch: 149114**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 149039**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics [C10-C28]	83.2	77.5		mg/Kg		93	36 - 112	3	35

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# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

**Lab Sample ID: LCSD 720-149039/3-A**  
**Matrix: Solid**  
**Analysis Batch: 149114**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 149039**

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
p-Terphenyl	112		38 - 148

**Lab Sample ID: 720-54027-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 149113**

**Client Sample ID: TS1-B1**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 149039**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
Diesel Range Organics [C10-C28]	52		83.3	125		mg/Kg		88	50 - 150

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
p-Terphenyl	84		38 - 148

**Lab Sample ID: 720-54027-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 149113**

**Client Sample ID: TS1-B1**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 149039**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec. Limits	RPD	
				Result	Qualifier					RPD	Limit
Diesel Range Organics [C10-C28]	52		82.9	121		mg/Kg		83	50 - 150	3	30

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
p-Terphenyl	81		38 - 148

**Lab Sample ID: MB 720-149125/1-A**  
**Matrix: Solid**  
**Analysis Batch: 149113**

**Client Sample ID: Method Blank**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 149125**

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics [C10-C28]	ND		0.99		mg/Kg		11/27/13 08:29	11/27/13 23:03	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		11/27/13 08:29	11/27/13 23:03	1

	MB	MB		Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			
Capric Acid (Surr)	0.001		0 - 1	11/27/13 08:29	11/27/13 23:03	1
p-Terphenyl	106		38 - 148	11/27/13 08:29	11/27/13 23:03	1

**Lab Sample ID: LCS 720-149125/2-A**  
**Matrix: Solid**  
**Analysis Batch: 149113**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 149125**

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
Diesel Range Organics [C10-C28]	83.2	69.0		mg/Kg		83	36 - 112

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
p-Terphenyl	105		38 - 148

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

**Lab Sample ID: LCSD 720-149125/3-A**

**Matrix: Solid**

**Analysis Batch: 149113**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 149125**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Diesel Range Organics [C10-C28]	83.3	70.2		mg/Kg		84	36 - 112	2	35
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
<i>p-Terphenyl</i>	107		38 - 148						

**Lab Sample ID: MB 720-149227/1-A**

**Matrix: Solid**

**Analysis Batch: 149188**

**Client Sample ID: Method Blank**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 149227**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	ND		1.0		mg/Kg		11/29/13 14:12	11/30/13 01:52	1
Motor Oil Range Organics [C24-C36]	ND		50		mg/Kg		11/29/13 14:12	11/30/13 01:52	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>MB Qualifier</b>	<b>Limits</b>						
<i>Capric Acid (Surr)</i>	0.002		0 - 1						
<i>p-Terphenyl</i>	112		38 - 148						

**Lab Sample ID: LCS 720-149227/2-A**

**Matrix: Solid**

**Analysis Batch: 149188**

**Client Sample ID: Lab Control Sample**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 149227**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Diesel Range Organics [C10-C28]	82.8	59.7		mg/Kg		72	36 - 112		
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>						
<i>p-Terphenyl</i>	100		38 - 148						

**Lab Sample ID: LCSD 720-149227/3-A**

**Matrix: Solid**

**Analysis Batch: 149188**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 149227**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Diesel Range Organics [C10-C28]	82.8	60.1		mg/Kg		73	36 - 112	1	35
<b>Surrogate</b>	<b>%Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
<i>p-Terphenyl</i>	100		38 - 148						

**Lab Sample ID: 720-54027-22 MS**

**Matrix: Solid**

**Analysis Batch: 149188**

**Client Sample ID: LF-SPOILSC COMP**

**Prep Type: Silica Gel Cleanup**

**Prep Batch: 149227**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Diesel Range Organics [C10-C28]	20		82.6	64.7		mg/Kg		54	50 - 150		

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# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

**Lab Sample ID: 720-54027-22 MS**  
**Matrix: Solid**  
**Analysis Batch: 149188**

**Client Sample ID: LF-SPOILSC COMP**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 149227**

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
p-Terphenyl	90		38 - 148

**Lab Sample ID: 720-54027-22 MSD**  
**Matrix: Solid**  
**Analysis Batch: 149188**

**Client Sample ID: LF-SPOILSC COMP**  
**Prep Type: Silica Gel Cleanup**  
**Prep Batch: 149227**

Analyte	Sample	Sample	Spike	MSD MSD		Unit	D	%Rec	%Rec.		RPD	Limit
	Result	Qualifier		Result	Qualifier				Limits	RPD		
Diesel Range Organics [C10-C28]	20		83.2	70.7		mg/Kg		61	50 - 150	9	30	

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
p-Terphenyl	78		38 - 148

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 720-149178/1-A**  
**Matrix: Solid**  
**Analysis Batch: 149384**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 149178**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	ND		0.50		mg/Kg		11/27/13 20:36	12/03/13 13:30	1
Arsenic	ND		1.0		mg/Kg		11/27/13 20:36	12/03/13 13:30	1
Barium	ND		0.50		mg/Kg		11/27/13 20:36	12/03/13 13:30	1
Beryllium	ND		0.10		mg/Kg		11/27/13 20:36	12/03/13 13:30	1
Cadmium	ND		0.13		mg/Kg		11/27/13 20:36	12/03/13 13:30	1
Chromium	ND		0.50		mg/Kg		11/27/13 20:36	12/03/13 13:30	1
Cobalt	ND		0.20		mg/Kg		11/27/13 20:36	12/03/13 13:30	1
Copper	ND		1.5		mg/Kg		11/27/13 20:36	12/03/13 13:30	1
Lead	ND		0.50		mg/Kg		11/27/13 20:36	12/03/13 13:30	1
Molybdenum	ND		0.50		mg/Kg		11/27/13 20:36	12/03/13 13:30	1
Nickel	ND		0.50		mg/Kg		11/27/13 20:36	12/03/13 13:30	1
Selenium	ND		1.0		mg/Kg		11/27/13 20:36	12/03/13 13:30	1
Silver	ND		0.25		mg/Kg		11/27/13 20:36	12/03/13 13:30	1
Thallium	ND		0.50		mg/Kg		11/27/13 20:36	12/03/13 13:30	1
Vanadium	ND		0.50		mg/Kg		11/27/13 20:36	12/03/13 13:30	1
Zinc	ND		1.5		mg/Kg		11/27/13 20:36	12/03/13 13:30	1

**Lab Sample ID: LCS 720-149178/2-A**  
**Matrix: Solid**  
**Analysis Batch: 149384**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 149178**

Analyte	Spike	LCS LCS		Unit	D	%Rec	%Rec.	
		Added	Result				Qualifier	Limits
Antimony	50.0	51.4		mg/Kg		103	80 - 120	
Arsenic	50.0	49.8		mg/Kg		100	80 - 120	
Barium	50.0	51.6		mg/Kg		103	80 - 120	
Beryllium	50.0	50.3		mg/Kg		101	80 - 120	
Cadmium	50.0	51.9		mg/Kg		104	80 - 120	
Chromium	50.0	49.1		mg/Kg		98	80 - 120	

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

Lab Sample ID: LCS 720-149178/2-A

Matrix: Solid

Analysis Batch: 149384

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 149178

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	50.0	52.4		mg/Kg		105	80 - 120
Copper	50.0	50.8		mg/Kg		102	80 - 120
Lead	50.0	51.4		mg/Kg		103	80 - 120
Molybdenum	50.0	51.5		mg/Kg		103	80 - 120
Nickel	50.0	51.0		mg/Kg		102	80 - 120
Selenium	50.0	48.7		mg/Kg		97	80 - 120
Silver	25.0	22.9		mg/Kg		92	80 - 120
Thallium	50.0	52.3		mg/Kg		105	80 - 120
Vanadium	50.0	50.2		mg/Kg		100	80 - 120
Zinc	50.0	50.6		mg/Kg		101	80 - 120

Lab Sample ID: LCSD 720-149178/3-A

Matrix: Solid

Analysis Batch: 149384

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 149178

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	50.0	50.9		mg/Kg		102	80 - 120	1	20
Arsenic	50.0	49.7		mg/Kg		99	80 - 120	0	20
Barium	50.0	52.6		mg/Kg		105	80 - 120	2	20
Beryllium	50.0	50.9		mg/Kg		102	80 - 120	1	20
Cadmium	50.0	51.6		mg/Kg		103	80 - 120	1	20
Chromium	50.0	49.6		mg/Kg		99	80 - 120	1	20
Cobalt	50.0	52.1		mg/Kg		104	80 - 120	1	20
Copper	50.0	50.8		mg/Kg		102	80 - 120	0	20
Lead	50.0	51.1		mg/Kg		102	80 - 120	1	20
Molybdenum	50.0	51.3		mg/Kg		103	80 - 120	0	20
Nickel	50.0	50.7		mg/Kg		101	80 - 120	0	20
Selenium	50.0	48.8		mg/Kg		98	80 - 120	0	20
Silver	25.0	23.1		mg/Kg		92	80 - 120	0	20
Thallium	50.0	51.7		mg/Kg		103	80 - 120	1	20
Vanadium	50.0	50.5		mg/Kg		101	80 - 120	0	20
Zinc	50.0	50.4		mg/Kg		101	80 - 120	0	20

## Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 720-149211/1-A

Matrix: Solid

Analysis Batch: 149264

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 149211

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.010		mg/Kg		11/29/13 11:52	11/30/13 12:11	1

Lab Sample ID: LCS 720-149211/2-A

Matrix: Solid

Analysis Batch: 149264

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 149211

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.833	0.883		mg/Kg		106	80 - 120

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

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

Lab Sample ID: LCSD 720-149211/3-A  
Matrix: Solid  
Analysis Batch: 149264

Client Sample ID: Lab Control Sample Dup  
Prep Type: Total/NA  
Prep Batch: 149211

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.833	0.883		mg/Kg		106	80 - 120	0	20

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# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

## GC/MS VOA

### Analysis Batch: 149057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-17	LF-SPOILSB COMP	Total/NA	Solid	8260B	149086
LCS 720-149057/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-149057/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-149057/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-149057/8	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 720-149057/4	Method Blank	Total/NA	Solid	8260B	

### Prep Batch: 149086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-17	LF-SPOILSB COMP	Total/NA	Solid	5030B	

### Analysis Batch: 149110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-22	LF-SPOILSC COMP	Total/NA	Solid	8260B	149152
720-54027-27	SL-SPOILS COMP	Total/NA	Solid	8260B	149152
LCS 720-149110/13	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-149110/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-149110/14	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-149110/8	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 720-149110/4	Method Blank	Total/NA	Solid	8260B	

### Prep Batch: 149152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-22	LF-SPOILSC COMP	Total/NA	Solid	5030B	
720-54027-27	SL-SPOILS COMP	Total/NA	Solid	5030B	

### Analysis Batch: 149153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-12	LF-SPOILSA COMP	Total/NA	Solid	8260B	149169
LCS 720-149153/5	Lab Control Sample	Total/NA	Solid	8260B	
LCS 720-149153/7	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 720-149153/6	Lab Control Sample Dup	Total/NA	Solid	8260B	
LCSD 720-149153/8	Lab Control Sample Dup	Total/NA	Solid	8260B	
MB 720-149153/4	Method Blank	Total/NA	Solid	8260B	

### Prep Batch: 149169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-12	LF-SPOILSA COMP	Total/NA	Solid	5030B	

## GC/MS Semi VOA

### Prep Batch: 149305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-4	TS3-S1(5.0)	Total/NA	Solid	3546	
720-54027-4 MS	TS3-S1(5.0)	Total/NA	Solid	3546	
720-54027-4 MSD	TS3-S1(5.0)	Total/NA	Solid	3546	
LCS 720-149305/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 720-149305/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 720-149305/1-A	Method Blank	Total/NA	Solid	3546	

TestAmerica Pleasanton

# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

## GC/MS Semi VOA (Continued)

### Analysis Batch: 149316

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-4	TS3-S1(5.0)	Total/NA	Solid	8270C SIM	149305
720-54027-4 MS	TS3-S1(5.0)	Total/NA	Solid	8270C SIM	149305
720-54027-4 MSD	TS3-S1(5.0)	Total/NA	Solid	8270C SIM	149305
LCS 720-149305/2-A	Lab Control Sample	Total/NA	Solid	8270C SIM	149305
LCSD 720-149305/3-A	Lab Control Sample Dup	Total/NA	Solid	8270C SIM	149305
MB 720-149305/1-A	Method Blank	Total/NA	Solid	8270C SIM	149305

## GC Semi VOA

### Prep Batch: 149039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-1	TS1-B1	Silica Gel Cleanup	Solid	3546	
720-54027-1 MS	TS1-B1	Silica Gel Cleanup	Solid	3546	
720-54027-1 MSD	TS1-B1	Silica Gel Cleanup	Solid	3546	
720-54027-2	TS2-B1	Silica Gel Cleanup	Solid	3546	
720-54027-3	TS3-B1	Silica Gel Cleanup	Solid	3546	
720-54027-4	TS3-S1(5.0)	Silica Gel Cleanup	Solid	3546	
720-54027-5	TS4-B1	Silica Gel Cleanup	Solid	3546	
LCS 720-149039/2-A	Lab Control Sample	Silica Gel Cleanup	Solid	3546	
LCSD 720-149039/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Solid	3546	
MB 720-149039/1-A	Method Blank	Silica Gel Cleanup	Solid	3546	

### Analysis Batch: 149113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-1	TS1-B1	Silica Gel Cleanup	Solid	8015B	149039
720-54027-1 MS	TS1-B1	Silica Gel Cleanup	Solid	8015B	149039
720-54027-1 MSD	TS1-B1	Silica Gel Cleanup	Solid	8015B	149039
720-54027-2	TS2-B1	Silica Gel Cleanup	Solid	8015B	149039
720-54027-3	TS3-B1	Silica Gel Cleanup	Solid	8015B	149039
720-54027-4	TS3-S1(5.0)	Silica Gel Cleanup	Solid	8015B	149039
720-54027-5	TS4-B1	Silica Gel Cleanup	Solid	8015B	149039
LCS 720-149125/2-A	Lab Control Sample	Silica Gel Cleanup	Solid	8015B	149125
LCSD 720-149125/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Solid	8015B	149125
MB 720-149125/1-A	Method Blank	Silica Gel Cleanup	Solid	8015B	149125

### Analysis Batch: 149114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 720-149039/2-A	Lab Control Sample	Silica Gel Cleanup	Solid	8015B	149039
LCSD 720-149039/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Solid	8015B	149039
MB 720-149039/1-A	Method Blank	Silica Gel Cleanup	Solid	8015B	149039

### Prep Batch: 149125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-6	CS-B10	Silica Gel Cleanup	Solid	3546	
720-54027-7	CS-B11	Silica Gel Cleanup	Solid	3546	
720-54027-12	LF-SPOILSA COMP	Silica Gel Cleanup	Solid	3546	
720-54027-17	LF-SPOILSB COMP	Silica Gel Cleanup	Solid	3546	
LCS 720-149125/2-A	Lab Control Sample	Silica Gel Cleanup	Solid	3546	
LCSD 720-149125/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Solid	3546	
MB 720-149125/1-A	Method Blank	Silica Gel Cleanup	Solid	3546	

