

US EPA ARCHIVE DOCUMENT

ANALYTICAL REPORT

Job Number: 680-55154-1

Job Description: WGK Vapor Sampling 2/17/2010

For:

Solutia Inc.

575 Maryville Centre Dr.

Saint Louis, MO 63141

Attention: Mr. William G Johnson



Approved for release.
Lidya Gulizia
Project Manager I
3/2/2010 1:55 PM

Lidya Gulizia

Project Manager I

lidya.gulizia@testamericainc.com

03/02/2010

The test results in this report meet NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted. Results pertain only to samples listed in this report. This report may not be reproduced, except in full, without the written approval of the laboratory. Questions should be directed to the person who signed this report.

Savannah Certifications and ID #s: A2LA: 0399.01; AL: 41450; ARDEQ: 88-0692; ARDOH; CA: 03217CA; CO; CT: PH0161; DE; FL: E87052; GA: 803; Guam; HI; IL: 200022; IN; IA: 353; KS: E-10322; KY EPPC: 90084; KY UST; LA DEQ: 30690; LA DHH: LA080008; ME: 2008022; MD: 250; MA: M-GA006; MI: 9925; MS; NFESC: 249; NV: GA00006; NJ: GA769; NM; NY: 10842; NC DWQ: 269; NC DHHS: 13701; PA: 68-00474; PR: GA00006; RI: LAO00244; SC: 98001001; TN: TN0296; TX: T104704185; USEPA: GA00006; VT: VT-87052; VA: 00302; WA; WV DEP: 094; WV DHHR: 9950 C; WI DNR: 999819810; WY/EPAR8: 8TMS-Q

TestAmerica Laboratories, Inc.

TestAmerica Savannah 5102 LaRoche Avenue, Savannah, GA 31404

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Job Narrative
Savannah Job 680-55154-1 / Knoxville Lot H0B180425

Receipt

Following sample collection, the air sample was sent directly to TestAmerica Knoxville for analysis and was received in good condition on February 18, 2010. Please refer to the sample receiving information contained in the body of the Knoxville report for more detailed information regarding receipt.

Comments

No additional comments.

METHOD SUMMARY

Client: Solutia Inc.

Job Number: 680-55154-1

| Description | Lab Location | Method | Preparation Method |
|---------------------------------|--------------|--------------|--------------------|
| Matrix: Air - Tedlar Bag | | | |
| EPA TO-15 | TAL KNX | EPA-21 TO-15 | |

Lab References:

TAL KNX = TestAmerica Knoxville

Method References:

EPA-21 = "Compendium Of Methods For The Determination Of Toxic Organic Compounds In Ambient Air", Second Edition, EPA/625/R-96/010B, January 1999

SAMPLE SUMMARY

Client: Solutia Inc.

Job Number: 680-55154-1

| Lab Sample ID | Client Sample ID | Client Matrix | Date/Time Sampled | Date/Time Received |
|---------------|---------------------------|------------------|----------------------|-----------------------|
| 680-55154-1 | WGK-BIGMO-SVE-Line A-V | Air - Tedlar Bag | 02/17/2010 1430 | 02/18/2010 1030 |
| 680-55154-2 | WGK-BIGMO-TMX-IAF-A | Air - Tedlar Bag | 02/17/2010 1520 | 02/18/2010 1030 |
| 680-55154-3 | WGK-BIGMO-TMX-EFF-A | Air - Tedlar Bag | 02/17/2010 1530 | 02/18/2010 1030 |

SAMPLE RESULTS

| | |
|---|-----------|
| H0B180425 Analytical Report | 1 |
| Sample Receipt Documentation | 25 |
| Total Number of Pages | 28 |

TestAmerica Laboratories, Inc.

ANALYTICAL REPORT

PROJECT NO. 680-55154

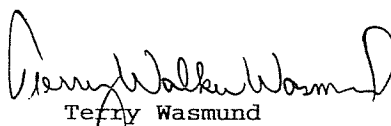
Solutia Vapor Sampling

Lot #: H0B180425

Lidya Gulizia

TestAmerica Savannah
5102 Laroche Avenue
Savannah, GA 31404

TESTAMERICA LABORATORIES, INC.


Terry Wasmund
Project Manager

March 1, 2010

TestAmerica Laboratories, Inc.

ANALYTICAL METHODS SUMMARY

H0B180425

| <u>PARAMETER</u> | <u>ANALYTICAL METHOD</u> |
|---------------------------|------------------------------|
| Volatile Organics by TO15 | EPA-2 TO-15 |

References:

EPA-2 "Compendium of Methods for the Determination of Toxic
Organic Compounds in Ambient Air", EPA-625/R-96/010b,
January 1999.

SAMPLE SUMMARY

H0B180425

| WO # | SAMPLE# | CLIENT SAMPLE ID | SAMPLED DATE | SAMP TIME |
|-------|---------|------------------------|-----------------|--------------|
| LVTPL | 001 | WGK-BIGMO-SVE-LINE A-V | 02/17/10 | 14:30 |
| LVTTP | 002 | WGK-BIGMO-TMX-INF-A | 02/17/10 | 15:20 |
| LVTPR | 003 | WGK-BIGMO-TMX-EFF-A | 02/17/10 | 15:30 |

NOTE (S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

PROJECT NARRATIVE HOB180425

The results reported herein are applicable to the samples submitted for analysis only.

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

The original chain of custody documentation is included with this report.

Sample Receipt

Custody seals were not present.

Quality Control and Data Interpretation

Unless otherwise noted, all holding times and QC criteria were met and the test results shown in this report meet all applicable NELAC requirements.

EPA methods TO-14A and TO-15 specify the use of humidified “zero air” as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of “zero air” by TestAmerica Knoxville.

The samples were received on 2/18/10 in Tedlar bags and transferred into Summa Canisters within 72 hours of sampling.

The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria. Even though the calibration verification analyzed on 2/19/10 exhibited a % difference of > 30% for 1,3,5-trimethylbenzene, hexachlorobutadiene, and the calibration verification analyzed on 2/22/10 exhibited a % difference of > 30% for chloromethane, the results were within the LCS acceptance limits.

Although 1,3,5-trimethylbenzene is flagged as being outside recovery limits in the laboratory control sample for batch 0053067, the laboratory control sample is in control.

