TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

# ANALYTICAL REPORT

Job Number: 680-58497-1

Job Description: WGK Vapor Sampling 6/9/10

For:
Solutia Inc.
575 Maryville Centre Dr.
Saint Louis, MO 63141

Attention: Mr. William G Johnson

Approved for release.
Lidya Gulizia
Project Manager I
7/16/2010 9:53 AM

Lidya Gulizia
Project Manager I
lidya.gulizia@testamericainc.com
07/16/2010

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
Tel (912) 354-7858 Fax (912) 352-0165 www.testamericainc.com

ACCREDITED IN ACCORDANCE WITH nelac

**Receipt**
Following sample collection, the air sample was sent directly to TestAmerica Knoxville for analysis and was received in good condition on June 11, 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: 680-58497-1

| 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: 680-58497-1

| Lab Sample ID | Client Sample ID | Client Matrix | Date/Time Sampled | Date/Time Received |
|---|---|---|---|---|
| 680-58497-1 | WGK-BIGMO-SVE-Line A-V | Air - Tedlar Bag | 06/09/2010 1500 | 06/11/2010 0945 |

# SAMPLE RESULTS

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

# ANALYTICAL REPORT

PROJECT NO. 680-58497

Solutia Vapor Sampling

Lot #: H0F110411

Lidya Gulizia

TestAmerica Savannah
5102 Laroche Avenue
Savannah, GA 31404

TESTAMERICA LABORATORIES, INC.

Terry Wasmund
Project Manager

July 1, 2010

# ANALYTICAL METHODS SUMMARY

**H0F110411**

| PARAMETER | ANALYTICAL METHOD |
|---|---|
| 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

H0F110411

| WO # | SAMPLE# | CLIENT SAMPLE ID | SAMPLED DATE | SAMP TIME |
|---|---|---|---|---|
| L2Q24 | 001 | WGK-BIGMO-SVE-LINE A-V | 06/09/10 | 15:00 |

**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
## HOF110411

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 sample was received on 6/11/10 in a Tedlar bag and transferred into a Summa Canister 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 6/14/10 exhibited a % difference of > 30% for dichlorodifluoromethane and 1,2-dichloro-1,1,2,2-tetrafluoroethane, the results were within the LCS acceptance limits.

The daily standard and laboratory control sample recovery for 1,2-dichloro-1,1,2,2-tetrafluoroethane was above QC limits for batch 0166055. However, since the recovery

# PROJECT NARRATIVE
## H0F110411

was high, and 1,2-dichloro-1,1,2,2-tetrafluoroethane was not detected above the reporting limit in the associated samples, the validity of the data is unaffected.

TestAmerica Savannah

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

GC/MS Volatiles

**Lot-Sample #...:** H0F110411-001 **Work Order #...:** L2Q241AA **Matrix.....:** AIR
**Date Sampled...:** 06/09/10 **Date Received..:** 06/11/10
**Prep Date.....:** 06/14/10 **Analysis Date..:** 06/14/10
**Prep Batch #...:** 0166055
**Dilution Factor:** 63683.49 **Method.....:** EPA-2 TO-15