TestAmerica Pleasanton

# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

## GC Semi VOA (Continued)

### Analysis Batch: 149188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-22	LF-SPOILSC COMP	Silica Gel Cleanup	Solid	8015B	149227
720-54027-22 MS	LF-SPOILSC COMP	Silica Gel Cleanup	Solid	8015B	149227
720-54027-22 MSD	LF-SPOILSC COMP	Silica Gel Cleanup	Solid	8015B	149227
720-54027-27	SL-SPOILS COMP	Silica Gel Cleanup	Solid	8015B	149227
LCS 720-149227/2-A	Lab Control Sample	Silica Gel Cleanup	Solid	8015B	149227
LCSD 720-149227/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Solid	8015B	149227
MB 720-149227/1-A	Method Blank	Silica Gel Cleanup	Solid	8015B	149227

### Analysis Batch: 149189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-6	CS-B10	Silica Gel Cleanup	Solid	8015B	149125
720-54027-7	CS-B11	Silica Gel Cleanup	Solid	8015B	149125
720-54027-12	LF-SPOILSA COMP	Silica Gel Cleanup	Solid	8015B	149125
720-54027-17	LF-SPOILSB COMP	Silica Gel Cleanup	Solid	8015B	149125

### Prep Batch: 149227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-22	LF-SPOILSC COMP	Silica Gel Cleanup	Solid	3546	
720-54027-22 MS	LF-SPOILSC COMP	Silica Gel Cleanup	Solid	3546	
720-54027-22 MSD	LF-SPOILSC COMP	Silica Gel Cleanup	Solid	3546	
720-54027-27	SL-SPOILS COMP	Silica Gel Cleanup	Solid	3546	
LCS 720-149227/2-A	Lab Control Sample	Silica Gel Cleanup	Solid	3546	
LCSD 720-149227/3-A	Lab Control Sample Dup	Silica Gel Cleanup	Solid	3546	
MB 720-149227/1-A	Method Blank	Silica Gel Cleanup	Solid	3546	

## Metals

### Prep Batch: 149178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-12	LF-SPOILSA COMP	Total/NA	Solid	3050B	
720-54027-17	LF-SPOILSB COMP	Total/NA	Solid	3050B	
720-54027-22	LF-SPOILSC COMP	Total/NA	Solid	3050B	
720-54027-27	SL-SPOILS COMP	Total/NA	Solid	3050B	
LCS 720-149178/2-A	Lab Control Sample	Total/NA	Solid	3050B	
LCSD 720-149178/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
MB 720-149178/1-A	Method Blank	Total/NA	Solid	3050B	

### Prep Batch: 149211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-12	LF-SPOILSA COMP	Total/NA	Solid	7471A	
720-54027-17	LF-SPOILSB COMP	Total/NA	Solid	7471A	
720-54027-22	LF-SPOILSC COMP	Total/NA	Solid	7471A	
720-54027-27	SL-SPOILS COMP	Total/NA	Solid	7471A	
LCS 720-149211/2-A	Lab Control Sample	Total/NA	Solid	7471A	
LCSD 720-149211/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	
MB 720-149211/1-A	Method Blank	Total/NA	Solid	7471A	

### Analysis Batch: 149264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-12	LF-SPOILSA COMP	Total/NA	Solid	7471A	149211

TestAmerica Pleasanton

# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

## Metals (Continued)

### Analysis Batch: 149264 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-17	LF-SPOILSB COMP	Total/NA	Solid	7471A	149211
720-54027-22	LF-SPOILSC COMP	Total/NA	Solid	7471A	149211
720-54027-27	SL-SPOILS COMP	Total/NA	Solid	7471A	149211
LCS 720-149211/2-A	Lab Control Sample	Total/NA	Solid	7471A	149211
LCSD 720-149211/3-A	Lab Control Sample Dup	Total/NA	Solid	7471A	149211
MB 720-149211/1-A	Method Blank	Total/NA	Solid	7471A	149211

### Analysis Batch: 149384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-12	LF-SPOILSA COMP	Total/NA	Solid	6010B	149178
720-54027-17	LF-SPOILSB COMP	Total/NA	Solid	6010B	149178
720-54027-22	LF-SPOILSC COMP	Total/NA	Solid	6010B	149178
720-54027-27	SL-SPOILS COMP	Total/NA	Solid	6010B	149178
LCS 720-149178/2-A	Lab Control Sample	Total/NA	Solid	6010B	149178
LCSD 720-149178/3-A	Lab Control Sample Dup	Total/NA	Solid	6010B	149178
MB 720-149178/1-A	Method Blank	Total/NA	Solid	6010B	149178



# Lab Chronicle

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

## Client Sample ID: TS1-B1

Lab Sample ID: 720-54027-1

Date Collected: 11/25/13 13:30

Matrix: Solid

Date Received: 11/25/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			149039	11/26/13 11:16	BB	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	149113	11/27/13 16:08	DCH	TAL PLS

## Client Sample ID: TS2-B1

Lab Sample ID: 720-54027-2

Date Collected: 11/25/13 13:35

Matrix: Solid

Date Received: 11/25/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			149039	11/26/13 11:16	BB	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	149113	11/27/13 15:44	DCH	TAL PLS

## Client Sample ID: TS3-B1

Lab Sample ID: 720-54027-3

Date Collected: 11/25/13 13:37

Matrix: Solid

Date Received: 11/25/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			149039	11/26/13 11:16	BB	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	149113	11/27/13 14:07	DCH	TAL PLS

## Client Sample ID: TS3-S1(5.0)

Lab Sample ID: 720-54027-4

Date Collected: 11/25/13 13:40

Matrix: Solid

Date Received: 11/25/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			149305	12/02/13 14:02	MRP	TAL PLS
Total/NA	Analysis	8270C SIM		1	149316	12/02/13 21:56	MQL	TAL PLS
Silica Gel Cleanup	Prep	3546			149039	11/26/13 11:16	BB	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	149113	11/27/13 18:10	DCH	TAL PLS

## Client Sample ID: TS4-B1

Lab Sample ID: 720-54027-5

Date Collected: 11/25/13 13:45

Matrix: Solid

Date Received: 11/25/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			149039	11/26/13 11:16	BB	TAL PLS
Silica Gel Cleanup	Analysis	8015B		3	149113	11/27/13 19:23	DCH	TAL PLS



# Lab Chronicle

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

## Client Sample ID: CS-B10

Lab Sample ID: 720-54027-6

Date Collected: 11/25/13 13:50

Matrix: Solid

Date Received: 11/25/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			149125	11/27/13 08:29	NVP	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	149189	11/29/13 15:44	JL	TAL PLS

## Client Sample ID: CS-B11

Lab Sample ID: 720-54027-7

Date Collected: 11/25/13 13:55

Matrix: Solid

Date Received: 11/25/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Silica Gel Cleanup	Prep	3546			149125	11/27/13 08:29	NVP	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	149189	11/29/13 14:56	JL	TAL PLS

## Client Sample ID: LF-SPOILSA COMP

Lab Sample ID: 720-54027-12

Date Collected: 11/25/13 11:50

Matrix: Solid

Date Received: 11/25/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			149169	11/27/13 16:22	LPL	TAL PLS
Total/NA	Analysis	8260B		1	149153	11/27/13 21:24	ASC	TAL PLS
Silica Gel Cleanup	Prep	3546			149125	11/27/13 08:29	NVP	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	149189	11/29/13 17:21	JL	TAL PLS
Total/NA	Prep	7471A			149211	11/29/13 11:52	ASB	TAL PLS
Total/NA	Analysis	7471A		1	149264	11/30/13 12:42	CAM	TAL PLS
Total/NA	Prep	3050B			149178	11/27/13 20:36	CTD	TAL PLS
Total/NA	Analysis	6010B		4	149384	12/03/13 14:23	SLK	TAL PLS

## Client Sample ID: LF-SPOILSB COMP

Lab Sample ID: 720-54027-17

Date Collected: 11/25/13 11:55

Matrix: Solid

Date Received: 11/25/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			149086	11/26/13 17:46	LPL	TAL PLS
Total/NA	Analysis	8260B		1	149057	11/27/13 01:51	ASC	TAL PLS
Silica Gel Cleanup	Prep	3546			149125	11/27/13 08:29	NVP	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	149189	11/29/13 13:43	JL	TAL PLS
Total/NA	Prep	7471A			149211	11/29/13 11:52	ASB	TAL PLS
Total/NA	Analysis	7471A		1	149264	11/30/13 12:44	CAM	TAL PLS
Total/NA	Prep	3050B			149178	11/27/13 20:36	CTD	TAL PLS
Total/NA	Analysis	6010B		4	149384	12/03/13 14:28	SLK	TAL PLS

TestAmerica Pleasanton

# Lab Chronicle

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

## Client Sample ID: LF-SPOILSC COMP

Lab Sample ID: 720-54027-22

Date Collected: 11/25/13 12:00

Matrix: Solid

Date Received: 11/25/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			149152	11/27/13 10:00	PDR	TAL PLS
Total/NA	Analysis	8260B		1	149110	11/27/13 18:47	LPL	TAL PLS
Silica Gel Cleanup	Prep	3546			149227	11/29/13 14:12	RLU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	149188	11/30/13 00:39	JL	TAL PLS
Total/NA	Prep	7471A			149211	11/29/13 11:52	ASB	TAL PLS
Total/NA	Analysis	7471A		1	149264	11/30/13 12:47	CAM	TAL PLS
Total/NA	Prep	3050B			149178	11/27/13 20:36	CTD	TAL PLS
Total/NA	Analysis	6010B		4	149384	12/03/13 14:32	SLK	TAL PLS

## Client Sample ID: SL-SPOILS COMP

Lab Sample ID: 720-54027-27

Date Collected: 11/25/13 12:10

Matrix: Solid

Date Received: 11/25/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030B			149152	11/27/13 10:00	PDR	TAL PLS
Total/NA	Analysis	8260B		1	149110	11/27/13 19:15	LPL	TAL PLS
Silica Gel Cleanup	Prep	3546			149227	11/29/13 14:12	RLU	TAL PLS
Silica Gel Cleanup	Analysis	8015B		1	149188	11/29/13 23:26	JL	TAL PLS
Total/NA	Prep	7471A			149211	11/29/13 11:52	ASB	TAL PLS
Total/NA	Analysis	7471A		1	149264	11/30/13 12:49	CAM	TAL PLS
Total/NA	Prep	3050B			149178	11/27/13 20:36	CTD	TAL PLS
Total/NA	Analysis	6010B		4	149384	12/03/13 14:36	SLK	TAL PLS

**Laboratory References:**

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

# Certification Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

## Laboratory: TestAmerica Pleasanton

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

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-14

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# Method Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL PLS
8270C SIM	PAHs by GCMS (SIM)	SW846	TAL PLS
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS
7471A	Mercury (CVAA)	SW846	TAL PLS

**Protocol References:**

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

**Laboratory References:**

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



# Sample Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-54027-1	TS1-B1	Solid	11/25/13 13:30	11/25/13 15:25
720-54027-2	TS2-B1	Solid	11/25/13 13:35	11/25/13 15:25
720-54027-3	TS3-B1	Solid	11/25/13 13:37	11/25/13 15:25
720-54027-4	TS3-S1(5.0)	Solid	11/25/13 13:40	11/25/13 15:25
720-54027-5	TS4-B1	Solid	11/25/13 13:45	11/25/13 15:25
720-54027-6	CS-B10	Solid	11/25/13 13:50	11/25/13 15:25
720-54027-7	CS-B11	Solid	11/25/13 13:55	11/25/13 15:25
720-54027-12	LF-SPOILSA COMP	Solid	11/25/13 11:50	11/25/13 15:25
720-54027-17	LF-SPOILSB COMP	Solid	11/25/13 11:55	11/25/13 15:25
720-54027-22	LF-SPOILSC COMP	Solid	11/25/13 12:00	11/25/13 15:25
720-54027-27	SL-SPOILS COMP	Solid	11/25/13 12:10	11/25/13 15:25

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

Reference #: 150333  
 Date 11/25/13 Page 1 of 2

12/3/2013

## Report To

## Analysis Request

Attn: James Schwartz  
 Company: Haley & Aldrich  
 Address: 2035 N. Main St. Walnut Creek, CA  
 Email: jschwartz@haleyaldrich.com  
 Bill To: Haley & Aldrich  
 Attn: Accounts Payable Phone: 925.359.7355

Sample ID: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Mat: \_\_\_\_\_ Preserv: \_\_\_\_\_  
 Volatile Organics GC/MS (VOGs)  EPA 8260B  
 HVOCs by  EPA 8260B  
 EPA 8260B:  Gas  BTEX  
 5 Oxygenates  DCA, EDB  Ethanol  
 TEPH EPA 8015B  Silica Gel  
 Diesel  Motor Oil  Other \_\_\_\_\_  
 SemiVolatile Organics GC/MS  
 EPA 8270C Nicotine, CA  
 PNA/PAH's by  8270C  
 8270C SIM  
 Oil and Grease  Petroleum  
 (EPA 1664/9071)  Total  
 Pesticides  EPA 8081  
 PCBs  EPA 8082  
 CAM17 Metals  
 (EPA 6010/7470/7471)  
 Metals:  6010B  200.7  
 Lead  LUFT  RCRA  Other: \_\_\_\_\_  
 Metals:  6020  200.8  
 (ICP-MS): \_\_\_\_\_  
 W.E.T (STLC)  
 W.E.T (Di)  TCLP  
 Hex. Chrom by  EPA 7196  
 or EPA 7199  
 pH  9040  
 SM4500  
 Spec. Cond.  Alkalinity  
 TSS  SS  TDS  
 Anions:  Cl  SO<sub>4</sub>  NO<sub>3</sub>  F  
 Br  NO<sub>2</sub>  PO<sub>4</sub>  
 Perchlorate by EPA 314.0  
 COD  EPA 410.4  SM5220D  
 Turbidity

Sample ID	Date	Time	Mat	Preserv	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
TS1-B1	11/25/13	1330	Soil	Ice	X														
TS2-B1	11/25/13	1335	Soil	Ice	X														
TS3-B1	11/25/13	1337	Soil	Ice	X														
TS3-S1 (50)	11/25/13	1340	Soil	Ice	X														
TS4-B1	11/25/13	1345	Soil	Ice	X														
CS-B10	11/25/13	1350	Soil	Ice	X														
CS-B11	11/25/13	1355	Soil	Ice	X														

## Project Info

Project Name: Former Hanson Aggregates Redium Facility  
 # of Containers: \_\_\_\_\_  
 Head Space: \_\_\_\_\_  
 PO#: # 39792 Temp: 4.22  
 Credit Card Y/N: \_\_\_\_\_  
 If yes, please call with payment information ASAP