TestAmerica Knoxville maintains the following certifications, approvals and accreditations: Arkansas DEQ Lab #88-0688, California DHS ELAP Cert. #2423, Colorado DPHE, Connecticut DPH Lab #PH-0223, Florida DOH Lab #E87177, Georgia DNR Lab #906, Hawaii DOH, Illinois EPA Lab #200012, Indiana DOH Lab #C-TN-02, Iowa DNR Lab #375, Kansas DHE Cert. #E-10349, Kentucky DEP Lab #90101, Louisiana DEQ Cert. #03079, Louisiana DOHH, Maryland DOE Cert. #277, Michigan DEQ Lab #9933, Nevada DEP, New Jersey DEP Lab #TN001, New York DOH Lab #10781, North Carolina DPH Lab #21705, North Carolina DEHNR Cert. #64, Ohio EPA VAP Lab #CL0059, Oklahoma DEQ Lab #9415, Pennsylvania DEP Lab #68-00576, South Carolina DHEC Cert #84001001, Tennessee DOH Lab #02014, Texas CEQ, Utah DOH Lab # QUAN3, Virginia DGS Lab #00165, Washington DOE Lab #C1314, West Virginia DEP Cert. #345, West Virginia DHHR Cert #9955C, Wisconsin DNR Lab #998044300, Naval Facilities Engineering Service Center and USDA Soil Permit #S-46424. This list of approvals is subject to change and does not imply that laboratory certification is available for all parameters reported in this environmental sample data report.

PROJECT NARRATIVE
HOB180425

The standard operating procedure allows for 2 analytes to be outside the control limits, but within marginal exceedence limit.

Sample Data Summary

TestAmerica Savannah

Client Sample ID: WGK-BIGMO-SVE-LINE A-V

GC/MS Volatiles

Lot-Sample #....: H0B180425-001 Work Order #....: LVTPL1AA Matrix.....: AIR
 Date Sampled....: 02/17/10 Date Received...: 02/18/10
 Prep Date.....: 02/19/10 Analysis Date...: 02/19/10
 Prep Batch #....: 0053067
 Dilution Factor: 160265.9 Method.....: EPA-2 TO-15

| PARAMETER | RESULT | REPORTING LIMIT | UNITS |
|--|----------------|--------------------|------------------|
| Dichlorodifluoromethane | ND | 32000 | ppb (v/v) |
| 1,2-Dichloro- 1,1,2,2-tetrafluoroethane | ND | 32000 | ppb (v/v) |
| Chloromethane | ND | 80000 | ppb (v/v) |
| Vinyl chloride | ND | 32000 | ppb (v/v) |
| Bromomethane | ND | 32000 | ppb (v/v) |
| Chloroethane | ND | 32000 | ppb (v/v) |
| Trichlorofluoromethane | ND | 32000 | ppb (v/v) |
| 1,1-Dichloroethene | ND | 32000 | ppb (v/v) |
| 1,1,2-Trichloro- 1,2,2-trifluoroethane | ND | 32000 | ppb (v/v) |
| Methylene chloride | ND | 80000 | ppb (v/v) |
| 1,1-Dichloroethane | ND | 32000 | ppb (v/v) |
| cis-1,2-Dichloroethene | ND | 32000 | ppb (v/v) |
| Chloroform | ND | 32000 | ppb (v/v) |
| 1,1,1-Trichloroethane | ND | 32000 | ppb (v/v) |
| Carbon tetrachloride | ND | 32000 | ppb (v/v) |
| Benzene | 5100000 | 32000 | ppb (v/v) |
| 1,2-Dichloroethane | ND | 32000 | ppb (v/v) |
| Trichloroethene | ND | 32000 | ppb (v/v) |
| 1,2-Dichloropropane | ND | 32000 | ppb (v/v) |
| cis-1,3-Dichloropropene | ND | 32000 | ppb (v/v) |
| Toluene | ND | 32000 | ppb (v/v) |
| trans-1,3-Dichloropropene | ND | 32000 | ppb (v/v) |
| 1,1,2-Trichloroethane | ND | 32000 | ppb (v/v) |
| Tetrachloroethene | ND | 32000 | ppb (v/v) |
| 1,2-Dibromoethane (EDB) | ND | 32000 | ppb (v/v) |
| Chlorobenzene | ND | 32000 | ppb (v/v) |
| Ethylbenzene | ND | 32000 | ppb (v/v) |
| m-Xylene & p-Xylene | ND | 32000 | ppb (v/v) |
| o-Xylene | ND | 32000 | ppb (v/v) |
| Styrene | ND | 32000 | ppb (v/v) |
| 1,1,2,2-Tetrachloroethane | ND | 32000 | ppb (v/v) |
| 1,3,5-Trimethylbenzene | ND | 32000 | ppb (v/v) |
| 1,2,4-Trimethylbenzene | ND | 32000 | ppb (v/v) |
| 1,3-Dichlorobenzene | ND | 32000 | ppb (v/v) |
| 1,4-Dichlorobenzene | ND | 32000 | ppb (v/v) |
| 1,2-Dichlorobenzene | ND | 32000 | ppb (v/v) |
| Benzyl chloride | ND | 64000 | ppb (v/v) |

(Continued on next page)

TestAmerica Savannah

Client Sample ID: WGK-BIGMO-SVE-LINE A-V

GC/MS Volatiles

Lot-Sample #...: H0B180425-001 Work Order #...: LVTPL1AA Matrix.....: AIR

| <u>PARAMETER</u> | <u>RESULT</u> | <u>REPORTING LIMIT</u> | <u>UNITS</u> |
|-----------------------------|-----------------------------|----------------------------|--------------|
| 1,2,4-Trichloro- benzene | ND | 160000 | ppb(v/v) |
| Hexachlorobutadiene | ND | 160000 | ppb(v/v) |
| <u>SURROGATE</u> | <u>PERCENT RECOVERY</u> | <u>RECOVERY LIMITS</u> | |
| 4-Bromofluorobenzene | 95 | (60 - 140) | |