| PARAMETER | RESULT | REPORTING LIMIT | UNITS |
|---|---|---|---|
| Dichlorodifluoromethane | ND | 13000 | ppb(v/v) |
| 1,2-Dichloro-1,1,2,2-tetrafluoroethane | ND | 13000 | ppb(v/v) |
| Chloromethane | ND | 32000 | ppb(v/v) |
| Vinyl chloride | ND | 13000 | ppb(v/v) |
| Bromomethane | ND | 13000 | ppb(v/v) |
| Chloroethane | ND | 13000 | ppb(v/v) |
| Trichlorofluoromethane | ND | 13000 | ppb(v/v) |
| 1,1-Dichloroethene | ND | 13000 | ppb(v/v) |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | ND | 13000 | ppb(v/v) |
| Methylene chloride | ND | 32000 | ppb(v/v) |
| 1,1-Dichloroethane | ND | 13000 | ppb(v/v) |
| cis-1,2-Dichloroethene | ND | 13000 | ppb(v/v) |
| Chloroform | ND | 13000 | ppb(v/v) |
| 1,1,1-Trichloroethane | ND | 13000 | ppb(v/v) |
| Carbon tetrachloride | ND | 13000 | ppb(v/v) |
| **Benzene** | **620000** | **13000** | **ppb(v/v)** |
| 1,2-Dichloroethane | ND | 13000 | ppb(v/v) |
| Trichloroethene | ND | 13000 | ppb(v/v) |
| 1,2-Dichloropropane | ND | 13000 | ppb(v/v) |
| cis-1,3-Dichloropropene | ND | 13000 | ppb(v/v) |
| Toluene | ND | 13000 | ppb(v/v) |
| trans-1,3-Dichloropropene | ND | 13000 | ppb(v/v) |
| 1,1,2-Trichloroethane | ND | 13000 | ppb(v/v) |
| Tetrachloroethene | ND | 13000 | ppb(v/v) |
| 1,2-Dibromoethane (EDB) | ND | 13000 | ppb(v/v) |
| Chlorobenzene | ND | 13000 | ppb(v/v) |
| Ethylbenzene | ND | 13000 | ppb(v/v) |
| m-Xylene & p-Xylene | ND | 13000 | ppb(v/v) |
| o-Xylene | ND | 13000 | ppb(v/v) |
| Styrene | ND | 13000 | ppb(v/v) |
| 1,1,2,2-Tetrachloroethane | ND | 13000 | ppb(v/v) |
| 1,3,5-Trimethylbenzene | ND | 13000 | ppb(v/v) |
| 1,2,4-Trimethylbenzene | ND | 13000 | ppb(v/v) |
| 1,3-Dichlorobenzene | ND | 13000 | ppb(v/v) |
| 1,4-Dichlorobenzene | ND | 13000 | ppb(v/v) |
| 1,2-Dichlorobenzene | ND | 13000 | ppb(v/v) |
| Benzyl chloride | ND | 25000 | ppb(v/v) |

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TestAmerica Savannah

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

GC/MS Volatiles

**Lot-Sample #...:** H0F110411-001 **Work Order #...:** L2Q241AA **Matrix.....:** AIR

| PARAMETER | RESULT | REPORTING LIMIT | UNITS |
|---|---|---|---|
| 1,2,4-Trichloro-benzene | ND | 64000 | ppb(v/v) |
| Hexachlorobutadiene | ND | 64000 | ppb(v/v) |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 4-Bromofluorobenzene | 91 | (60 - 140) |

METHOD BLANK REPORT

GC/MS Volatiles

**Client Lot #...:** H0F110411 **Work Order #...:** L2WKV1AA **Matrix.....:** AIR
**MB Lot-Sample #:** H0F150000-055

**Prep Date.....:** 06/14/10
**Analysis Date..:** 06/14/10 **Prep Batch #...:** 0166055
**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-Trichlorobenzene | ND | 1.0 | ppb(v/v) | EPA-2 TO-15 |

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# METHOD BLANK REPORT

## GC/MS Volatiles

**Client Lot #...:** H0F110411 **Work Order #...:** L2WKV1AA **Matrix.....:** AIR

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

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 4-Bromofluorobenzene | 91 | (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 #...: H0F110411 Work Order #...: L2WKV1AC Matrix.....: AIR
LCS Lot-Sample#: H0F150000-055
Prep Date.....: 06/14/10 Analysis Date..: 06/14/10
Prep Batch #...: 0166055
Dilution Factor: 1