1) Relinquished by: [Signature] Time 1525  
 Signature: \_\_\_\_\_  
 Printed Name: Verant Toiber Date 11/25/13  
 Company: \_\_\_\_\_  
 2) Relinquished by: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_ Date \_\_\_\_\_  
 Company: \_\_\_\_\_  
 3) Relinquished by: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_ Date \_\_\_\_\_  
 Company: \_\_\_\_\_



Report  Routine  Level 3  Level 4  EDD  EDF  
 Special Instructions / Comments: \_\_\_\_\_  
 Global ID: \_\_\_\_\_  
 See Terms and Conditions on reverse

1) Received by: [Signature] Time 1525  
 Signature: \_\_\_\_\_  
 Printed Name: Mark Ben Date 11-25-13  
 Company: \_\_\_\_\_  
 2) Received by: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_ Date \_\_\_\_\_  
 Company: \_\_\_\_\_  
 3) Received by: \_\_\_\_\_  
 Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_ Date \_\_\_\_\_  
 Company: \_\_\_\_\_

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

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

Reference #: 150333  
 Date: 11/25/13 Page 2 of 2

## Report To

Attn: James Schwartz  
 Company: Haley & Aldrich  
 Address: 2035 N. Main St. Walnut Creek, CA  
 Email: jschwartz@haleyaldrich.com  
 Bill To: Haley & Aldrich  
 Attn: Accounts Payable Phone: 925-959-9355  
 Sampled by: VT BSM JS

## Analysis Request

Volatile Organics GC/MS (VOGs)  EPA 8260B  
 HVCs by  EPA 8260B  
 EPA 8260B:  Gas  BTEX  
 5 Oxygenates  DCA, EDB  Ethanol  
 TEPH EPA 8015B  Silica Gel  
 Diesel  Motor Oil  Other  
 SemiVolatile Organics GC/MS  
 EPA 8270C  
 PNA/PAH's by  8270C  
 8270C SIM  
 Oil and Grease  Petroleum  
 (EPA 1664/9071)  Total  
 Pesticides  EPA 8081  
 PCBs  EPA 8082  
 CAM17 Metals  
 (EPA 6010/7470/7471)  
 Metals:  6010B  200.7  
 Lead  LUFT  RCRA  Other  
 Metals:  6020  200.8  
 (ICP-MS):  
 W.E.T (STLC)  
 W.E.T (DI)  TCLP  
 Hex. Chrom by  EPA 7196  
 or EPA 7199  
 pH  9040  
 SM4500  
 Spec. Cond.  Alkalinity  
 TSS  SS  TDS  
 Anions  Cl  SO<sub>4</sub>  NO<sub>3</sub>  F  
 Br  NO<sub>2</sub>  PO<sub>4</sub>  
 Perchlorate by EPA 314.0  
 COD  EPA 410.4  SM5220D  
 Turbidity  
 Please make 4 jar composite  
 Number of Containers

Sample ID	Date	Time	Mat	Preserv	FX
LF-SP015 A	11/25/13	11:50	Soil	ICE	X
LF-SP015 B	11/25/13	11:55	Soil	ICE	X
LF-SP015 C	11/25/13	12:00	Soil	ICE	X
SL-SP015	11/25/13	12:10	Soil	ICE	X

## Project Info

Project Name: Former Hanson Aggregates Reclaim Facility  
 # of Containers: 4  
 Head Space: 4.20  
 PO#: #39992  
 Temp: 4.20  
 Credit Card Y/N:     
 If yes, please call with payment information ASAP

## Sample Receipt

1) Relinquished by: [Signature] Time: 1525  
 Signature: [Signature] Time: 11/25/13  
 Printed Name: Haley & Aldrich Date:     
 Company:   

2) Relinquished by:    Time:     
 Signature:    Time:     
 Printed Name:    Date:     
 Company:   

3) Relinquished by:    Time:     
 Signature:    Time:     
 Printed Name:    Date:     
 Company:   

Report  Routine  Level 3  Level 4  EDD  EDF  
 Special Instructions / Comments:     Global ID     
 See Terms and Conditions on reverse

1) Received by: [Signature] Time: 1525  
 Signature: [Signature] Time: 11-25-13  
 Printed Name: [Name] Date:     
 Company:   

2) Received by:    Time:     
 Signature:    Time:     
 Printed Name:    Date:     
 Company:   

3) Received by:    Time:     
 Signature:    Time:     
 Printed Name:    Date:     
 Company:

## Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 720-54027-1

**Login Number: 54027**

**List Source: TestAmerica Pleasanton**

**List Number: 1**

**Creator: Gonzales, Justinn**

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





# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

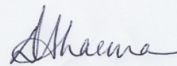
## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Pleasanton  
1220 Quarry Lane  
Pleasanton, CA 94566  
Tel: (925)484-1919

TestAmerica Job ID: 720-54027-2  
Client Project/Site: Hanson

For:  
Haley & Aldrich, Inc.  
2033 North Main Street  
Suite 309  
Walnut Creek, California 94596

Attn: James Schwartz



Authorized for release by:  
1/7/2014 12:22:37 PM

Dimple Sharma, Senior Project Manager  
(925)484-1919  
[dimple.sharma@testamericainc.com](mailto:dimple.sharma@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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# Definitions/Glossary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

## Qualifiers

### GC/MS Semi VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

### GC Semi VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time

## Glossary

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

# Case Narrative

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

**Job ID: 720-54027-2**

**Laboratory: TestAmerica Pleasanton**

## Narrative

### Job Narrative 720-54027-2

#### Comments

No additional comments.

#### Receipt

The samples were received on 11/25/2013 3:25 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.2° C.

#### GC/MS Semi VOA

No analytical or quality issues were noted.

#### GC Semi VOA

Method 8081A: The following samples was prepared outside the method defined holding time because the request for the test was made after the holding time for the sample expired: LF-SPOILSA COMP (720-54027-12), LF-SPOILSB COMP (720-54027-17), LF-SPOILSC COMP (720-54027-22).

Method 8270C: The following sample was prepared and/or analyzed outside the method defined holding time because the request for the test was made after the holding time for the sample expired: LF-SPOILSA COMP (720-54027-12), LF-SPOILSB COMP (720-54027-17), LF-SPOILSC COMP (720-54027-22).

Method 8082: The following sample was prepared and/or analyzed outside the method defined holding time because the request for the test was made after the holding time for the sample expired: LF-SPOILSA COMP (720-54027-12), LF-SPOILSB COMP (720-54027-17), LF-SPOILSC COMP (720-54027-22).

No other analytical or quality issues were noted.

#### Metals

No analytical or quality issues were noted.

#### Organic Prep

No analytical or quality issues were noted.

# Detection Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

## Client Sample ID: LF-SPOILSA COMP

Lab Sample ID: 720-54027-12

No Detections.

## Client Sample ID: LF-SPOILSB COMP

Lab Sample ID: 720-54027-17

No Detections.

## Client Sample ID: LF-SPOILSC COMP

Lab Sample ID: 720-54027-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	0.10	H	0.066		mg/Kg	1		8270C	Total/NA
Pyrene	0.15	H	0.066		mg/Kg	1		8270C	Total/NA
Chrysene	0.098	H	0.066		mg/Kg	1		8270C	Total/NA
Benzo[a]pyrene	0.072	H	0.066		mg/Kg	1		8270C	Total/NA
Chromium	0.13		0.10		mg/L	1		6010B	STLC Citrate

## Client Sample ID: SL-SPOILS COMP

Lab Sample ID: 720-54027-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.10		0.10		mg/L	1		6010B	STLC Citrate

This Detection Summary does not include radiochemical test results.

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

**Client Sample ID: LF-SPOILSA COMP**

**Lab Sample ID: 720-54027-12**

**Date Collected: 11/25/13 11:50**

**Matrix: Solid**

**Date Received: 11/25/13 15:25**

**Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Bis(2-chloroethyl)ether	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
2-Chlorophenol	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
1,3-Dichlorobenzene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
1,4-Dichlorobenzene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Benzyl alcohol	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
1,2-Dichlorobenzene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
2-Methylphenol	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Methylphenol, 3 & 4	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
N-Nitrosodi-n-propylamine	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Hexachloroethane	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Nitrobenzene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Isophorone	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
2-Nitrophenol	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
2,4-Dimethylphenol	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Bis(2-chloroethoxy)methane	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
2,4-Dichlorophenol	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
1,2,4-Trichlorobenzene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Naphthalene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
4-Chloroaniline	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Hexachlorobutadiene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
4-Chloro-3-methylphenol	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
2-Methylnaphthalene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Hexachlorocyclopentadiene	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
2,4,6-Trichlorophenol	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
2,4,5-Trichlorophenol	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
2-Chloronaphthalene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
2-Nitroaniline	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Dimethyl phthalate	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Acenaphthylene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
3-Nitroaniline	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Acenaphthene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
2,4-Dinitrophenol	ND	H	0.66		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
4-Nitrophenol	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Dibenzofuran	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
2,4-Dinitrotoluene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
2,6-Dinitrotoluene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Diethyl phthalate	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
4-Chlorophenyl phenyl ether	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Fluorene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
4-Nitroaniline	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
2-Methyl-4,6-dinitrophenol	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
N-Nitrosodiphenylamine	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
4-Bromophenyl phenyl ether	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Hexachlorobenzene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Pentachlorophenol	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Phenanthrene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Anthracene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Di-n-butyl phthalate	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:39	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

**Client Sample ID: LF-SPOILSA COMP**

**Lab Sample ID: 720-54027-12**

Date Collected: 11/25/13 11:50

Matrix: Solid

Date Received: 11/25/13 15:25

**Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Pyrene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Butyl benzyl phthalate	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
3,3'-Dichlorobenzidine	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Benzo[a]anthracene	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Bis(2-ethylhexyl) phthalate	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Chrysene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Di-n-octyl phthalate	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Benzo[b]fluoranthene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Benzo[a]pyrene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Benzo[k]fluoranthene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Indeno[1,2,3-cd]pyrene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Benzo[g,h,i]perylene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Benzoic acid	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Azobenzene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1
Dibenz(a,h)anthracene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 16:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	57		21 - 98	01/03/14 10:02	01/03/14 16:39	1
2-Fluorobiphenyl	65		30 - 112	01/03/14 10:02	01/03/14 16:39	1
Terphenyl-d14	81		32 - 117	01/03/14 10:02	01/03/14 16:39	1
2-Fluorophenol	46		28 - 98	01/03/14 10:02	01/03/14 16:39	1
Phenol-d5	56		23 - 101	01/03/14 10:02	01/03/14 16:39	1
2,4,6-Tribromophenol	68		37 - 114	01/03/14 10:02	01/03/14 16:39	1

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
Dieldrin	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
Endrin aldehyde	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
Endrin	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
Endrin ketone	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
Heptachlor	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
Heptachlor epoxide	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
4,4'-DDT	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
4,4'-DDE	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
4,4'-DDD	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
Endosulfan I	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
Endosulfan II	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
alpha-BHC	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
beta-BHC	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
gamma-BHC (Lindane)	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
delta-BHC	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
Endosulfan sulfate	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
Methoxychlor	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
Toxaphene	ND	H	40		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
Chlordane (technical)	ND	H	40		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
alpha-Chlordane	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1
gamma-Chlordane	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 00:53	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

**Client Sample ID: LF-SPOILSA COMP**

**Lab Sample ID: 720-54027-12**

Date Collected: 11/25/13 11:50

Matrix: Solid

Date Received: 11/25/13 15:25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	99		57 - 122	01/03/14 09:54	01/04/14 00:53	1
DCB Decachlorobiphenyl	106		21 - 136	01/03/14 09:54	01/04/14 00:53	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	H	50		ug/Kg		01/03/14 09:58	01/03/14 20:27	1
PCB-1221	ND	H	50		ug/Kg		01/03/14 09:58	01/03/14 20:27	1
PCB-1232	ND	H	50		ug/Kg		01/03/14 09:58	01/03/14 20:27	1
PCB-1242	ND	H	50		ug/Kg		01/03/14 09:58	01/03/14 20:27	1
PCB-1248	ND	H	50		ug/Kg		01/03/14 09:58	01/03/14 20:27	1
PCB-1254	ND	H	50		ug/Kg		01/03/14 09:58	01/03/14 20:27	1
PCB-1260	ND	H	50		ug/Kg		01/03/14 09:58	01/03/14 20:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	72		45 - 132	01/03/14 09:58	01/03/14 20:27	1
DCB Decachlorobiphenyl	94		42 - 146	01/03/14 09:58	01/03/14 20:27	1

**Method: 6010B - Metals (ICP) - STLC Citrate**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.10		mg/L		01/06/14 10:24	01/06/14 15:39	1



# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

**Client Sample ID: LF-SPOILSB COMP**

**Lab Sample ID: 720-54027-17**

**Date Collected: 11/25/13 11:55**

**Matrix: Solid**

**Date Received: 11/25/13 15:25**

**Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Bis(2-chloroethyl)ether	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
2-Chlorophenol	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
1,3-Dichlorobenzene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
1,4-Dichlorobenzene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Benzyl alcohol	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
1,2-Dichlorobenzene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
2-Methylphenol	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Methylphenol, 3 & 4	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
N-Nitrosodi-n-propylamine	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Hexachloroethane	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Nitrobenzene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Isophorone	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
2-Nitrophenol	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
2,4-Dimethylphenol	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Bis(2-chloroethoxy)methane	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
2,4-Dichlorophenol	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
1,2,4-Trichlorobenzene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Naphthalene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
4-Chloroaniline	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Hexachlorobutadiene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
4-Chloro-3-methylphenol	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
2-Methylnaphthalene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Hexachlorocyclopentadiene	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
2,4,6-Trichlorophenol	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
2,4,5-Trichlorophenol	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
2-Chloronaphthalene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
2-Nitroaniline	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Dimethyl phthalate	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Acenaphthylene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
3-Nitroaniline	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Acenaphthene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
2,4-Dinitrophenol	ND	H	0.66		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
4-Nitrophenol	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Dibenzofuran	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
2,4-Dinitrotoluene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
2,6-Dinitrotoluene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Diethyl phthalate	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
4-Chlorophenyl phenyl ether	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Fluorene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
4-Nitroaniline	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
2-Methyl-4,6-dinitrophenol	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
N-Nitrosodiphenylamine	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
4-Bromophenyl phenyl ether	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Hexachlorobenzene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Pentachlorophenol	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Phenanthrene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Anthracene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Di-n-butyl phthalate	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 17:04	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