TestAmerica Savannah

Client Sample ID: W GK-BIGMO-TMX-INF-A

GC/MS Volatiles

Lot-Sample #...: H0B180425-002 Work Order #...: LVTTP1AA Matrix.....: AIR
 Date Sampled...: 02/17/10 Date Received...: 02/18/10
 Prep Date.....: 02/19/10 Analysis Date...: 02/19/10
 Prep Batch #...: 0053067
 Dilution Factor: 34996.8 Method.....: EPA-2 TO-15

| PARAMETER | RESULT | REPORTING LIMIT | UNITS |
|--|---------------|--------------------|------------------|
| Dichlorodifluoromethane | ND | 7000 | ppb (v/v) |
| 1,2-Dichloro- 1,1,2,2-tetrafluoroethane | ND | 7000 | ppb (v/v) |
| Chloromethane | ND | 17000 | ppb (v/v) |
| Vinyl chloride | ND | 7000 | ppb (v/v) |
| Bromomethane | ND | 7000 | ppb (v/v) |
| Chloroethane | ND | 7000 | ppb (v/v) |
| Trichlorofluoromethane | ND | 7000 | ppb (v/v) |
| 1,1-Dichloroethene | ND | 7000 | ppb (v/v) |
| 1,1,2-Trichloro- 1,2,2-trifluoroethane | ND | 7000 | ppb (v/v) |
| Methylene chloride | ND | 17000 | ppb (v/v) |
| 1,1-Dichloroethane | ND | 7000 | ppb (v/v) |
| cis-1,2-Dichloroethene | ND | 7000 | ppb (v/v) |
| Chloroform | ND | 7000 | ppb (v/v) |
| 1,1,1-Trichloroethane | ND | 7000 | ppb (v/v) |
| Carbon tetrachloride | ND | 7000 | ppb (v/v) |
| Benzene | 800000 | 7000 | ppb (v/v) |
| 1,2-Dichloroethane | ND | 7000 | ppb (v/v) |
| Trichloroethene | ND | 7000 | ppb (v/v) |
| 1,2-Dichloropropane | ND | 7000 | ppb (v/v) |
| cis-1,3-Dichloropropene | ND | 7000 | ppb (v/v) |
| Toluene | ND | 7000 | ppb (v/v) |
| trans-1,3-Dichloropropene | ND | 7000 | ppb (v/v) |
| 1,1,2-Trichloroethane | ND | 7000 | ppb (v/v) |
| Tetrachloroethene | ND | 7000 | ppb (v/v) |
| 1,2-Dibromoethane (EDB) | ND | 7000 | ppb (v/v) |
| Chlorobenzene | ND | 7000 | ppb (v/v) |
| Ethylbenzene | ND | 7000 | ppb (v/v) |
| m-Xylene & p-Xylene | ND | 7000 | ppb (v/v) |
| o-Xylene | ND | 7000 | ppb (v/v) |
| Styrene | ND | 7000 | ppb (v/v) |
| 1,1,2,2-Tetrachloroethane | ND | 7000 | ppb (v/v) |
| 1,3,5-Trimethylbenzene | ND | 7000 | ppb (v/v) |
| 1,2,4-Trimethylbenzene | ND | 7000 | ppb (v/v) |
| 1,3-Dichlorobenzene | ND | 7000 | ppb (v/v) |
| 1,4-Dichlorobenzene | ND | 7000 | ppb (v/v) |
| 1,2-Dichlorobenzene | ND | 7000 | ppb (v/v) |
| Benzyl chloride | ND | 14000 | ppb (v/v) |

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TestAmerica Savannah

Client Sample ID: WGK-BIGMO-TMX-INF-A

GC/MS Volatiles

Lot-Sample #....: H0B180425-002 Work Order #....: LVTPP1AA Matrix.....: AIR

| <u>PARAMETER</u> | <u>RESULT</u> | <u>REPORTING LIMIT</u> | <u>UNITS</u> |
|-----------------------------|---------------|----------------------------|--------------|
| 1,2,4-Trichloro- benzene | ND | 35000 | ppb (v/v) |
| Hexachlorobutadiene | ND | 35000 | ppb (v/v) |

| <u>SURROGATE</u> | <u>PERCENT RECOVERY</u> | <u>RECOVERY LIMITS</u> |
|----------------------|-----------------------------|----------------------------|
| 4-Bromofluorobenzene | 100 | (60 - 140) |

TestAmerica Savannah

Client Sample ID: W GK-BIGMO-TMX-EFF-A

GC/MS Volatiles

Lot-Sample #...: H0B180425-003 Work Order #...: LVTPR1AA Matrix.....: AIR
 Date Sampled...: 02/17/10 Date Received...: 02/18/10
 Prep Date.....: 02/22/10 Analysis Date...: 02/22/10
 Prep Batch #...: 0054050
 Dilution Factor: 308.82 Method.....: EPA-2 TO-15

| PARAMETER | RESULT | REPORTING LIMIT | UNITS |
|---------------------------|-------------|--------------------|------------------|
| Dichlorodifluoromethane | ND | 62 | ppb (v/v) |
| 1,2-Dichloro- | ND | 62 | ppb (v/v) |
| 1,1,2,2-tetrafluoroethane | | | |
| Chloromethane | ND | 150 | ppb (v/v) |
| Vinyl chloride | ND | 62 | ppb (v/v) |
| Bromomethane | ND | 62 | ppb (v/v) |
| Chloroethane | ND | 62 | ppb (v/v) |
| Trichlorofluoromethane | ND | 62 | ppb (v/v) |
| 1,1-Dichloroethene | ND | 62 | ppb (v/v) |
| 1,1,2-Trichloro- | ND | 62 | ppb (v/v) |
| 1,2,2-trifluoroethane | | | |
| Methylene chloride | 390 | 150 | ppb (v/v) |
| 1,1-Dichloroethane | ND | 62 | ppb (v/v) |
| cis-1,2-Dichloroethene | ND | 62 | ppb (v/v) |
| Chloroform | ND | 62 | ppb (v/v) |
| 1,1,1-Trichloroethane | ND | 62 | ppb (v/v) |
| Carbon tetrachloride | ND | 62 | ppb (v/v) |
| Benzene | 8800 | 62 | ppb (v/v) |
| 1,2-Dichloroethane | ND | 62 | ppb (v/v) |
| Trichloroethene | ND | 62 | ppb (v/v) |
| 1,2-Dichloropropane | ND | 62 | ppb (v/v) |
| cis-1,3-Dichloropropene | ND | 62 | ppb (v/v) |
| Toluene | 70 | 62 | ppb (v/v) |
| trans-1,3-Dichloropropene | ND | 62 | ppb (v/v) |
| 1,1,2-Trichloroethane | ND | 62 | ppb (v/v) |
| Tetrachloroethene | ND | 62 | ppb (v/v) |
| 1,2-Dibromoethane (EDB) | ND | 62 | ppb (v/v) |
| Chlorobenzene | ND | 62 | ppb (v/v) |
| Ethylbenzene | ND | 62 | ppb (v/v) |
| m-Xylene & p-Xylene | ND | 62 | ppb (v/v) |
| o-Xylene | ND | 62 | ppb (v/v) |
| Styrene | ND | 62 | ppb (v/v) |
| 1,1,2,2-Tetrachloroethane | ND | 62 | ppb (v/v) |
| 1,3,5-Trimethylbenzene | ND | 62 | ppb (v/v) |
| 1,2,4-Trimethylbenzene | ND | 62 | ppb (v/v) |
| 1,3-Dichlorobenzene | ND | 62 | ppb (v/v) |
| 1,4-Dichlorobenzene | ND | 62 | ppb (v/v) |
| 1,2-Dichlorobenzene | ND | 62 | ppb (v/v) |
| Benzyl chloride | ND | 120 | ppb (v/v) |

(Continued on next page)

TestAmerica Savannah

Client Sample ID: WGK-BIGMO-TMX-EFF-A

GC/MS Volatiles

Lot-Sample #...: H0B180425-003 Work Order #...: LVTPR1AA Matrix.....: AIR

| <u>PARAMETER</u> | <u>RESULT</u> | <u>REPORTING LIMIT</u> | <u>UNITS</u> |
|-----------------------------|---------------|----------------------------|--------------|
| 1,2,4-Trichloro- benzene | ND | 310 | ppb (v/v) |
| Hexachlorobutadiene | ND | 310 | ppb (v/v) |

| <u>SURROGATE</u> | <u>PERCENT RECOVERY</u> | <u>RECOVERY LIMITS</u> |
|----------------------|-----------------------------|----------------------------|
| 4-Bromofluorobenzene | 96 | (60 - 140) |

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: H0B180425
 MB Lot-Sample #: H0B220000-067

Work Order #...: LVXNE1AA

Matrix.....: AIR

Analysis Date...: 02/19/10

Prep Date.....: 02/19/10

Prep Batch #...: 0053067

Dilution Factor: 1

| PARAMETER | RESULT | REPORTING LIMIT | UNITS | METHOD |
|--|--------|--------------------|-----------|-------------|
| Dichlorodifluoromethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,2-Dichloro- 1,1,2,2-tetrafluoroethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Chloromethane | ND | 0.50 | ppb (v/v) | EPA-2 TO-15 |
| Vinyl chloride | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Bromomethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Chloroethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Trichlorofluoromethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,1-Dichloroethene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,1,2-Trichloro- 1,2,2-trifluoroethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Methylene chloride | ND | 0.50 | ppb (v/v) | EPA-2 TO-15 |
| 1,1-Dichloroethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| cis-1,2-Dichloroethene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Chloroform | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,1,1-Trichloroethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Carbon tetrachloride | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Benzene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,2-Dichloroethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Trichloroethene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,2-Dichloropropane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| cis-1,3-Dichloropropene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Toluene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| trans-1,3-Dichloropropene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,1,2-Trichloroethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Tetrachloroethene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,2-Dibromoethane (EDB) | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Chlorobenzene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Ethylbenzene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| m-Xylene & p-Xylene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| o-Xylene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Styrene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,1,2,2-Tetrachloroethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,3,5-Trimethylbenzene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,2,4-Trimethylbenzene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,3-Dichlorobenzene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,4-Dichlorobenzene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,2-Dichlorobenzene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Benzyl chloride | ND | 0.40 | ppb (v/v) | EPA-2 TO-15 |
| 1,2,4-Trichloro- benzene | ND | 1.0 | ppb (v/v) | EPA-2 TO-15 |

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METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: H0B180425

Work Order #...: LVXNE1AA

Matrix.....: AIR

| <u>PARAMETER</u> | <u>RESULT</u> | <u>REPORTING LIMIT</u> | <u>UNITS</u> | <u>METHOD</u> |
|---------------------|---------------|----------------------------|--------------|---------------|
| Hexachlorobutadiene | ND | 1.0 | ppb (v/v) | EPA-2 TO-15 |

| <u>SURROGATE</u> | <u>PERCENT RECOVERY</u> | <u>RECOVERY LIMITS</u> |
|----------------------|-----------------------------|----------------------------|
| 4-Bromofluorobenzene | 102 | (60 - 140) |

NOTE (S) :

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: H0B180425 Work Order #...: LVXNE1AC Matrix.....: AIR
 LCS Lot-Sample#: H0B220000-067
 Prep Date.....: 02/19/10 Analysis Date...: 02/19/10
 Prep Batch #...: 0053067
 Dilution Factor: 1

| PARAMETER | PERCENT RECOVERY | RECOVERY LIMITS | METHOD |
|--|---------------------|--------------------|-------------|
| Dichlorodifluoromethane | 94 | (60 - 140) | EPA-2 TO-15 |
| 1,2-Dichloro- 1,1,2,2-tetrafluoroethane | 94 | (60 - 140) | EPA-2 TO-15 |
| Chloromethane | 107 | (60 - 140) | EPA-2 TO-15 |
| Vinyl chloride | 97 | (70 - 130) | EPA-2 TO-15 |
| Bromomethane | 91 | (70 - 130) | EPA-2 TO-15 |
| Chloroethane | 97 | (70 - 130) | EPA-2 TO-15 |
| Trichlorofluoromethane | 93 | (60 - 140) | EPA-2 TO-15 |
| 1,1-Dichloroethene | 93 | (70 - 130) | EPA-2 TO-15 |
| 1,1,2-Trichloro- 1,2,2-trifluoroethane | 91 | (70 - 130) | EPA-2 TO-15 |
| Methylene chloride | 83 | (70 - 130) | EPA-2 TO-15 |
| 1,1-Dichloroethane | 92 | (70 - 130) | EPA-2 TO-15 |
| cis-1,2-Dichloroethene | 89 | (70 - 130) | EPA-2 TO-15 |
| Chloroform | 88 | (70 - 130) | EPA-2 TO-15 |
| 1,1,1-Trichloroethane | 90 | (70 - 130) | EPA-2 TO-15 |
| Carbon tetrachloride | 90 | (70 - 130) | EPA-2 TO-15 |
| Benzene | 84 | (70 - 130) | EPA-2 TO-15 |
| 1,2-Dichloroethane | 87 | (70 - 130) | EPA-2 TO-15 |
| Trichloroethene | 91 | (70 - 130) | EPA-2 TO-15 |
| 1,2-Dichloropropane | 85 | (70 - 130) | EPA-2 TO-15 |
| cis-1,3-Dichloropropene | 80 | (70 - 130) | EPA-2 TO-15 |
| Toluene | 77 | (70 - 130) | EPA-2 TO-15 |
| trans-1,3-Dichloropropene | 78 | (70 - 130) | EPA-2 TO-15 |
| 1,1,2-Trichloroethane | 78 | (70 - 130) | EPA-2 TO-15 |
| Tetrachloroethene | 79 | (70 - 130) | EPA-2 TO-15 |
| 1,2-Dibromoethane (EDB) | 78 | (70 - 130) | EPA-2 TO-15 |
| Chlorobenzene | 77 | (70 - 130) | EPA-2 TO-15 |
| Ethylbenzene | 78 | (70 - 130) | EPA-2 TO-15 |
| m-Xylene & p-Xylene | 77 | (70 - 130) | EPA-2 TO-15 |
| o-Xylene | 74 | (70 - 130) | EPA-2 TO-15 |
| Styrene | 76 | (70 - 130) | EPA-2 TO-15 |
| 1,1,2,2-Tetrachloroethane | 70 | (70 - 130) | EPA-2 TO-15 |
| 1,3,5-Trimethylbenzene | 67 a | (70 - 130) | EPA-2 TO-15 |