**Client Sample ID: LF-SPOILSB COMP**

**Lab Sample ID: 720-54027-17**

Date Collected: 11/25/13 11:55

Matrix: Solid

Date Received: 11/25/13 15:25

**Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Pyrene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Butyl benzyl phthalate	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
3,3'-Dichlorobenzidine	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Benzo[a]anthracene	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Bis(2-ethylhexyl) phthalate	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Chrysene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Di-n-octyl phthalate	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Benzo[b]fluoranthene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Benzo[a]pyrene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Benzo[k]fluoranthene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Indeno[1,2,3-cd]pyrene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Benzo[g,h,i]perylene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Benzoic acid	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Azobenzene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1
Dibenz(a,h)anthracene	ND	H	0.067		mg/Kg		01/03/14 10:02	01/03/14 17:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	59		21 - 98	01/03/14 10:02	01/03/14 17:04	1
2-Fluorobiphenyl	66		30 - 112	01/03/14 10:02	01/03/14 17:04	1
Terphenyl-d14	80		32 - 117	01/03/14 10:02	01/03/14 17:04	1
2-Fluorophenol	49		28 - 98	01/03/14 10:02	01/03/14 17:04	1
Phenol-d5	57		23 - 101	01/03/14 10:02	01/03/14 17:04	1
2,4,6-Tribromophenol	65		37 - 114	01/03/14 10:02	01/03/14 17:04	1

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
Dieldrin	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
Endrin aldehyde	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
Endrin	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
Endrin ketone	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
Heptachlor	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
Heptachlor epoxide	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
4,4'-DDT	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
4,4'-DDE	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
4,4'-DDD	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
Endosulfan I	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
Endosulfan II	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
alpha-BHC	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
beta-BHC	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
gamma-BHC (Lindane)	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
delta-BHC	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
Endosulfan sulfate	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
Methoxychlor	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
Toxaphene	ND	H	39		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
Chlordane (technical)	ND	H	39		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
alpha-Chlordane	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1
gamma-Chlordane	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:10	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

**Client Sample ID: LF-SPOILSB COMP**

**Lab Sample ID: 720-54027-17**

Date Collected: 11/25/13 11:55

Matrix: Solid

Date Received: 11/25/13 15:25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	102		57 - 122	01/03/14 09:54	01/04/14 01:10	1
DCB Decachlorobiphenyl	99		21 - 136	01/03/14 09:54	01/04/14 01:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	H	49		ug/Kg		01/03/14 09:58	01/03/14 20:27	1
PCB-1221	ND	H	49		ug/Kg		01/03/14 09:58	01/03/14 20:27	1
PCB-1232	ND	H	49		ug/Kg		01/03/14 09:58	01/03/14 20:27	1
PCB-1242	ND	H	49		ug/Kg		01/03/14 09:58	01/03/14 20:27	1
PCB-1248	ND	H	49		ug/Kg		01/03/14 09:58	01/03/14 20:27	1
PCB-1254	ND	H	49		ug/Kg		01/03/14 09:58	01/03/14 20:27	1
PCB-1260	ND	H	49		ug/Kg		01/03/14 09:58	01/03/14 20:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	75		45 - 132	01/03/14 09:58	01/03/14 20:27	1
DCB Decachlorobiphenyl	89		42 - 146	01/03/14 09:58	01/03/14 20:27	1

**Method: 6010B - Metals (ICP) - STLC Citrate**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.10		mg/L		01/06/14 10:24	01/06/14 15:53	1

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

**Client Sample ID: LF-SPOILSC COMP**

**Lab Sample ID: 720-54027-22**

**Date Collected: 11/25/13 12:00**

**Matrix: Solid**

**Date Received: 11/25/13 15:25**

**Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Bis(2-chloroethyl)ether	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
2-Chlorophenol	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
1,3-Dichlorobenzene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
1,4-Dichlorobenzene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Benzyl alcohol	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
1,2-Dichlorobenzene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
2-Methylphenol	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Methylphenol, 3 & 4	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
N-Nitrosodi-n-propylamine	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Hexachloroethane	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Nitrobenzene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Isophorone	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
2-Nitrophenol	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
2,4-Dimethylphenol	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Bis(2-chloroethoxy)methane	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
2,4-Dichlorophenol	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
1,2,4-Trichlorobenzene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Naphthalene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
4-Chloroaniline	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Hexachlorobutadiene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
4-Chloro-3-methylphenol	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
2-Methylnaphthalene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Hexachlorocyclopentadiene	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
2,4,6-Trichlorophenol	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
2,4,5-Trichlorophenol	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
2-Chloronaphthalene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
2-Nitroaniline	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Dimethyl phthalate	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Acenaphthylene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
3-Nitroaniline	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Acenaphthene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
2,4-Dinitrophenol	ND	H	0.65		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
4-Nitrophenol	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Dibenzofuran	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
2,4-Dinitrotoluene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
2,6-Dinitrotoluene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Diethyl phthalate	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
4-Chlorophenyl phenyl ether	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Fluorene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
4-Nitroaniline	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
2-Methyl-4,6-dinitrophenol	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
N-Nitrosodiphenylamine	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
4-Bromophenyl phenyl ether	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Hexachlorobenzene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Pentachlorophenol	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Phenanthrene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Anthracene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Di-n-butyl phthalate	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:16	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

**Client Sample ID: LF-SPOILSC COMP**

**Lab Sample ID: 720-54027-22**

Date Collected: 11/25/13 12:00

Matrix: Solid

Date Received: 11/25/13 15:25

**Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (Continued)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	0.10	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Pyrene	0.15	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Butyl benzyl phthalate	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
3,3'-Dichlorobenzidine	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Benzo[a]anthracene	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Bis(2-ethylhexyl) phthalate	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Chrysene	0.098	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Di-n-octyl phthalate	ND	H	0.17		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Benzo[b]fluoranthene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Benzo[a]pyrene	0.072	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Benzo[k]fluoranthene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Indeno[1,2,3-cd]pyrene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Benzo[g,h,i]perylene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Benzoic acid	ND	H	0.33		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Azobenzene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1
Dibenz(a,h)anthracene	ND	H	0.066		mg/Kg		01/03/14 10:02	01/03/14 16:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	59		21 - 98	01/03/14 10:02	01/03/14 16:16	1
2-Fluorobiphenyl	65		30 - 112	01/03/14 10:02	01/03/14 16:16	1
Terphenyl-d14	78		32 - 117	01/03/14 10:02	01/03/14 16:16	1
2-Fluorophenol	50		28 - 98	01/03/14 10:02	01/03/14 16:16	1
Phenol-d5	55		23 - 101	01/03/14 10:02	01/03/14 16:16	1
2,4,6-Tribromophenol	67		37 - 114	01/03/14 10:02	01/03/14 16:16	1

**Method: 8081A - Organochlorine Pesticides (GC)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aldrin	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
Dieldrin	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
Endrin aldehyde	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
Endrin	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
Endrin ketone	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
Heptachlor	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
Heptachlor epoxide	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
4,4'-DDT	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
4,4'-DDE	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
4,4'-DDD	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
Endosulfan I	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
Endosulfan II	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
alpha-BHC	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
beta-BHC	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
gamma-BHC (Lindane)	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
delta-BHC	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
Endosulfan sulfate	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
Methoxychlor	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
Toxaphene	ND	H	40		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
Chlordane (technical)	ND	H	40		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
alpha-Chlordane	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1
gamma-Chlordane	ND	H	2.0		ug/Kg		01/03/14 09:54	01/04/14 01:27	1

TestAmerica Pleasanton

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

**Client Sample ID: LF-SPOILSC COMP**

**Lab Sample ID: 720-54027-22**

Date Collected: 11/25/13 12:00

Matrix: Solid

Date Received: 11/25/13 15:25

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	107		57 - 122	01/03/14 09:54	01/04/14 01:27	1
DCB Decachlorobiphenyl	123		21 - 136	01/03/14 09:54	01/04/14 01:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	H	50		ug/Kg		01/03/14 09:58	01/03/14 20:44	1
PCB-1221	ND	H	50		ug/Kg		01/03/14 09:58	01/03/14 20:44	1
PCB-1232	ND	H	50		ug/Kg		01/03/14 09:58	01/03/14 20:44	1
PCB-1242	ND	H	50		ug/Kg		01/03/14 09:58	01/03/14 20:44	1
PCB-1248	ND	H	50		ug/Kg		01/03/14 09:58	01/03/14 20:44	1
PCB-1254	ND	H	50		ug/Kg		01/03/14 09:58	01/03/14 20:44	1
PCB-1260	ND	H	50		ug/Kg		01/03/14 09:58	01/03/14 20:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	72		45 - 132	01/03/14 09:58	01/03/14 20:44	1
DCB Decachlorobiphenyl	95		42 - 146	01/03/14 09:58	01/03/14 20:44	1

**Method: 6010B - Metals (ICP) - STLC Citrate**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.13		0.10		mg/L		01/06/14 10:24	01/06/14 15:58	1

# Client Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

**Client Sample ID: SL-SPOILS COMP**

**Lab Sample ID: 720-54027-27**

**Date Collected: 11/25/13 12:10**

**Matrix: Solid**

**Date Received: 11/25/13 15:25**

**Method: 6010B - Metals (ICP) - STLC Citrate**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	0.10		0.10		mg/L		01/06/14 10:24	01/06/14 16:03	1

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

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

## Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

Lab Sample ID: MB 720-151100/1-A

Matrix: Solid

Analysis Batch: 151118

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 151100

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenol	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Bis(2-chloroethyl)ether	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2-Chlorophenol	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
1,3-Dichlorobenzene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
1,4-Dichlorobenzene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Benzyl alcohol	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
1,2-Dichlorobenzene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2-Methylphenol	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Methylphenol, 3 & 4	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
N-Nitrosodi-n-propylamine	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Hexachloroethane	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Nitrobenzene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Isophorone	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2-Nitrophenol	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2,4-Dimethylphenol	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Bis(2-chloroethoxy)methane	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2,4-Dichlorophenol	ND		0.33		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
1,2,4-Trichlorobenzene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Naphthalene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
4-Chloroaniline	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Hexachlorobutadiene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
4-Chloro-3-methylphenol	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2-Methylnaphthalene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Hexachlorocyclopentadiene	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2,4,6-Trichlorophenol	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2,4,5-Trichlorophenol	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2-Chloronaphthalene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2-Nitroaniline	ND		0.33		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Dimethyl phthalate	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Acenaphthylene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
3-Nitroaniline	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Acenaphthene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2,4-Dinitrophenol	ND		0.65		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
4-Nitrophenol	ND		0.33		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Dibenzofuran	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2,4-Dinitrotoluene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2,6-Dinitrotoluene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Diethyl phthalate	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
4-Chlorophenyl phenyl ether	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Fluorene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
4-Nitroaniline	ND		0.33		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
2-Methyl-4,6-dinitrophenol	ND		0.33		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
N-Nitrosodiphenylamine	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
4-Bromophenyl phenyl ether	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Hexachlorobenzene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Pentachlorophenol	ND		0.33		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Phenanthrene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Anthracene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1

TestAmerica Pleasanton



# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

## Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

(Continued)

**Lab Sample ID: MB 720-151100/1-A**

**Matrix: Solid**

**Analysis Batch: 151118**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 151100**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-butyl phthalate	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Fluoranthene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Pyrene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Butyl benzyl phthalate	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
3,3'-Dichlorobenzidine	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Benzo[a]anthracene	ND		0.33		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Bis(2-ethylhexyl) phthalate	ND		0.33		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Chrysene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Di-n-octyl phthalate	ND		0.17		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Benzo[b]fluoranthene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Benzo[a]pyrene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Benzo[k]fluoranthene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Indeno[1,2,3-cd]pyrene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Benzo[g,h,i]perylene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Benzoic acid	ND		0.33		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Azobenzene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1
Dibenz(a,h)anthracene	ND		0.066		mg/Kg		01/03/14 10:02	01/03/14 15:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Nitrobenzene-d5	64		21 - 98	01/03/14 10:02	01/03/14 15:52	1
2-Fluorobiphenyl	71		30 - 112	01/03/14 10:02	01/03/14 15:52	1
Terphenyl-d14	75		32 - 117	01/03/14 10:02	01/03/14 15:52	1
2-Fluorophenol	53		28 - 98	01/03/14 10:02	01/03/14 15:52	1
Phenol-d5	64		23 - 101	01/03/14 10:02	01/03/14 15:52	1
2,4,6-Tribromophenol	63		37 - 114	01/03/14 10:02	01/03/14 15:52	1

**Lab Sample ID: LCS 720-151100/2-A**

**Matrix: Solid**

**Analysis Batch: 151118**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 151100**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Phenol	1.33	0.930		mg/Kg		70	48 - 115
Bis(2-chloroethyl)ether	1.33	0.827		mg/Kg		62	45 - 115
2-Chlorophenol	1.33	0.921		mg/Kg		69	48 - 115
1,3-Dichlorobenzene	1.33	0.823		mg/Kg		62	41 - 115
1,4-Dichlorobenzene	1.33	0.880		mg/Kg		66	40 - 115
Benzyl alcohol	1.33	0.880		mg/Kg		66	54 - 115
1,2-Dichlorobenzene	1.33	0.880		mg/Kg		66	44 - 115
2-Methylphenol	1.33	0.986		mg/Kg		74	54 - 115
Methylphenol, 3 & 4	1.33	0.965		mg/Kg		73	42 - 115
N-Nitrosodi-n-propylamine	1.33	0.910		mg/Kg		68	46 - 115
Hexachloroethane	1.33	0.831		mg/Kg		63	44 - 115
Nitrobenzene	1.33	0.899		mg/Kg		68	48 - 115
Isophorone	1.33	0.892		mg/Kg		67	54 - 115
2-Nitrophenol	1.33	0.933		mg/Kg		70	48 - 115
2,4-Dimethylphenol	1.33	0.968		mg/Kg		73	52 - 115
Bis(2-chloroethoxy)methane	1.33	0.897		mg/Kg		67	46 - 115

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

## Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

(Continued)