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: H0B180425 Work Order #...: LVXNE1AC Matrix.....: AIR
 LCS Lot-Sample#: H0B220000-067

| <u>PARAMETER</u> | <u>PERCENT RECOVERY</u> | <u>RECOVERY LIMITS</u> | <u>METHOD</u> |
|-----------------------------|-----------------------------|-----------------------------|----------------------------|
| 1,2,4-Trimethylbenzene | 71 | (70 - 130) | EPA-2 TO-15 |
| 1,3-Dichlorobenzene | 72 | (70 - 130) | EPA-2 TO-15 |
| 1,4-Dichlorobenzene | 71 | (70 - 130) | EPA-2 TO-15 |
| 1,2-Dichlorobenzene | 75 | (70 - 130) | EPA-2 TO-15 |
| Benzyl chloride | 75 | (70 - 130) | EPA-2 TO-15 |
| 1,2,4-Trichloro- benzene | 72 | (60 - 140) | EPA-2 TO-15 |
| Hexachlorobutadiene | 62 | (60 - 140) | EPA-2 TO-15 |
| <u>SURROGATE</u> | | <u>PERCENT RECOVERY</u> | <u>RECOVERY LIMITS</u> |
| 4-Bromofluorobenzene | | 105 | (60 - 140) |

NOTE (S) :

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

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: H0B180425 Work Order #...: LVXNE1AC Matrix.....: AIR
 LCS Lot-Sample#: H0B220000-067
 Prep Date.....: 02/19/10 Analysis Date...: 02/19/10
 Prep Batch #...: 0053067
 Dilution Factor: 1

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | METHOD |
|--|-----------------|--------------------|-----------|---------------------|-------------|
| Dichlorodifluoromethane | 2.50 | 2.34 | ppb (v/v) | 94 | EPA-2 TO-15 |
| 1,2-Dichloro- 1,1,2,2-tetrafluoroethane | 2.50 | 2.34 | ppb (v/v) | 94 | EPA-2 TO-15 |
| Chloromethane | 2.50 | 2.68 | ppb (v/v) | 107 | EPA-2 TO-15 |
| Vinyl chloride | 2.50 | 2.43 | ppb (v/v) | 97 | EPA-2 TO-15 |
| Bromomethane | 2.50 | 2.27 | ppb (v/v) | 91 | EPA-2 TO-15 |
| Chloroethane | 2.50 | 2.43 | ppb (v/v) | 97 | EPA-2 TO-15 |
| Trichlorofluoromethane | 2.50 | 2.34 | ppb (v/v) | 93 | EPA-2 TO-15 |
| 1,1-Dichloroethene | 2.50 | 2.33 | ppb (v/v) | 93 | EPA-2 TO-15 |
| 1,1,2-Trichloro- 1,2,2-trifluoroethane | 2.50 | 2.27 | ppb (v/v) | 91 | EPA-2 TO-15 |
| Methylene chloride | 2.50 | 2.07 | ppb (v/v) | 83 | EPA-2 TO-15 |
| 1,1-Dichloroethane | 2.50 | 2.31 | ppb (v/v) | 92 | EPA-2 TO-15 |
| cis-1,2-Dichloroethene | 2.50 | 2.23 | ppb (v/v) | 89 | EPA-2 TO-15 |
| Chloroform | 2.50 | 2.20 | ppb (v/v) | 88 | EPA-2 TO-15 |
| 1,1,1-Trichloroethane | 2.50 | 2.24 | ppb (v/v) | 90 | EPA-2 TO-15 |
| Carbon tetrachloride | 2.50 | 2.25 | ppb (v/v) | 90 | EPA-2 TO-15 |
| Benzene | 2.50 | 2.10 | ppb (v/v) | 84 | EPA-2 TO-15 |
| 1,2-Dichloroethane | 2.50 | 2.17 | ppb (v/v) | 87 | EPA-2 TO-15 |
| Trichloroethene | 2.50 | 2.28 | ppb (v/v) | 91 | EPA-2 TO-15 |
| 1,2-Dichloropropane | 2.50 | 2.12 | ppb (v/v) | 85 | EPA-2 TO-15 |
| cis-1,3-Dichloropropene | 2.50 | 2.01 | ppb (v/v) | 80 | EPA-2 TO-15 |
| Toluene | 2.50 | 1.93 | ppb (v/v) | 77 | EPA-2 TO-15 |
| trans-1,3-Dichloropropene | 2.50 | 1.96 | ppb (v/v) | 78 | EPA-2 TO-15 |
| 1,1,2-Trichloroethane | 2.50 | 1.95 | ppb (v/v) | 78 | EPA-2 TO-15 |
| Tetrachloroethene | 2.50 | 1.97 | ppb (v/v) | 79 | EPA-2 TO-15 |
| 1,2-Dibromoethane (EDB) | 2.50 | 1.96 | ppb (v/v) | 78 | EPA-2 TO-15 |
| Chlorobenzene | 2.50 | 1.94 | ppb (v/v) | 77 | EPA-2 TO-15 |
| Ethylbenzene | 2.50 | 1.94 | ppb (v/v) | 78 | EPA-2 TO-15 |
| m-Xylene & p-Xylene | 5.00 | 3.84 | ppb (v/v) | 77 | EPA-2 TO-15 |
| o-Xylene | 2.50 | 1.85 | ppb (v/v) | 74 | EPA-2 TO-15 |
| Styrene | 2.50 | 1.90 | ppb (v/v) | 76 | EPA-2 TO-15 |
| 1,1,2,2-Tetrachloroethane | 2.50 | 1.74 | ppb (v/v) | 70 | EPA-2 TO-15 |
| 1,3,5-Trimethylbenzene | 2.50 | 1.67 a | ppb (v/v) | 67 | EPA-2 TO-15 |

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: H0B180425
 LCS Lot-Sample#: H0B220000-067