**Lab Sample ID: LCS 720-151100/2-A**

**Matrix: Solid**

**Analysis Batch: 151118**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 151100**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4-Dichlorophenol	1.33	0.962		mg/Kg		72	49 - 100
1,2,4-Trichlorobenzene	1.33	0.904		mg/Kg		68	47 - 115
Naphthalene	1.33	0.987		mg/Kg		74	44 - 115
4-Chloroaniline	1.33	0.789		mg/Kg		59	30 - 115
Hexachlorobutadiene	1.33	0.925		mg/Kg		70	44 - 115
4-Chloro-3-methylphenol	1.33	0.996		mg/Kg		75	58 - 115
2-Methylnaphthalene	1.33	0.949		mg/Kg		71	49 - 115
Hexachlorocyclopentadiene	1.33	0.836		mg/Kg		63	42 - 132
2,4,6-Trichlorophenol	1.33	0.965		mg/Kg		73	45 - 115
2,4,5-Trichlorophenol	1.33	1.02		mg/Kg		77	48 - 115
2-Chloronaphthalene	1.33	0.977		mg/Kg		73	52 - 115
2-Nitroaniline	1.33	1.01		mg/Kg		76	54 - 115
Dimethyl phthalate	1.33	1.05		mg/Kg		79	64 - 119
Acenaphthylene	1.33	0.960		mg/Kg		72	61 - 129
3-Nitroaniline	1.33	0.875		mg/Kg		66	50 - 115
Acenaphthene	1.33	1.01		mg/Kg		76	50 - 115
2,4-Dinitrophenol	2.66	0.668		mg/Kg		25	15 - 115
4-Nitrophenol	2.66	2.32		mg/Kg		87	54 - 125
Dibenzofuran	1.33	1.01		mg/Kg		76	55 - 115
2,4-Dinitrotoluene	1.33	1.07		mg/Kg		80	57 - 115
2,6-Dinitrotoluene	1.33	1.04		mg/Kg		78	54 - 119
Diethyl phthalate	1.33	1.03		mg/Kg		78	49 - 117
4-Chlorophenyl phenyl ether	1.33	1.07		mg/Kg		80	57 - 115
Fluorene	1.33	1.03		mg/Kg		78	54 - 115
4-Nitroaniline	1.33	1.04		mg/Kg		78	59 - 115
2-Methyl-4,6-dinitrophenol	2.66	1.56		mg/Kg		59	39 - 115
N-Nitrosodiphenylamine	1.33	1.08		mg/Kg		81	56 - 115
4-Bromophenyl phenyl ether	1.33	1.03		mg/Kg		77	53 - 115
Hexachlorobenzene	1.33	1.01		mg/Kg		76	55 - 115
Pentachlorophenol	2.66	1.92		mg/Kg		72	35 - 115
Phenanthrene	1.33	1.05		mg/Kg		79	54 - 115
Anthracene	1.33	1.07		mg/Kg		81	55 - 115
Di-n-butyl phthalate	1.33	1.02		mg/Kg		77	55 - 115
Fluoranthene	1.33	1.00		mg/Kg		75	52 - 130
Pyrene	1.33	1.17		mg/Kg		88	48 - 115
Butyl benzyl phthalate	1.33	1.15		mg/Kg		87	53 - 115
3,3'-Dichlorobenzidine	1.33	0.912		mg/Kg		69	42 - 115
Benzo[a]anthracene	1.33	1.08		mg/Kg		81	55 - 115
Bis(2-ethylhexyl) phthalate	1.33	1.24		mg/Kg		93	53 - 115
Chrysene	1.33	1.14		mg/Kg		85	58 - 115
Di-n-octyl phthalate	1.33	1.13		mg/Kg		85	53 - 115
Benzo[b]fluoranthene	1.33	1.12		mg/Kg		84	50 - 119
Benzo[a]pyrene	1.33	1.11		mg/Kg		83	57 - 122
Benzo[k]fluoranthene	1.33	1.06		mg/Kg		79	55 - 120
Indeno[1,2,3-cd]pyrene	1.33	0.981		mg/Kg		74	56 - 115
Benzo[g,h,i]perylene	1.33	0.932		mg/Kg		70	56 - 115
Benzoic acid	1.33	0.461		mg/Kg		35	10 - 115

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

## Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

(Continued)

**Lab Sample ID: LCS 720-151100/2-A**

**Matrix: Solid**

**Analysis Batch: 151118**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 151100**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Azobenzene	1.33	0.979		mg/Kg		74	52 - 115
Dibenz(a,h)anthracene	1.33	0.995		mg/Kg		75	57 - 121

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	68		21 - 98
2-Fluorobiphenyl	71		30 - 112
Terphenyl-d14	81		32 - 117
2-Fluorophenol	56		28 - 98
Phenol-d5	68		23 - 101
2,4,6-Tribromophenol	76		37 - 114

**Lab Sample ID: LCSD 720-151100/3-A**

**Matrix: Solid**

**Analysis Batch: 151118**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 151100**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Phenol	1.33	0.921		mg/Kg		69	48 - 115	1	35
Bis(2-chloroethyl)ether	1.33	0.810		mg/Kg		61	45 - 115	2	35
2-Chlorophenol	1.33	0.907		mg/Kg		68	48 - 115	2	35
1,3-Dichlorobenzene	1.33	0.810		mg/Kg		61	41 - 115	2	35
1,4-Dichlorobenzene	1.33	0.849		mg/Kg		64	40 - 115	4	35
Benzyl alcohol	1.33	0.856		mg/Kg		64	54 - 115	3	35
1,2-Dichlorobenzene	1.33	0.863		mg/Kg		65	44 - 115	2	35
2-Methylphenol	1.33	0.964		mg/Kg		72	54 - 115	2	35
Methylphenol, 3 & 4	1.33	0.950		mg/Kg		71	42 - 115	2	35
N-Nitrosodi-n-propylamine	1.33	0.882		mg/Kg		66	46 - 115	3	35
Hexachloroethane	1.33	0.829		mg/Kg		62	44 - 115	0	35
Nitrobenzene	1.33	0.886		mg/Kg		67	48 - 115	1	35
Isophorone	1.33	0.856		mg/Kg		64	54 - 115	4	35
2-Nitrophenol	1.33	0.928		mg/Kg		70	48 - 115	0	35
2,4-Dimethylphenol	1.33	0.896		mg/Kg		67	52 - 115	8	35
Bis(2-chloroethoxy)methane	1.33	0.865		mg/Kg		65	46 - 115	4	35
2,4-Dichlorophenol	1.33	0.951		mg/Kg		72	49 - 100	1	35
1,2,4-Trichlorobenzene	1.33	0.896		mg/Kg		67	47 - 115	1	35
Naphthalene	1.33	0.971		mg/Kg		73	44 - 115	2	35
4-Chloroaniline	1.33	0.784		mg/Kg		59	30 - 115	1	35
Hexachlorobutadiene	1.33	0.943		mg/Kg		71	44 - 115	2	35
4-Chloro-3-methylphenol	1.33	0.988		mg/Kg		74	58 - 115	1	35
2-Methylnaphthalene	1.33	0.944		mg/Kg		71	49 - 115	1	35
Hexachlorocyclopentadiene	1.33	0.825		mg/Kg		62	42 - 132	1	35
2,4,6-Trichlorophenol	1.33	0.952		mg/Kg		72	45 - 115	1	35
2,4,5-Trichlorophenol	1.33	0.967		mg/Kg		73	48 - 115	5	35
2-Chloronaphthalene	1.33	0.965		mg/Kg		73	52 - 115	1	35
2-Nitroaniline	1.33	0.992		mg/Kg		75	54 - 115	2	35
Dimethyl phthalate	1.33	1.01		mg/Kg		76	64 - 119	4	35
Acenaphthylene	1.33	0.941		mg/Kg		71	61 - 129	2	35
3-Nitroaniline	1.33	0.899		mg/Kg		68	50 - 115	3	35

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

## Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

(Continued)

Lab Sample ID: LCS D 720-151100/3-A

Matrix: Solid

Analysis Batch: 151118

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 151100

Analyte	Spike Added	LCS D Result	LCS D Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	1.33	0.991		mg/Kg		75	50 - 115	2	35
2,4-Dinitrophenol	2.66	ND		mg/Kg		23	15 - 115	10	35
4-Nitrophenol	2.66	2.28		mg/Kg		86	54 - 125	2	35
Dibenzofuran	1.33	0.991		mg/Kg		75	55 - 115	2	35
2,4-Dinitrotoluene	1.33	1.05		mg/Kg		79	57 - 115	1	35
2,6-Dinitrotoluene	1.33	1.02		mg/Kg		77	54 - 119	2	35
Diethyl phthalate	1.33	1.03		mg/Kg		77	49 - 117	0	35
4-Chlorophenyl phenyl ether	1.33	1.03		mg/Kg		77	57 - 115	4	35
Fluorene	1.33	1.02		mg/Kg		76	54 - 115	2	35
4-Nitroaniline	1.33	1.04		mg/Kg		78	59 - 115	0	35
2-Methyl-4,6-dinitrophenol	2.66	1.49		mg/Kg		56	39 - 115	4	35
N-Nitrosodiphenylamine	1.33	1.07		mg/Kg		80	56 - 115	1	35
4-Bromophenyl phenyl ether	1.33	1.01		mg/Kg		76	53 - 115	2	35
Hexachlorobenzene	1.33	1.01		mg/Kg		76	55 - 115	0	35
Pentachlorophenol	2.66	1.88		mg/Kg		71	35 - 115	2	35
Phenanthrene	1.33	1.06		mg/Kg		80	54 - 115	1	35
Anthracene	1.33	1.07		mg/Kg		80	55 - 115	1	35
Di-n-butyl phthalate	1.33	1.02		mg/Kg		77	55 - 115	0	35
Fluoranthene	1.33	1.02		mg/Kg		77	52 - 130	2	35
Pyrene	1.33	1.14		mg/Kg		86	48 - 115	3	35
Butyl benzyl phthalate	1.33	1.14		mg/Kg		86	53 - 115	1	35
3,3'-Dichlorobenzidine	1.33	0.919		mg/Kg		69	42 - 115	1	35
Benzo[a]anthracene	1.33	1.10		mg/Kg		82	55 - 115	1	35
Bis(2-ethylhexyl) phthalate	1.33	1.22		mg/Kg		92	53 - 115	1	35
Chrysene	1.33	1.14		mg/Kg		86	58 - 115	0	35
Di-n-octyl phthalate	1.33	1.12		mg/Kg		84	53 - 115	2	35
Benzo[b]fluoranthene	1.33	1.07		mg/Kg		80	50 - 119	4	35
Benzo[a]pyrene	1.33	1.12		mg/Kg		84	57 - 122	1	35
Benzo[k]fluoranthene	1.33	1.11		mg/Kg		84	55 - 120	5	35
Indeno[1,2,3-cd]pyrene	1.33	0.990		mg/Kg		74	56 - 115	1	35
Benzo[g,h,i]perylene	1.33	0.965		mg/Kg		73	56 - 115	3	35
Benzoic acid	1.33	0.392		mg/Kg		29	10 - 115	16	35
Azobenzene	1.33	0.974		mg/Kg		73	52 - 115	0	35
Dibenz(a,h)anthracene	1.33	1.00		mg/Kg		75	57 - 121	1	35

Surrogate	LCS D LCS D		Limits
	%Recovery	Qualifier	
Nitrobenzene-d5	66		21 - 98
2-Fluorobiphenyl	70		30 - 112
Terphenyl-d14	79		32 - 117
2-Fluorophenol	60		28 - 98
Phenol-d5	67		23 - 101
2,4,6-Tribromophenol	74		37 - 114

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

## Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

(Continued)

**Lab Sample ID: 720-54027-22 MS**

**Matrix: Solid**

**Analysis Batch: 151118**

**Client Sample ID: LF-SPOILSC COMP**

**Prep Type: Total/NA**

**Prep Batch: 151100**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec. Limits
	Result	Qualifier	Added	Result	Qualifier				
Phenol	ND	H	1.33	0.782		mg/Kg		59	23 - 115
Bis(2-chloroethyl)ether	ND	H	1.33	0.759		mg/Kg		57	27 - 115
2-Chlorophenol	ND	H	1.33	0.805		mg/Kg		60	16 - 115
1,3-Dichlorobenzene	ND	H	1.33	0.732		mg/Kg		55	22 - 115
1,4-Dichlorobenzene	ND	H	1.33	0.795		mg/Kg		58	21 - 115
Benzyl alcohol	ND	H	1.33	0.763		mg/Kg		57	28 - 115
1,2-Dichlorobenzene	ND	H	1.33	0.771		mg/Kg		58	25 - 115
2-Methylphenol	ND	H	1.33	0.807		mg/Kg		61	32 - 115
Methylphenol, 3 & 4	ND	H	1.33	0.803		mg/Kg		60	28 - 115
N-Nitrosodi-n-propylamine	ND	H	1.33	0.766		mg/Kg		58	27 - 115
Hexachloroethane	ND	H	1.33	0.737		mg/Kg		55	19 - 115
Nitrobenzene	ND	H	1.33	0.791		mg/Kg		59	30 - 115
Isophorone	ND	H	1.33	0.774		mg/Kg		58	36 - 115
2-Nitrophenol	ND	H	1.33	0.815		mg/Kg		61	11 - 116
2,4-Dimethylphenol	ND	H	1.33	0.731		mg/Kg		55	36 - 115
Bis(2-chloroethoxy)methane	ND	H	1.33	0.789		mg/Kg		59	28 - 115
2,4-Dichlorophenol	ND	H	1.33	0.843		mg/Kg		63	17 - 115
1,2,4-Trichlorobenzene	ND	H	1.33	0.801		mg/Kg		60	29 - 115
Naphthalene	ND	H	1.33	0.879		mg/Kg		66	22 - 115
4-Chloroaniline	ND	H	1.33	0.631		mg/Kg		47	7 - 115
Hexachlorobutadiene	ND	H	1.33	0.848		mg/Kg		64	26 - 115
4-Chloro-3-methylphenol	ND	H	1.33	0.886		mg/Kg		67	42 - 115
2-Methylnaphthalene	ND	H	1.33	0.850		mg/Kg		64	28 - 115
Hexachlorocyclopentadiene	ND	H	1.33	0.392		mg/Kg		29	15 - 115
2,4,6-Trichlorophenol	ND	H	1.33	0.863		mg/Kg		65	25 - 115
2,4,5-Trichlorophenol	ND	H	1.33	0.924		mg/Kg		69	38 - 115
2-Chloronaphthalene	ND	H	1.33	0.854		mg/Kg		64	38 - 115
2-Nitroaniline	ND	H	1.33	0.905		mg/Kg		68	43 - 115
Dimethyl phthalate	ND	H	1.33	0.909		mg/Kg		68	55 - 116
Acenaphthylene	ND	H	1.33	0.814		mg/Kg		61	49 - 120
3-Nitroaniline	ND	H	1.33	0.808		mg/Kg		61	39 - 115
Acenaphthene	ND	H	1.33	0.914		mg/Kg		68	42 - 115
2,4-Dinitrophenol	ND	H	2.66	2.00		mg/Kg		75	13 - 122
4-Nitrophenol	ND	H	2.66	2.19		mg/Kg		82	25 - 147
Dibenzofuran	ND	H	1.33	0.896		mg/Kg		67	43 - 115
2,4-Dinitrotoluene	ND	H	1.33	0.975		mg/Kg		73	47 - 115
2,6-Dinitrotoluene	ND	H	1.33	0.916		mg/Kg		69	55 - 115
Diethyl phthalate	ND	H	1.33	0.926		mg/Kg		70	48 - 115
4-Chlorophenyl phenyl ether	ND	H	1.33	0.987		mg/Kg		74	44 - 115
Fluorene	ND	H	1.33	0.955		mg/Kg		72	41 - 115
4-Nitroaniline	ND	H	1.33	0.989		mg/Kg		74	47 - 120
2-Methyl-4,6-dinitrophenol	ND	H	2.66	2.11		mg/Kg		74	19 - 132
N-Nitrosodiphenylamine	ND	H	1.33	1.06		mg/Kg		80	43 - 115
4-Bromophenyl phenyl ether	ND	H	1.33	1.02		mg/Kg		77	45 - 115
Hexachlorobenzene	ND	H	1.33	0.986		mg/Kg		74	48 - 115
Pentachlorophenol	ND	H	2.66	1.87		mg/Kg		70	7 - 132
Phenanthrene	ND	H	1.33	1.06		mg/Kg		76	38 - 115