Work Order #...: LVXNE1AC

Matrix.....: AIR

| <u>PARAMETER</u> | <u>SPIKE AMOUNT</u> | <u>MEASURED AMOUNT</u> | <u>UNITS</u> | <u>PERCENT RECOVERY</u> | <u>METHOD</u> |
|-----------------------------|-------------------------|-----------------------------|----------------------------|-----------------------------|---------------|
| 1,2,4-Trimethylbenzene | 2.50 | 1.77 | ppb (v/v) | 71 | EPA-2 TO-15 |
| 1,3-Dichlorobenzene | 2.50 | 1.80 | ppb (v/v) | 72 | EPA-2 TO-15 |
| 1,4-Dichlorobenzene | 2.50 | 1.78 | ppb (v/v) | 71 | EPA-2 TO-15 |
| 1,2-Dichlorobenzene | 2.50 | 1.88 | ppb (v/v) | 75 | EPA-2 TO-15 |
| Benzyl chloride | 2.50 | 1.87 | ppb (v/v) | 75 | EPA-2 TO-15 |
| 1,2,4-Trichloro- benzene | 2.50 | 1.79 | ppb (v/v) | 72 | EPA-2 TO-15 |
| Hexachlorobutadiene | 2.50 | 1.54 | ppb (v/v) | 62 | EPA-2 TO-15 |
| <u>SURROGATE</u> | | <u>PERCENT RECOVERY</u> | <u>RECOVERY LIMITS</u> | | |
| 4-Bromofluorobenzene | | 105 | (60 - 140) | | |

NOTE (S) :

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

Bold print denotes control parameters

a Spiked analyte recovery is outside stated control limits.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: H0B180425
 MB Lot-Sample #: H0B230000-050

Work Order #...: LV0GM1AA

Matrix.....: AIR

Analysis Date...: 02/22/10

Prep Date.....: 02/22/10

Prep Batch #...: 0054050

Dilution Factor: 1

| PARAMETER | RESULT | REPORTING | | |
|--|--------|-----------|-----------|-------------|
| | | LIMIT | UNITS | METHOD |
| Dichlorodifluoromethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,2-Dichloro- 1,1,2,2-tetrafluoroethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Chloromethane | ND | 0.50 | ppb (v/v) | EPA-2 TO-15 |
| Vinyl chloride | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Bromomethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Chloroethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Trichlorofluoromethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,1-Dichloroethene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,1,2-Trichloro- 1,2,2-trifluoroethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Methylene chloride | ND | 0.50 | ppb (v/v) | EPA-2 TO-15 |
| 1,1-Dichloroethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| cis-1,2-Dichloroethene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Chloroform | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,1,1-Trichloroethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Carbon tetrachloride | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Benzene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,2-Dichloroethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Trichloroethene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,2-Dichloropropane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| cis-1,3-Dichloropropene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Toluene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| trans-1,3-Dichloropropene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,1,2-Trichloroethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Tetrachloroethene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,2-Dibromoethane (EDB) | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Chlorobenzene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Ethylbenzene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| m-Xylene & p-Xylene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| o-Xylene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Styrene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,1,2,2-Tetrachloroethane | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,3,5-Trimethylbenzene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,2,4-Trimethylbenzene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,3-Dichlorobenzene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,4-Dichlorobenzene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| 1,2-Dichlorobenzene | ND | 0.20 | ppb (v/v) | EPA-2 TO-15 |
| Benzyl chloride | ND | 0.40 | ppb (v/v) | EPA-2 TO-15 |
| 1,2,4-Trichloro- benzene | ND | 1.0 | ppb (v/v) | EPA-2 TO-15 |

(Continued on next page)

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: H0B180425

Work Order #...: LV0GM1AA

Matrix.....: AIR

| <u>PARAMETER</u> | <u>RESULT</u> | <u>REPORTING</u> <u>LIMIT</u> | <u>UNITS</u> | <u>METHOD</u> |
|---------------------|---------------|----------------------------------|--------------|---------------|
| Hexachlorobutadiene | ND | 1.0 | ppb (v/v) | EPA-2 TO-15 |

| <u>SURROGATE</u> | <u>PERCENT</u> <u>RECOVERY</u> | <u>RECOVERY</u> <u>LIMITS</u> |
|----------------------|-----------------------------------|----------------------------------|
| 4-Bromofluorobenzene | 107 | (60 - 140) |

NOTE(S) :

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

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #....: H0B180425 Work Order #....: LV0GMLAC Matrix.....: AIR
 LCS Lot-Sample#: H0B230000-050
 Prep Date.....: 02/22/10 Analysis Date...: 02/22/10
 Prep Batch #....: 0054050
 Dilution Factor: 1

| PARAMETER | PERCENT RECOVERY | RECOVERY LIMITS | METHOD |
|--|---------------------|--------------------|-------------|
| Dichlorodifluoromethane | 103 | (60 - 140) | EPA-2 TO-15 |
| 1,2-Dichloro- 1,1,2,2-tetrafluoroethane | 96 | (60 - 140) | EPA-2 TO-15 |
| Chloromethane | 68 | (60 - 140) | EPA-2 TO-15 |
| Vinyl chloride | 108 | (70 - 130) | EPA-2 TO-15 |
| Bromomethane | 98 | (70 - 130) | EPA-2 TO-15 |
| Chloroethane | 108 | (70 - 130) | EPA-2 TO-15 |
| Trichlorofluoromethane | 102 | (60 - 140) | EPA-2 TO-15 |
| 1,1-Dichloroethene | 95 | (70 - 130) | EPA-2 TO-15 |
| 1,1,2-Trichloro- 1,2,2-trifluoroethane | 93 | (70 - 130) | EPA-2 TO-15 |
| Methylene chloride | 87 | (70 - 130) | EPA-2 TO-15 |
| 1,1-Dichloroethane | 105 | (70 - 130) | EPA-2 TO-15 |
| cis-1,2-Dichloroethene | 97 | (70 - 130) | EPA-2 TO-15 |
| Chloroform | 99 | (70 - 130) | EPA-2 TO-15 |
| 1,1,1-Trichloroethane | 100 | (70 - 130) | EPA-2 TO-15 |
| Carbon tetrachloride | 106 | (70 - 130) | EPA-2 TO-15 |
| Benzene | 96 | (70 - 130) | EPA-2 TO-15 |
| 1,2-Dichloroethane | 107 | (70 - 130) | EPA-2 TO-15 |
| Trichloroethene | 104 | (70 - 130) | EPA-2 TO-15 |
| 1,2-Dichloropropane | 98 | (70 - 130) | EPA-2 TO-15 |
| cis-1,3-Dichloropropene | 96 | (70 - 130) | EPA-2 TO-15 |
| Toluene | 92 | (70 - 130) | EPA-2 TO-15 |
| trans-1,3-Dichloropropene | 100 | (70 - 130) | EPA-2 TO-15 |
| 1,1,2-Trichloroethane | 90 | (70 - 130) | EPA-2 TO-15 |
| Tetrachloroethene | 97 | (70 - 130) | EPA-2 TO-15 |
| 1,2-Dibromoethane (EDB) | 95 | (70 - 130) | EPA-2 TO-15 |
| Chlorobenzene | 93 | (70 - 130) | EPA-2 TO-15 |
| Ethylbenzene | 96 | (70 - 130) | EPA-2 TO-15 |
| m-Xylene & p-Xylene | 95 | (70 - 130) | EPA-2 TO-15 |
| o-Xylene | 92 | (70 - 130) | EPA-2 TO-15 |
| Styrene | 97 | (70 - 130) | EPA-2 TO-15 |
| 1,1,2,2-Tetrachloroethane | 91 | (70 - 130) | EPA-2 TO-15 |
| 1,3,5-Trimethylbenzene | 87 | (70 - 130) | EPA-2 TO-15 |

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: H0B180425
 LCS Lot-Sample#: H0B230000-050

Work Order #...: LV0GM1AC

Matrix.....: AIR

| <u>PARAMETER</u> | <u>PERCENT RECOVERY</u> | <u>RECOVERY LIMITS</u> | <u>METHOD</u> |
|-----------------------------|-----------------------------|-----------------------------|----------------------------|
| 1,2,4-Trimethylbenzene | 99 | (70 - 130) | EPA-2 TO-15 |
| 1,3-Dichlorobenzene | 95 | (70 - 130) | EPA-2 TO-15 |
| 1,4-Dichlorobenzene | 96 | (70 - 130) | EPA-2 TO-15 |
| 1,2-Dichlorobenzene | 99 | (70 - 130) | EPA-2 TO-15 |
| Benzyl chloride | 116 | (70 - 130) | EPA-2 TO-15 |
| 1,2,4-Trichloro- benzene | 127 | (60 - 140) | EPA-2 TO-15 |
| Hexachlorobutadiene | 96 | (60 - 140) | EPA-2 TO-15 |
| <u>SURROGATE</u> | | <u>PERCENT RECOVERY</u> | <u>RECOVERY LIMITS</u> |
| 4-Bromofluorobenzene | | 100 | (60 - 140) |

NOTE (S) :

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

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: H0B180425 Work Order #...: LV0GM1AC Matrix.....: AIR
 LCS Lot-Sample#: H0B230000-050
 Prep Date.....: 02/22/10 Analysis Date...: 02/22/10
 Prep Batch #...: 0054050
 Dilution Factor: 1

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | METHOD |
|--|-----------------|--------------------|-----------|---------------------|-------------|
| Dichlorodifluoromethane | 5.00 | 5.16 | ppb (v/v) | 103 | EPA-2 TO-15 |
| 1,2-Dichloro- 1,1,2,2-tetrafluoroethane | 5.00 | 4.80 | ppb (v/v) | 96 | EPA-2 TO-15 |
| Chloromethane | 5.00 | 3.41 | ppb (v/v) | 68 | EPA-2 TO-15 |
| Vinyl chloride | 5.00 | 5.40 | ppb (v/v) | 108 | EPA-2 TO-15 |
| Bromomethane | 5.00 | 4.91 | ppb (v/v) | 98 | EPA-2 TO-15 |
| Chloroethane | 5.00 | 5.40 | ppb (v/v) | 108 | EPA-2 TO-15 |
| Trichlorofluoromethane | 5.00 | 5.12 | ppb (v/v) | 102 | EPA-2 TO-15 |
| 1,1-Dichloroethene | 5.00 | 4.74 | ppb (v/v) | 95 | EPA-2 TO-15 |
| 1,1,2-Trichloro- 1,2,2-trifluoroethane | 5.00 | 4.64 | ppb (v/v) | 93 | EPA-2 TO-15 |
| Methylene chloride | 5.00 | 4.33 | ppb (v/v) | 87 | EPA-2 TO-15 |
| 1,1-Dichloroethane | 5.00 | 5.25 | ppb (v/v) | 105 | EPA-2 TO-15 |
| cis-1,2-Dichloroethene | 5.00 | 4.83 | ppb (v/v) | 97 | EPA-2 TO-15 |
| Chloroform | 5.00 | 4.97 | ppb (v/v) | 99 | EPA-2 TO-15 |
| 1,1,1-Trichloroethane | 5.00 | 4.99 | ppb (v/v) | 100 | EPA-2 TO-15 |
| Carbon tetrachloride | 5.00 | 5.31 | ppb (v/v) | 106 | EPA-2 TO-15 |
| Benzene | 5.00 | 4.79 | ppb (v/v) | 96 | EPA-2 TO-15 |
| 1,2-Dichloroethane | 5.00 | 5.33 | ppb (v/v) | 107 | EPA-2 TO-15 |
| Trichloroethene | 5.00 | 5.22 | ppb (v/v) | 104 | EPA-2 TO-15 |
| 1,2-Dichloropropane | 5.00 | 4.92 | ppb (v/v) | 98 | EPA-2 TO-15 |
| cis-1,3-Dichloropropene | 5.00 | 4.80 | ppb (v/v) | 96 | EPA-2 TO-15 |
| Toluene | 5.00 | 4.58 | ppb (v/v) | 92 | EPA-2 TO-15 |
| trans-1,3-Dichloropropene | 5.00 | 5.00 | ppb (v/v) | 100 | EPA-2 TO-15 |
| 1,1,2-Trichloroethane | 5.00 | 4.50 | ppb (v/v) | 90 | EPA-2 TO-15 |
| Tetrachloroethene | 5.00 | 4.85 | ppb (v/v) | 97 | EPA-2 TO-15 |
| 1,2-Dibromoethane (EDB) | 5.00 | 4.77 | ppb (v/v) | 95 | EPA-2 TO-15 |
| Chlorobenzene | 5.00 | 4.65 | ppb (v/v) | 93 | EPA-2 TO-15 |
| Ethylbenzene | 5.00 | 4.78 | ppb (v/v) | 96 | EPA-2 TO-15 |
| m-Xylene & p-Xylene | 10.0 | 9.52 | ppb (v/v) | 95 | EPA-2 TO-15 |
| o-Xylene | 5.00 | 4.59 | ppb (v/v) | 92 | EPA-2 TO-15 |
| Styrene | 5.00 | 4.84 | ppb (v/v) | 97 | EPA-2 TO-15 |
| 1,1,2,2-Tetrachloroethane | 5.00 | 4.57 | ppb (v/v) | 91 | EPA-2 TO-15 |
| 1,3,5-Trimethylbenzene | 5.00 | 4.36 | ppb (v/v) | 87 | EPA-2 TO-15 |