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

## Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

(Continued)

Lab Sample ID: 720-54027-22 MS

Matrix: Solid

Analysis Batch: 151118

Client Sample ID: LF-SPOILSC COMP

Prep Type: Total/NA

Prep Batch: 151100

Analyte	Sample		Spike Added	MS MS		Unit	D	%Rec	%Rec. Limits
	Result	Qualifier		Result	Qualifier				
Anthracene	ND	H	1.33	1.02		mg/Kg		76	47 - 115
Di-n-butyl phthalate	ND	H	1.33	0.918		mg/Kg		69	46 - 115
Fluoranthene	0.10	H	1.33	1.07		mg/Kg		73	40 - 115
Pyrene	0.15	H	1.33	1.41		mg/Kg		95	35 - 115
Butyl benzyl phthalate	ND	H	1.33	1.05		mg/Kg		79	40 - 115
3,3'-Dichlorobenzidine	ND	H	1.33	0.618		mg/Kg		46	17 - 115
Benzo[a]anthracene	ND	H	1.33	1.21		mg/Kg		84	42 - 115
Bis(2-ethylhexyl) phthalate	ND	H	1.33	1.23		mg/Kg		91	42 - 115
Chrysene	0.098	H	1.33	1.30		mg/Kg		90	37 - 115
Di-n-octyl phthalate	ND	H	1.33	1.02		mg/Kg		77	46 - 115
Benzo[b]fluoranthene	ND	H	1.33	1.17		mg/Kg		83	43 - 115
Benzo[a]pyrene	0.072	H	1.33	1.17		mg/Kg		82	48 - 115
Benzo[k]fluoranthene	ND	H	1.33	1.17		mg/Kg		84	39 - 115
Indeno[1,2,3-cd]pyrene	ND	H	1.33	1.02		mg/Kg		74	50 - 115
Benzo[g,h,i]perylene	ND	H	1.33	1.02		mg/Kg		74	43 - 115
Benzoic acid	ND	H	1.33	0.836		mg/Kg		63	0 - 115
Azobenzene	ND	H	1.33	0.908		mg/Kg		68	48 - 115
Dibenz(a,h)anthracene	ND	H	1.33	1.02		mg/Kg		75	49 - 115

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
Nitrobenzene-d5	58		21 - 98
2-Fluorobiphenyl	63		30 - 112
Terphenyl-d14	77		32 - 117
2-Fluorophenol	50		28 - 98
Phenol-d5	59		23 - 101
2,4,6-Tribromophenol	71		37 - 114

Lab Sample ID: 720-54027-22 MSD

Matrix: Solid

Analysis Batch: 151118

Client Sample ID: LF-SPOILSC COMP

Prep Type: Total/NA

Prep Batch: 151100

Analyte	Sample		Spike Added	MSD MSD		Unit	D	%Rec	%Rec. Limits	RPD	
	Result	Qualifier		Result	Qualifier					RPD	Limit
Phenol	ND	H	1.33	0.754		mg/Kg		57	23 - 115	4	35
Bis(2-chloroethyl)ether	ND	H	1.33	0.686		mg/Kg		51	27 - 115	10	35
2-Chlorophenol	ND	H	1.33	0.766		mg/Kg		57	16 - 115	5	35
1,3-Dichlorobenzene	ND	H	1.33	0.698		mg/Kg		52	22 - 115	5	35
1,4-Dichlorobenzene	ND	H	1.33	0.757		mg/Kg		55	21 - 115	5	35
Benzyl alcohol	ND	H	1.33	0.752		mg/Kg		56	28 - 115	1	35
1,2-Dichlorobenzene	ND	H	1.33	0.740		mg/Kg		56	25 - 115	4	35
2-Methylphenol	ND	H	1.33	0.775		mg/Kg		58	32 - 115	4	35
Methylphenol, 3 & 4	ND	H	1.33	0.779		mg/Kg		58	28 - 115	3	35
N-Nitrosodi-n-propylamine	ND	H	1.33	0.758		mg/Kg		57	27 - 115	1	35
Hexachloroethane	ND	H	1.33	0.709		mg/Kg		53	19 - 115	4	35
Nitrobenzene	ND	H	1.33	0.759		mg/Kg		57	30 - 115	4	35
Isophorone	ND	H	1.33	0.732		mg/Kg		55	36 - 115	6	35
2-Nitrophenol	ND	H	1.33	0.803		mg/Kg		60	11 - 116	1	35
2,4-Dimethylphenol	ND	H	1.33	0.638		mg/Kg		48	36 - 115	14	35

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

## Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

(Continued)

Lab Sample ID: 720-54027-22 MSD

Matrix: Solid

Analysis Batch: 151118

Client Sample ID: LF-SPOILSC COMP

Prep Type: Total/NA

Prep Batch: 151100

Analyte	Sample		Spike Added	MSD		Unit	D	%Rec	%Rec. Limits	RPD	
	Result	Qualifier		Result	Qualifier					RPD	Limit
Bis(2-chloroethoxy)methane	ND	H	1.33	0.749		mg/Kg		56	28 - 115	5	35
2,4-Dichlorophenol	ND	H	1.33	0.811		mg/Kg		61	17 - 115	4	35
1,2,4-Trichlorobenzene	ND	H	1.33	0.756		mg/Kg		57	29 - 115	6	35
Naphthalene	ND	H	1.33	0.826		mg/Kg		62	22 - 115	6	35
4-Chloroaniline	ND	H	1.33	0.642		mg/Kg		48	7 - 115	2	35
Hexachlorobutadiene	ND	H	1.33	0.803		mg/Kg		60	26 - 115	5	35
4-Chloro-3-methylphenol	ND	H	1.33	0.871		mg/Kg		65	42 - 115	2	35
2-Methylnaphthalene	ND	H	1.33	0.817		mg/Kg		61	28 - 115	4	35
Hexachlorocyclopentadiene	ND	H	1.33	0.340		mg/Kg		25	15 - 115	14	35
2,4,6-Trichlorophenol	ND	H	1.33	0.848		mg/Kg		64	25 - 115	2	35
2,4,5-Trichlorophenol	ND	H	1.33	0.920		mg/Kg		69	38 - 115	0	35
2-Chloronaphthalene	ND	H	1.33	0.839		mg/Kg		63	38 - 115	2	35
2-Nitroaniline	ND	H	1.33	0.903		mg/Kg		68	43 - 115	0	35
Dimethyl phthalate	ND	H	1.33	0.916		mg/Kg		69	55 - 116	1	35
Acenaphthylene	ND	H	1.33	0.779		mg/Kg		58	49 - 120	4	35
3-Nitroaniline	ND	H	1.33	0.806		mg/Kg		60	39 - 115	0	35
Acenaphthene	ND	H	1.33	0.890		mg/Kg		66	42 - 115	3	35
2,4-Dinitrophenol	ND	H	2.67	1.82		mg/Kg		68	13 - 122	9	35
4-Nitrophenol	ND	H	2.67	2.16		mg/Kg		81	25 - 147	1	35
Dibenzofuran	ND	H	1.33	0.906		mg/Kg		68	43 - 115	1	35
2,4-Dinitrotoluene	ND	H	1.33	0.953		mg/Kg		71	47 - 115	2	35
2,6-Dinitrotoluene	ND	H	1.33	0.902		mg/Kg		68	55 - 115	1	35
Diethyl phthalate	ND	H	1.33	0.932		mg/Kg		70	48 - 115	1	35
4-Chlorophenyl phenyl ether	ND	H	1.33	0.946		mg/Kg		71	44 - 115	4	35
Fluorene	ND	H	1.33	0.928		mg/Kg		70	41 - 115	3	35
4-Nitroaniline	ND	H	1.33	0.994		mg/Kg		75	47 - 120	1	35
2-Methyl-4,6-dinitrophenol	ND	H	2.67	2.04		mg/Kg		72	19 - 132	3	35
N-Nitrosodiphenylamine	ND	H	1.33	1.06		mg/Kg		79	43 - 115	1	35
4-Bromophenyl phenyl ether	ND	H	1.33	0.978		mg/Kg		73	45 - 115	4	35
Hexachlorobenzene	ND	H	1.33	0.983		mg/Kg		74	48 - 115	0	35
Pentachlorophenol	ND	H	2.67	1.85		mg/Kg		70	7 - 132	1	35
Phenanthrene	ND	H	1.33	1.03		mg/Kg		74	38 - 115	3	35
Anthracene	ND	H	1.33	1.01		mg/Kg		74	47 - 115	2	35
Di-n-butyl phthalate	ND	H	1.33	0.894		mg/Kg		67	46 - 115	3	35
Fluoranthene	0.10	H	1.33	0.862		mg/Kg		57	40 - 115	22	35
Pyrene	0.15	H	1.33	1.15		mg/Kg		74	35 - 115	21	35
Butyl benzyl phthalate	ND	H	1.33	1.06		mg/Kg		80	40 - 115	1	35
3,3'-Dichlorobenzidine	ND	H	1.33	0.576		mg/Kg		43	17 - 115	7	35
Benzo[a]anthracene	ND	H	1.33	1.03		mg/Kg		71	42 - 115	16	35
Bis(2-ethylhexyl) phthalate	ND	H	1.33	1.23		mg/Kg		90	42 - 115	1	35
Chrysene	0.098	H	1.33	1.11		mg/Kg		76	37 - 115	16	35
Di-n-octyl phthalate	ND	H	1.33	1.03		mg/Kg		78	46 - 115	1	35
Benzo[b]fluoranthene	ND	H	1.33	0.987		mg/Kg		70	43 - 115	17	35
Benzo[a]pyrene	0.072	H	1.33	1.01		mg/Kg		70	48 - 115	14	35
Benzo[k]fluoranthene	ND	H	1.33	1.07		mg/Kg		76	39 - 115	9	35
Indeno[1,2,3-cd]pyrene	ND	H	1.33	0.967		mg/Kg		70	50 - 115	6	35
Benzo[g,h,i]perylene	ND	H	1.33	0.952		mg/Kg		69	43 - 115	7	35

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# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

## Method: 8270C - Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)

(Continued)

Lab Sample ID: 720-54027-22 MSD

Matrix: Solid

Analysis Batch: 151118

Client Sample ID: LF-SPOILSC COMP

Prep Type: Total/NA

Prep Batch: 151100

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier							
Benzoic acid	ND	H	1.33	0.825		mg/Kg		62	0 - 115	1	35	
Azobenzene	ND	H	1.33	0.894		mg/Kg		67	48 - 115	2	35	
Dibenz(a,h)anthracene	ND	H	1.33	0.998		mg/Kg		74	49 - 115	2	35	

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
Nitrobenzene-d5	56		21 - 98
2-Fluorobiphenyl	61		30 - 112
Terphenyl-d14	79		32 - 117
2-Fluorophenol	48		28 - 98
Phenol-d5	56		23 - 101
2,4,6-Tribromophenol	71		37 - 114

## Method: 8081A - Organochlorine Pesticides (GC)

Lab Sample ID: MB 720-151097/1-A

Matrix: Solid

Analysis Batch: 151132

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 151097

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Aldrin	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Dieldrin	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Endrin aldehyde	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Endrin	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Endrin ketone	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Heptachlor	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Heptachlor epoxide	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
4,4'-DDT	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
4,4'-DDE	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
4,4'-DDD	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Endosulfan I	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Endosulfan II	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
alpha-BHC	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
beta-BHC	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
gamma-BHC (Lindane)	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
delta-BHC	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Endosulfan sulfate	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Methoxychlor	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Toxaphene	ND		40		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
Chlordane (technical)	ND		40		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
alpha-Chlordane	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1
gamma-Chlordane	ND		2.0		ug/Kg		01/03/14 09:54	01/03/14 23:29	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	110		57 - 122	01/03/14 09:54	01/03/14 23:29	1
DCB Decachlorobiphenyl	121		21 - 136	01/03/14 09:54	01/03/14 23:29	1

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# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCS 720-151097/2-A**

**Matrix: Solid**

**Analysis Batch: 151132**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 151097**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	16.5	14.5		ug/Kg		87	65 - 120
Dieldrin	16.5	14.4		ug/Kg		87	72 - 120
Endrin aldehyde	16.5	14.6		ug/Kg		88	68 - 120
Endrin	16.5	14.4		ug/Kg		87	68 - 120
Endrin ketone	16.5	14.4		ug/Kg		87	67 - 120
Heptachlor	16.5	14.0		ug/Kg		85	69 - 120
Heptachlor epoxide	16.5	14.8		ug/Kg		89	68 - 120
4,4'-DDT	16.5	14.3		ug/Kg		86	63 - 127
4,4'-DDE	16.5	15.0		ug/Kg		91	70 - 120
4,4'-DDD	16.5	14.6		ug/Kg		89	69 - 120
Endosulfan I	16.5	14.5		ug/Kg		87	62 - 120
Endosulfan II	16.5	14.6		ug/Kg		88	65 - 120
alpha-BHC	16.5	14.2		ug/Kg		86	62 - 120
beta-BHC	16.5	15.4		ug/Kg		93	74 - 124
gamma-BHC (Lindane)	16.5	14.3		ug/Kg		87	72 - 120
delta-BHC	16.5	14.3		ug/Kg		87	64 - 120
Endosulfan sulfate	16.5	14.7		ug/Kg		89	67 - 120
Methoxychlor	16.5	15.1		ug/Kg		92	71 - 132
alpha-Chlordane	16.5	14.6		ug/Kg		88	70 - 120
gamma-Chlordane	16.5	14.7		ug/Kg		89	68 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Tetrachloro-m-xylene	91		57 - 122
DCB Decachlorobiphenyl	102		21 - 136

**Lab Sample ID: LCSD 720-151097/3-A**

**Matrix: Solid**

**Analysis Batch: 151132**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 151097**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aldrin	16.5	16.2		ug/Kg		98	65 - 120	11	20
Dieldrin	16.5	16.7		ug/Kg		102	72 - 120	15	20
Endrin aldehyde	16.5	17.1		ug/Kg		104	68 - 120	16	20
Endrin	16.5	16.9		ug/Kg		102	68 - 120	16	20
Endrin ketone	16.5	16.8		ug/Kg		102	67 - 120	15	20
Heptachlor	16.5	15.7		ug/Kg		95	69 - 120	11	20
Heptachlor epoxide	16.5	16.9		ug/Kg		102	68 - 120	13	20
4,4'-DDT	16.5	16.8		ug/Kg		102	63 - 127	16	20
4,4'-DDE	16.5	17.7		ug/Kg		107	70 - 120	16	20
4,4'-DDD	16.5	17.1		ug/Kg		104	69 - 120	15	20
Endosulfan I	16.5	16.8		ug/Kg		102	62 - 120	15	20
Endosulfan II	16.5	17.1		ug/Kg		104	65 - 120	16	35
alpha-BHC	16.5	15.9		ug/Kg		96	62 - 120	11	20
beta-BHC	16.5	17.2		ug/Kg		104	74 - 124	11	20
gamma-BHC (Lindane)	16.5	16.1		ug/Kg		98	72 - 120	12	20
delta-BHC	16.5	16.4		ug/Kg		100	64 - 120	14	20
Endosulfan sulfate	16.5	17.2		ug/Kg		104	67 - 120	15	20
Methoxychlor	16.5	17.8		ug/Kg		108	71 - 132	16	20