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: H0B180425
 LCS Lot-Sample#: H0B230000-050

Work Order #...: LV0GM1AC

Matrix.....: AIR

| <u>PARAMETER</u> | <u>SPIKE AMOUNT</u> | <u>MEASURED AMOUNT</u> | <u>UNITS</u> | <u>PERCENT RECOVERY</u> | <u>METHOD</u> |
|-----------------------------|-------------------------|-----------------------------|----------------------------|-----------------------------|---------------|
| 1,2,4-Trimethylbenzene | 5.00 | 4.96 | ppb (v/v) | 99 | EPA-2 TO-15 |
| 1,3-Dichlorobenzene | 5.00 | 4.74 | ppb (v/v) | 95 | EPA-2 TO-15 |
| 1,4-Dichlorobenzene | 5.00 | 4.81 | ppb (v/v) | 96 | EPA-2 TO-15 |
| 1,2-Dichlorobenzene | 5.00 | 4.97 | ppb (v/v) | 99 | EPA-2 TO-15 |
| Benzyl chloride | 5.00 | 5.82 | ppb (v/v) | 116 | EPA-2 TO-15 |
| 1,2,4-Trichloro- benzene | 5.00 | 6.33 | ppb (v/v) | 127 | EPA-2 TO-15 |
| Hexachlorobutadiene | 5.00 | 4.80 | ppb (v/v) | 96 | EPA-2 TO-15 |
| <u>SURROGATE</u> | | <u>PERCENT RECOVERY</u> | <u>RECOVERY LIMITS</u> | | |
| 4-Bromofluorobenzene | | 100 | (60 - 140) | | |

NOTE (S) :

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

Bold print denotes control parameters

Sample Receipt Documentation

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TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Lot Number: 4038043

| Review Items | Yes | No | NA | If No, what was the problem? | Comments/Actions Taken |
|---|-----|----|----|---|------------------------|
| 1. Do sample container labels match COC? (IDs, Dates, Times) | ✓ | | | <input type="checkbox"/> 1a Do not match COC <input type="checkbox"/> 1b Incomplete information <input type="checkbox"/> 1c Marking smeared <input type="checkbox"/> 1d Label torn <input type="checkbox"/> 1e No label <input type="checkbox"/> 1f COC not received <input type="checkbox"/> 1g Other: | 4A |
| 2. Is the cooler temperature within limits? (> freezing temp. of water to 6°C; NC, 1668, 1613B: 0-4°C; VOST: 10°C; MA: 2-6°C) | | ✓ | | <input type="checkbox"/> 2a Temp Blank = _____ <input type="checkbox"/> 2b Cooler Temp = _____ | |
| 3. Were samples received with correct chemical preservative (excluding Encore)? | | ✓ | | <input type="checkbox"/> 3a Sample preservative = | |
| 4. Were custody seals present/intact on cooler and/or containers? | | ✓ | | <input checked="" type="checkbox"/> 4a Not present <input type="checkbox"/> 4b Not intact <input type="checkbox"/> 4c Other: | |
| 5. Were all of the samples listed on the COC received? | ✓ | | | <input type="checkbox"/> 5a Samples received-not on COC <input type="checkbox"/> 5b Samples not received-on COC | |
| 6. Were all of the sample containers received intact? | ✓ | | | <input type="checkbox"/> 6a Leaking <input type="checkbox"/> 6b Broken | |
| 7. Were VOA samples received without headspace? | ✓ | | | <input type="checkbox"/> 7a Headspace (VOA only) | |
| 8. Were samples received in appropriate containers? | ✓ | | | <input type="checkbox"/> 8a Improper container | |
| 9. Did you check for residual chlorine, if necessary? | ✓ | | | <input type="checkbox"/> 9a Could not be determined due to matrix interference | |
| 10. Were samples received within holding time? | ✓ | | | <input type="checkbox"/> 10a Holding time expired | |
| 11. For rad samples, was sample activity info. provided? | | | ✓ | <input type="checkbox"/> Incomplete information | |
| 12. For 1613B water samples is pH<9? | | | ✓ | If no, was pH adjusted to pH 7 - 9 with sulfuric acid? _____ | |
| 13. Are the shipping containers intact? | ✓ | | | <input type="checkbox"/> 13a Leaking <input type="checkbox"/> 13b Other: | |
| 14. Was COC relinquished? (Signed/Dated/Timed) | ✓ | | | <input type="checkbox"/> 14a Not relinquished | |
| 15. Are tests/parameters listed for each sample? | ✓ | | | <input type="checkbox"/> 15a Incomplete information | |
| 16. Is the matrix of the samples noted? | ✓ | | | <input type="checkbox"/> 15a Incomplete information | |
| 17. Is the date/time of sample collection noted? | ✓ | | | <input type="checkbox"/> 15a Incomplete information | |
| 18. Is the client and project name/# identified? | ✓ | | | <input type="checkbox"/> 15a Incomplete information | |
| 19. Was the sampler identified on the COC? | ✓ | | | | |
| Quote #: <u>80050</u> PM Instructions: <u>NA</u> Sample Receiving Associate: <u>[Signature]</u> Date: <u>2/13/10</u> | | | | | |

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| Initial Can Pressure | | | | | Subsequent Dilutions | | | | | | | | | | | | | |
|----------------------|-----------------|------------|-----------|--------|------------------------------------|------------------------------------|--------------|-------|------------|-----------------------|-----------------------|------------------------------------|-------------------------------------|------------------------------------|-----------------------|----------|-----------------------|----------|
| Analyst/Date | Tedlar Bag Time | Pbarr (in) | Sample ID | Can # | Pres. upon receipt (-in or + psig) | Adj. Initial Pres. (-in or + psig) | Analyst/Date | I / S | Pbarr (in) | Initial Pres. Pi (in) | Final Pres. Pf (psig) | First In-can Final Pres. Pf (psig) | Second In-can Final Pres. Pf (psig) | Third In-can Final Pres. Pf (psig) | Serial Dilution Can # | Vol (mL) | Final Pres. Pf (psig) | Comments |
| HWB 2-14-10 | 750 | 29.11 | LVTPL | 12207 | | | | | | | | | | | 12207 | 2 | 24.8 27.4 | 858 |
| ✓ | 800 | ✓ | LVTTP | 04396 | | | | | | | | | | | 04396 | 2 | 27.4 | ✓ |
| ✓ | 805 | ✓ | LVTPR | 93297A | | | | | | | | | | | 93297A | 5 | 4.1 | ✓ |

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