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# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

**Lab Sample ID: LCSD 720-151097/3-A**

**Matrix: Solid**

**Analysis Batch: 151132**

**Client Sample ID: Lab Control Sample Dup**

**Prep Type: Total/NA**

**Prep Batch: 151097**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
alpha-Chlordane	16.5	16.7		ug/Kg		101	70 - 120	13	20
gamma-Chlordane	16.5	16.9		ug/Kg		103	68 - 120	13	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
Tetrachloro-m-xylene	99		57 - 122
DCB Decachlorobiphenyl	111		21 - 136

**Lab Sample ID: 720-54027-12 MS**

**Matrix: Solid**

**Analysis Batch: 151132**

**Client Sample ID: LF-SPOILSA COMP**

**Prep Type: Total/NA**

**Prep Batch: 151097**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aldrin	ND	H	16.6	16.0		ug/Kg		97	53 - 120
Dieldrin	ND	H	16.6	15.9		ug/Kg		96	46 - 130
Endrin aldehyde	ND	H	16.6	16.3		ug/Kg		98	40 - 120
Endrin	ND	H	16.6	15.8		ug/Kg		95	32 - 143
Endrin ketone	ND	H	16.6	15.7		ug/Kg		95	40 - 120
Heptachlor	ND	H	16.6	15.1		ug/Kg		91	52 - 120
Heptachlor epoxide	ND	H	16.6	17.0		ug/Kg		103	40 - 120
4,4'-DDT	ND	H	16.6	16.0		ug/Kg		97	17 - 144
4,4'-DDE	ND	H	16.6	16.6		ug/Kg		100	40 - 120
4,4'-DDD	ND	H	16.6	16.7		ug/Kg		101	40 - 120
Endosulfan I	ND	H	16.6	17.1		ug/Kg		103	40 - 120
Endosulfan II	ND	H	16.6	16.1		ug/Kg		97	40 - 120
alpha-BHC	ND	H	16.6	15.7		ug/Kg		94	40 - 120
beta-BHC	ND	H	16.6	17.1		ug/Kg		103	40 - 120
gamma-BHC (Lindane)	ND	H	16.6	15.7		ug/Kg		95	58 - 120
delta-BHC	ND	H	16.6	16.7		ug/Kg		101	40 - 120
Endosulfan sulfate	ND	H	16.6	16.0		ug/Kg		97	40 - 120
Methoxychlor	ND	H	16.6	16.8		ug/Kg		101	40 - 120
alpha-Chlordane	ND	H	16.6	16.8		ug/Kg		101	40 - 120
gamma-Chlordane	ND	H	16.6	16.7		ug/Kg		101	40 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
Tetrachloro-m-xylene	95		57 - 122
DCB Decachlorobiphenyl	101		21 - 136

**Lab Sample ID: 720-54027-12 MSD**

**Matrix: Solid**

**Analysis Batch: 151132**

**Client Sample ID: LF-SPOILSA COMP**

**Prep Type: Total/NA**

**Prep Batch: 151097**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aldrin	ND	H	16.3	17.0		ug/Kg		104	53 - 120	6	20
Dieldrin	ND	H	16.3	16.3		ug/Kg		100	46 - 130	3	20
Endrin aldehyde	ND	H	16.3	14.6		ug/Kg		90	40 - 120	10	20
Endrin	ND	H	16.3	16.8		ug/Kg		103	32 - 143	6	20
Endrin ketone	ND	H	16.3	16.5		ug/Kg		101	40 - 120	5	20
Heptachlor	ND	H	16.3	15.9		ug/Kg		98	52 - 120	5	20

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

## Method: 8081A - Organochlorine Pesticides (GC) (Continued)

Lab Sample ID: 720-54027-12 MSD

Matrix: Solid

Analysis Batch: 151132

Client Sample ID: LF-SPOILSA COMP

Prep Type: Total/NA

Prep Batch: 151097

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Heptachlor epoxide	ND	H	16.3	17.2		ug/Kg		106	40 - 120	1	20
4,4'-DDT	ND	H	16.3	16.7		ug/Kg		103	17 - 144	4	20
4,4'-DDE	ND	H	16.3	17.1		ug/Kg		105	40 - 120	3	20
4,4'-DDD	ND	H	16.3	17.3		ug/Kg		106	40 - 120	2	20
Endosulfan I	ND	H	16.3	18.9		ug/Kg		116	40 - 120	8	20
Endosulfan II	ND	H	16.3	16.4		ug/Kg		100	40 - 120	2	30
alpha-BHC	ND	H	16.3	16.4		ug/Kg		101	40 - 120	5	20
beta-BHC	ND	H	16.3	18.0		ug/Kg		110	40 - 120	5	20
gamma-BHC (Lindane)	ND	H	16.3	16.4		ug/Kg		101	58 - 120	4	20
delta-BHC	ND	H	16.3	17.5		ug/Kg		107	40 - 120	5	20
Endosulfan sulfate	ND	H	16.3	16.5		ug/Kg		101	40 - 120	3	20
Methoxychlor	ND	H	16.3	17.8		ug/Kg		109	40 - 120	5	20
alpha-Chlordane	ND	H	16.3	17.4		ug/Kg		107	40 - 120	4	20
gamma-Chlordane	ND	H	16.3	17.6		ug/Kg		108	40 - 120	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
Tetrachloro-m-xylene	107		57 - 122
DCB Decachlorobiphenyl	108		21 - 136

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

Lab Sample ID: MB 720-151099/1-A

Matrix: Solid

Analysis Batch: 151107

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 151099

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	ND		50		ug/Kg		01/03/14 09:58	01/03/14 19:37	1
PCB-1221	ND		50		ug/Kg		01/03/14 09:58	01/03/14 19:37	1
PCB-1232	ND		50		ug/Kg		01/03/14 09:58	01/03/14 19:37	1
PCB-1242	ND		50		ug/Kg		01/03/14 09:58	01/03/14 19:37	1
PCB-1248	ND		50		ug/Kg		01/03/14 09:58	01/03/14 19:37	1
PCB-1254	ND		50		ug/Kg		01/03/14 09:58	01/03/14 19:37	1
PCB-1260	ND		50		ug/Kg		01/03/14 09:58	01/03/14 19:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	70		45 - 132	01/03/14 09:58	01/03/14 19:37	1
DCB Decachlorobiphenyl	79		42 - 146	01/03/14 09:58	01/03/14 19:37	1

Lab Sample ID: LCS 720-151099/2-A

Matrix: Solid

Analysis Batch: 151107

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 151099

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				Limits
PCB-1016	132	116		ug/Kg		88	72 - 127
PCB-1260	132	110		ug/Kg		84	74 - 129

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# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

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

**Lab Sample ID:** LCS 720-151099/2-A  
**Matrix:** Solid  
**Analysis Batch:** 151107

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA  
**Prep Batch:** 151099

	LCS	LCS	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
Tetrachloro-m-xylene	76		45 - 132
DCB Decachlorobiphenyl	86		42 - 146

**Lab Sample ID:** LCSD 720-151099/3-A  
**Matrix:** Solid  
**Analysis Batch:** 151107

**Client Sample ID:** Lab Control Sample Dup  
**Prep Type:** Total/NA  
**Prep Batch:** 151099

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec.		RPD	Limit
							Limits	RPD		
PCB-1016	132	109		ug/Kg		83	72 - 127	6	20	
PCB-1260	132	110		ug/Kg		83	74 - 129	0	20	

	LCSD	LCSD	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
Tetrachloro-m-xylene	68		45 - 132
DCB Decachlorobiphenyl	84		42 - 146

**Lab Sample ID:** 720-54027-17 MS  
**Matrix:** Solid  
**Analysis Batch:** 151107

**Client Sample ID:** LF-SPOILSB COMP  
**Prep Type:** Total/NA  
**Prep Batch:** 151099

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
PCB-1016	ND	H	130	137		ug/Kg		106	69 - 120	
PCB-1260	ND	H	130	107		ug/Kg		82	73 - 114	

	MS	MS	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
Tetrachloro-m-xylene	73		45 - 132
DCB Decachlorobiphenyl	82		42 - 146

**Lab Sample ID:** 720-54027-17 MSD  
**Matrix:** Solid  
**Analysis Batch:** 151107

**Client Sample ID:** LF-SPOILSB COMP  
**Prep Type:** Total/NA  
**Prep Batch:** 151099

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec.	
									Limits	RPD
PCB-1016	ND	H	133	113		ug/Kg		85	69 - 120	20
PCB-1260	ND	H	133	104		ug/Kg		79	73 - 114	2

	MSD	MSD	
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>
Tetrachloro-m-xylene	67		45 - 132
DCB Decachlorobiphenyl	78		42 - 146

## Method: 6010B - Metals (ICP)

**Lab Sample ID:** MB 720-151163/1-A  
**Matrix:** Solid  
**Analysis Batch:** 151192

**Client Sample ID:** Method Blank  
**Prep Type:** Total Recoverable  
**Prep Batch:** 151163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

TestAmerica Pleasanton

# QC Sample Results

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

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

**Lab Sample ID: LCS 720-151163/2-A**  
**Matrix: Solid**  
**Analysis Batch: 151192**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total Recoverable**  
**Prep Batch: 151163**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	1.00	0.942		mg/L		94	80 - 120

**Lab Sample ID: LCSD 720-151163/3-A**  
**Matrix: Solid**  
**Analysis Batch: 151192**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total Recoverable**  
**Prep Batch: 151163**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chromium	1.00	0.984		mg/L		98	80 - 120	4	20

**Lab Sample ID: LB4 720-151056/1-B**  
**Matrix: Solid**  
**Analysis Batch: 151192**

**Client Sample ID: Method Blank**  
**Prep Type: STLC Citrate**  
**Prep Batch: 151163**

Analyte	LB4 Result	LB4 Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		0.10		mg/L		01/06/14 10:24	01/06/14 15:11	1

# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

## GC/MS Semi VOA

### Prep Batch: 151100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-12	LF-SPOILSA COMP	Total/NA	Solid	3546	
720-54027-17	LF-SPOILSB COMP	Total/NA	Solid	3546	
720-54027-22	LF-SPOILSC COMP	Total/NA	Solid	3546	
720-54027-22 MS	LF-SPOILSC COMP	Total/NA	Solid	3546	
720-54027-22 MSD	LF-SPOILSC COMP	Total/NA	Solid	3546	
LCS 720-151100/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 720-151100/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 720-151100/1-A	Method Blank	Total/NA	Solid	3546	

### Analysis Batch: 151118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-12	LF-SPOILSA COMP	Total/NA	Solid	8270C	151100
720-54027-17	LF-SPOILSB COMP	Total/NA	Solid	8270C	151100
720-54027-22	LF-SPOILSC COMP	Total/NA	Solid	8270C	151100
720-54027-22 MS	LF-SPOILSC COMP	Total/NA	Solid	8270C	151100
720-54027-22 MSD	LF-SPOILSC COMP	Total/NA	Solid	8270C	151100
LCS 720-151100/2-A	Lab Control Sample	Total/NA	Solid	8270C	151100
LCSD 720-151100/3-A	Lab Control Sample Dup	Total/NA	Solid	8270C	151100
MB 720-151100/1-A	Method Blank	Total/NA	Solid	8270C	151100

## GC Semi VOA

### Analysis Batch: 151092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-12	LF-SPOILSA COMP	Total/NA	Solid	8082	151099
720-54027-22	LF-SPOILSC COMP	Total/NA	Solid	8082	151099

### Prep Batch: 151097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-12	LF-SPOILSA COMP	Total/NA	Solid	3546	
720-54027-12 MS	LF-SPOILSA COMP	Total/NA	Solid	3546	
720-54027-12 MSD	LF-SPOILSA COMP	Total/NA	Solid	3546	
720-54027-17	LF-SPOILSB COMP	Total/NA	Solid	3546	
720-54027-22	LF-SPOILSC COMP	Total/NA	Solid	3546	
LCS 720-151097/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 720-151097/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 720-151097/1-A	Method Blank	Total/NA	Solid	3546	

### Prep Batch: 151099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-12	LF-SPOILSA COMP	Total/NA	Solid	3546	
720-54027-17	LF-SPOILSB COMP	Total/NA	Solid	3546	
720-54027-17 MS	LF-SPOILSB COMP	Total/NA	Solid	3546	
720-54027-17 MSD	LF-SPOILSB COMP	Total/NA	Solid	3546	
720-54027-22	LF-SPOILSC COMP	Total/NA	Solid	3546	
LCS 720-151099/2-A	Lab Control Sample	Total/NA	Solid	3546	
LCSD 720-151099/3-A	Lab Control Sample Dup	Total/NA	Solid	3546	
MB 720-151099/1-A	Method Blank	Total/NA	Solid	3546	

TestAmerica Pleasanton

# QC Association Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

## GC Semi VOA (Continued)

### Analysis Batch: 151107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-17	LF-SPOILSB COMP	Total/NA	Solid	8082	151099
720-54027-17 MS	LF-SPOILSB COMP	Total/NA	Solid	8082	151099
720-54027-17 MSD	LF-SPOILSB COMP	Total/NA	Solid	8082	151099
LCS 720-151099/2-A	Lab Control Sample	Total/NA	Solid	8082	151099
LCSD 720-151099/3-A	Lab Control Sample Dup	Total/NA	Solid	8082	151099
MB 720-151099/1-A	Method Blank	Total/NA	Solid	8082	151099

### Analysis Batch: 151132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-12	LF-SPOILSA COMP	Total/NA	Solid	8081A	151097
720-54027-12 MS	LF-SPOILSA COMP	Total/NA	Solid	8081A	151097
720-54027-12 MSD	LF-SPOILSA COMP	Total/NA	Solid	8081A	151097
720-54027-17	LF-SPOILSB COMP	Total/NA	Solid	8081A	151097
720-54027-22	LF-SPOILSC COMP	Total/NA	Solid	8081A	151097
LCS 720-151097/2-A	Lab Control Sample	Total/NA	Solid	8081A	151097
LCSD 720-151097/3-A	Lab Control Sample Dup	Total/NA	Solid	8081A	151097
MB 720-151097/1-A	Method Blank	Total/NA	Solid	8081A	151097

## Metals

### Leach Batch: 151056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-12	LF-SPOILSA COMP	STLC Citrate	Solid	CA WET Citrate	
720-54027-17	LF-SPOILSB COMP	STLC Citrate	Solid	CA WET Citrate	
720-54027-22	LF-SPOILSC COMP	STLC Citrate	Solid	CA WET Citrate	
720-54027-27	SL-SPOILS COMP	STLC Citrate	Solid	CA WET Citrate	
LB4 720-151056/1-B	Method Blank	STLC Citrate	Solid	CA WET Citrate	

### Prep Batch: 151163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-12	LF-SPOILSA COMP	STLC Citrate	Solid	3005A	151056
720-54027-17	LF-SPOILSB COMP	STLC Citrate	Solid	3005A	151056
720-54027-22	LF-SPOILSC COMP	STLC Citrate	Solid	3005A	151056
720-54027-27	SL-SPOILS COMP	STLC Citrate	Solid	3005A	151056
LB4 720-151056/1-B	Method Blank	STLC Citrate	Solid	3005A	151056
LCS 720-151163/2-A	Lab Control Sample	Total Recoverable	Solid	3005A	
LCSD 720-151163/3-A	Lab Control Sample Dup	Total Recoverable	Solid	3005A	
MB 720-151163/1-A	Method Blank	Total Recoverable	Solid	3005A	

### Analysis Batch: 151192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
720-54027-12	LF-SPOILSA COMP	STLC Citrate	Solid	6010B	151163
720-54027-17	LF-SPOILSB COMP	STLC Citrate	Solid	6010B	151163
720-54027-22	LF-SPOILSC COMP	STLC Citrate	Solid	6010B	151163
720-54027-27	SL-SPOILS COMP	STLC Citrate	Solid	6010B	151163
LB4 720-151056/1-B	Method Blank	STLC Citrate	Solid	6010B	151163
LCS 720-151163/2-A	Lab Control Sample	Total Recoverable	Solid	6010B	151163
LCSD 720-151163/3-A	Lab Control Sample Dup	Total Recoverable	Solid	6010B	151163
MB 720-151163/1-A	Method Blank	Total Recoverable	Solid	6010B	151163

TestAmerica Pleasanton

# Lab Chronicle

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

## Client Sample ID: LF-SPOILSA COMP

Lab Sample ID: 720-54027-12

Date Collected: 11/25/13 11:50

Matrix: Solid

Date Received: 11/25/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			151100	01/03/14 10:02	NDU	TAL PLS
Total/NA	Analysis	8270C		1	151118	01/03/14 16:39	MQL	TAL PLS
Total/NA	Prep	3546			151099	01/03/14 09:58	MRP	TAL PLS
Total/NA	Analysis	8082		1	151092	01/03/14 20:27	JZT	TAL PLS
Total/NA	Prep	3546			151097	01/03/14 09:54	MRP	TAL PLS
Total/NA	Analysis	8081A		1	151132	01/04/14 00:53	JZT	TAL PLS
STLC Citrate	Leach	CA WET Citrate			151056	01/04/14 09:16	ECT	TAL PLS
STLC Citrate	Prep	3005A			151163	01/06/14 10:24	JCR	TAL PLS
STLC Citrate	Analysis	6010B		1	151192	01/06/14 15:39	EFH	TAL PLS

## Client Sample ID: LF-SPOILSB COMP

Lab Sample ID: 720-54027-17

Date Collected: 11/25/13 11:55

Matrix: Solid

Date Received: 11/25/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			151100	01/03/14 10:02	NDU	TAL PLS
Total/NA	Analysis	8270C		1	151118	01/03/14 17:04	MQL	TAL PLS
Total/NA	Prep	3546			151099	01/03/14 09:58	MRP	TAL PLS
Total/NA	Analysis	8082		1	151107	01/03/14 20:27	JZT	TAL PLS
Total/NA	Prep	3546			151097	01/03/14 09:54	MRP	TAL PLS
Total/NA	Analysis	8081A		1	151132	01/04/14 01:10	JZT	TAL PLS
STLC Citrate	Leach	CA WET Citrate			151056	01/04/14 09:16	ECT	TAL PLS
STLC Citrate	Prep	3005A			151163	01/06/14 10:24	JCR	TAL PLS
STLC Citrate	Analysis	6010B		1	151192	01/06/14 15:53	EFH	TAL PLS

## Client Sample ID: LF-SPOILSC COMP

Lab Sample ID: 720-54027-22

Date Collected: 11/25/13 12:00

Matrix: Solid

Date Received: 11/25/13 15:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3546			151100	01/03/14 10:02	NDU	TAL PLS
Total/NA	Analysis	8270C		1	151118	01/03/14 16:16	MQL	TAL PLS
Total/NA	Prep	3546			151099	01/03/14 09:58	MRP	TAL PLS
Total/NA	Analysis	8082		1	151092	01/03/14 20:44	JZT	TAL PLS
Total/NA	Prep	3546			151097	01/03/14 09:54	MRP	TAL PLS
Total/NA	Analysis	8081A		1	151132	01/04/14 01:27	JZT	TAL PLS
STLC Citrate	Leach	CA WET Citrate			151056	01/04/14 09:16	ECT	TAL PLS
STLC Citrate	Prep	3005A			151163	01/06/14 10:24	JCR	TAL PLS
STLC Citrate	Analysis	6010B		1	151192	01/06/14 15:58	EFH	TAL PLS

TestAmerica Pleasanton



# Lab Chronicle

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

**Client Sample ID: SL-SPOILS COMP**

**Lab Sample ID: 720-54027-27**

**Date Collected: 11/25/13 12:10**

**Matrix: Solid**

**Date Received: 11/25/13 15:25**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
STLC Citrate	Leach	CA WET Citrate			151056	01/04/14 09:16	ECT	TAL PLS
STLC Citrate	Prep	3005A			151163	01/06/14 10:24	JCR	TAL PLS
STLC Citrate	Analysis	6010B		1	151192	01/06/14 16:03	EFH	TAL PLS

**Laboratory References:**

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

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# Certification Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

## Laboratory: TestAmerica Pleasanton

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

Authority	Program	EPA Region	Certification ID	Expiration Date
California	State Program	9	2496	01-31-14

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# Method Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

Method	Method Description	Protocol	Laboratory
8270C	Semivolatile Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	SW846	TAL PLS
8081A	Organochlorine Pesticides (GC)	SW846	TAL PLS
8082	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL PLS
6010B	Metals (ICP)	SW846	TAL PLS

**Protocol References:**

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

**Laboratory References:**

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



# Sample Summary

Client: Haley & Aldrich, Inc.  
Project/Site: Hanson

TestAmerica Job ID: 720-54027-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
720-54027-12	LF-SPOILSA COMP	Solid	11/25/13 11:50	11/25/13 15:25
720-54027-17	LF-SPOILSB COMP	Solid	11/25/13 11:55	11/25/13 15:25
720-54027-22	LF-SPOILSC COMP	Solid	11/25/13 12:00	11/25/13 15:25
720-54027-27	SL-SPOILS COMP	Solid	11/25/13 12:10	11/25/13 15:25

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Sharma, Dimple

720-54027-2

**From:** Tilotta, Vincent [VTilotta@haleyaldrich.com]  
**Sent:** Tuesday, December 31, 2013 11:39 AM  
**To:** Sharma, Dimple  
**Cc:** Schwartz, James; Green, James; Sebik, Joanna  
**Subject:** RE: Extra analysis

Good morning Dimple,

Would you please arrange for a W.E.T. STLC chromium analysis for the following sample? A standard five day turnaround is fine.

Sample ID	Sample ID number	Notes
FHARF-9-Spoils-Composite	720-54487-5	W.E.T. STLC for Cr

If possible, could you include the results of this analysis in the same report as the analyses listed in the email below?

Thank you,  
Vince



720-54027 Chain of Custody

**From:** Tilotta, Vincent  
**Sent:** Tuesday, December 24, 2013 9:55 AM  
**To:** Sharma, Dimple <dimple.sharma@testamericainc.com> (dimple.sharma@testamericainc.com)  
**Cc:** Schwartz, James; Green, James; Sebik, Joanna  
**Subject:** Extra analysis

Good morning Dimple,

I would like to formally request some extra testing be done on some samples collected in the last month.

Sample ID	Sample ID number	Notes
SL-SPOILS COMP	720-54027-27	W.E.T. STLC for Cr
3-TR/EX-SPOILS	720-54016-45	W.E.T. STLC for Cr
3-EX2-SPOILS-B	720-54016-10	W.E.T. STLC for Cr
3-EX2-SPOILS-C	720-54016-15	W.E.T. STLC for Cr
3-TR2-SPOILS-B	720-54016-25	W.E.T. STLC for Cr
FHARF-7/8-SPOILS-A	720-54017-10	W.E.T. STLC for Cr
FHARF-7/8-SPOILS-B	720-54017-15	W.E.T. STLC for Cr
LF-SPOILSC COMP	720-54027-22	W.E.T. STLC for Cr, BTEX (8260B), SVOC (8270C), Pesticides (8081A), f
LF-SPOILSA COMP	720-54027-12	W.E.T. STLC for Cr, BTEX (8260B), SVOC (8270C), Pesticides (8081A), f
LF-SPOILSB COMP	720-54027-17	W.E.T. STLC for Cr, BTEX (8260B), SVOC (8270C), Pesticides (8081A), f
3-TPT-SPOILS	720-54016-40	BTEX (8260B), SVOC (8270C), Pesticides (8081A), PCBs (8082), Pheno

## Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 720-54027-2

**Login Number: 54027**

**List Source: TestAmerica Pleasanton**

**List Number: 1**

**Creator: Gonzales, Justinn**

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



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

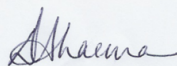
## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.  
TestAmerica Pleasanton  
1220 Quarry Lane  
Pleasanton, CA 94566  
Tel: (925)484-1919

TestAmerica Job ID: 720-54027-3  
Client Project/Site: Hanson

For:  
Haley & Aldrich, Inc.  
2033 North Main Street  
Suite 309  
Walnut Creek, California 94596

Attn: James Schwartz



Authorized for release by:  
1/17/2014 11:30:13 AM

Dimple Sharma, Senior Project Manager  
(925)484-1919  
[dimple.sharma@testamericainc.com](mailto:dimple.sharma@testamericainc.com)

### LINKS

Review your project  
results through  
**TotalAccess**

Have a Question?



Visit us at:  
[www.testamericainc.com](http://www.testamericainc.com)

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

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

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Report for:

**Ms. Dimple Sharma**  
**TestAmerica Pleasanton**  
1220 Quarry Lane  
Pleasanton, CA 94566

Regarding: Project: 720-54027-3  
EML ID: 1159388

Approved by:

Dates of Analysis:  
Asbestos-EPA Method 600/R-93/116: 01-17-2014

Approved Signatory  
Miguel Ines

Service SOPs: Asbestos-EPA Method 600/R-93/116 (EPA-600/M4-82-020 (SOP 01267))

All samples were received in acceptable condition unless noted in the Report Comments portion in the body of the report. The results relate only to the items tested. The results include an inherent uncertainty of measurement associated with estimating percentages by polarized light microscopy. Measurement uncertainty data for sample results with >1% asbestos concentration can be provided when requested.

EMLab P&K ("the Company") shall have no liability to the client or the client's customer with respect to decisions or recommendations made, actions taken or courses of conduct implemented by either the client or the client's customer as a result of or based upon the Test Results. In no event shall the Company be liable to the client with respect to the Test Results except for the Company's own willful misconduct or gross negligence nor shall the Company be liable for incidental or consequential damages or lost profits or revenues to the fullest extent such liability may be disclaimed by law, even if the Company has been advised of the possibility of such damages, lost profits or lost revenues. In no event shall the Company's liability with respect to the Test Results exceed the amount paid to the Company by the client therefor.



**EMLab P&K**

17461 Derian Ave, Suite 100, Irvine, CA 92614  
(800) 651-4802 Fax (623) 780-7695 www.emlab.com

Client: TestAmerica Pleasanton  
C/O: Ms. Dimple Sharma  
Re: 720-54027-3

Date of Sampling: 11-25-2013  
Date of Receipt: 01-14-2014  
Date of Report: 01-17-2014

**ASBESTOS PLM REPORT: EPA-600/M4-82-020 & EPA METHOD 600/R-93-116**

**Total Samples Submitted:** 2  
**Total Samples Analysed:** 2  
**Total Samples with Layer Asbestos Content > 1%:** 0

**Location: LF-SPOILSA COMP (720-54027-12)**

Lab ID-Version‡: 5243879-1

Sample Layers	Asbestos Content
Brown Soil	ND
<b>Sample Composite Homogeneity:</b> Good	

**Location: LF-SPOILSB COMP (720-54027-17)**

Lab ID-Version‡: 5243880-1

Sample Layers	Asbestos Content
Brown Soil	ND
<b>Sample Composite Homogeneity:</b> Good	

The test report shall not be reproduced except in full, without written approval of the laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. EMLab P&K reserves the right to dispose of all samples after a period of thirty (30) days, according to all state and federal guidelines, unless otherwise specified.

Inhomogeneous samples are separated into homogeneous subsamples and analyzed individually. ND means no fibers were detected. When detected, the minimum detection and reporting limit is less than 1% unless point counting is performed. Floor tile samples may contain large amounts of interference material and it is recommended that the sample be analyzed by gravimetric point count analysis to lower the detection limit and to aid in asbestos identification.

‡ A "Version" indicated by "-x" after the Lab ID# with a value greater than 1 indicates a sample with amended data. The revision number is reflected by the value of "x".

Sharma, Dimple

720-54027-3

**From:** Tilotta, Vincent [VTilotta@haleyaldrich.com]  
**Sent:** Monday, January 13, 2014 1:27 PM  
**To:** Sharma, Dimple  
**Cc:** Schwartz, James; Sebik, Joanna  
**Subject:** Asbestos Testing

Good afternoon Dimple,

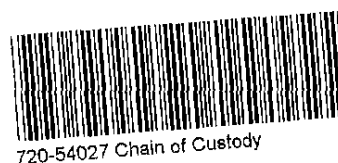
Please have the following three samples analyzed for asbestos as bulk PLM on a 5 day turnaround.

Sample ID	Sample ID number	Notes
LF-SPOILSA COMP	720-54027-12	asbestos (as bulk PLM)
LF-SPOILSB COMP	720-54027-17	asbestos (as bulk PLM)
3-TPT-SPOILS	720-54016-40	asbestos (as bulk PLM)

Please let me know if you have any questions.

Thank you,  
Vince

Vincent P. Tilotta, E.I.T.  
Staff Engineer  
**HALEY & ALDRICH**  
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Walnut Creek, CA 94596  
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cell: 925.708.3696  
Fax: 925.979.1456  
[VTilotta@HaleyAldrich.com](mailto:VTilotta@HaleyAldrich.com)  
[www.HaleyAldrich.com](http://www.HaleyAldrich.com)



## Login Sample Receipt Checklist

Client: Haley & Aldrich, Inc.

Job Number: 720-54027-3

Login Number: 54027

List Source: TestAmerica Pleasanton

List Number: 1

Creator: Gonzales, Justinn

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