| PARAMETER | PERCENT RECOVERY | RECOVERY LIMITS | METHOD |
|---|---|---|---|
| Dichlorodifluoromethane | 131 | (60 - 140) | EPA-2 TO-15 |
| 1,2-Dichloro-1,1,2,2-tetrafluoroethane | 155 a | (60 - 140) | EPA-2 TO-15 |
| Chloromethane | 107 | (60 - 140) | EPA-2 TO-15 |
| Vinyl chloride | 98 | (70 - 130) | EPA-2 TO-15 |
| Bromomethane | 99 | (70 - 130) | EPA-2 TO-15 |
| Chloroethane | 88 | (70 - 130) | EPA-2 TO-15 |
| Trichlorofluoromethane | 125 | (60 - 140) | EPA-2 TO-15 |
| 1,1-Dichloroethene | 87 | (70 - 130) | EPA-2 TO-15 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 91 | (70 - 130) | EPA-2 TO-15 |
| Methylene chloride | 75 | (70 - 130) | EPA-2 TO-15 |
| 1,1-Dichloroethane | 85 | (70 - 130) | EPA-2 TO-15 |
| cis-1,2-Dichloroethene | 82 | (70 - 130) | EPA-2 TO-15 |
| Chloroform | 87 | (70 - 130) | EPA-2 TO-15 |
| 1,1,1-Trichloroethane | 110 | (70 - 130) | EPA-2 TO-15 |
| Carbon tetrachloride | 106 | (70 - 130) | EPA-2 TO-15 |
| Benzene | 77 | (70 - 130) | EPA-2 TO-15 |
| 1,2-Dichloroethane | 92 | (70 - 130) | EPA-2 TO-15 |
| Trichloroethene | 77 | (70 - 130) | EPA-2 TO-15 |
| 1,2-Dichloropropane | 81 | (70 - 130) | EPA-2 TO-15 |
| cis-1,3-Dichloropropene | 81 | (70 - 130) | EPA-2 TO-15 |
| Toluene | 87 | (70 - 130) | EPA-2 TO-15 |
| trans-1,3-Dichloropropene | 93 | (70 - 130) | EPA-2 TO-15 |
| 1,1,2-Trichloroethane | 92 | (70 - 130) | EPA-2 TO-15 |
| Tetrachloroethene | 96 | (70 - 130) | EPA-2 TO-15 |
| 1,2-Dibromoethane (EDB) | 93 | (70 - 130) | EPA-2 TO-15 |
| Chlorobenzene | 96 | (70 - 130) | EPA-2 TO-15 |
| Ethylbenzene | 100 | (70 - 130) | EPA-2 TO-15 |
| m-Xylene & p-Xylene | 103 | (70 - 130) | EPA-2 TO-15 |
| o-Xylene | 103 | (70 - 130) | EPA-2 TO-15 |
| Styrene | 109 | (70 - 130) | EPA-2 TO-15 |
| 1,1,2,2-Tetrachloroethane | 97 | (70 - 130) | EPA-2 TO-15 |
| 1,3,5-Trimethylbenzene | 104 | (70 - 130) | EPA-2 TO-15 |

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# LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

**Client Lot #...:** H0F110411 **Work Order #...:** L2WKV1AC **Matrix.....:** AIR
**LCS Lot-Sample#:** H0F150000-055

| PARAMETER | PERCENT RECOVERY | RECOVERY LIMITS | METHOD |
|---|---|---|---|
| **1,2,4-Trimethylbenzene** | **110** | **(70 - 130)** | **EPA-2 TO-15** |
| **1,3-Dichlorobenzene** | **107** | **(70 - 130)** | **EPA-2 TO-15** |
| **1,4-Dichlorobenzene** | **107** | **(70 - 130)** | **EPA-2 TO-15** |
| **1,2-Dichlorobenzene** | **109** | **(70 - 130)** | **EPA-2 TO-15** |
| **Benzyl chloride** | **109** | **(70 - 130)** | **EPA-2 TO-15** |
| **1,2,4-Trichloro-benzene** | **78** | **(60 - 140)** | **EPA-2 TO-15** |
| **Hexachlorobutadiene** | **96** | **(60 - 140)** | **EPA-2 TO-15** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 4-Bromofluorobenzene | 97 | (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 #...: H0F110411 Work Order #...: L2WKV1AC Matrix.....: AIR
LCS Lot-Sample#: H0F150000-055
Prep Date.....: 06/14/10 Analysis Date..: 06/14/10
Prep Batch #...: 0166055
Dilution Factor: 1

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | METHOD |
|---|---|---|---|---|---|
| Dichlorodifluoromethane | 10.0 | 13.1 | ppb(v/v) | 131 | EPA-2 TO-15 |
| 1,2-Dichloro-1,1,2,2-tetrafluoroethane | 10.0 | 15.5 a | ppb(v/v) | 155 | EPA-2 TO-15 |
| Chloromethane | 10.0 | 10.7 | ppb(v/v) | 107 | EPA-2 TO-15 |
| Vinyl chloride | 10.0 | 9.82 | ppb(v/v) | 98 | EPA-2 TO-15 |
| Bromomethane | 10.0 | 9.87 | ppb(v/v) | 99 | EPA-2 TO-15 |
| Chloroethane | 10.0 | 8.76 | ppb(v/v) | 88 | EPA-2 TO-15 |
| Trichlorofluoromethane | 10.0 | 12.5 | ppb(v/v) | 125 | EPA-2 TO-15 |
| 1,1-Dichloroethene | 10.0 | 8.66 | ppb(v/v) | 87 | EPA-2 TO-15 |
| 1,1,2-Trichloro-1,2,2-trifluoroethane | 10.0 | 9.13 | ppb(v/v) | 91 | EPA-2 TO-15 |
| Methylene chloride | 10.0 | 7.54 | ppb(v/v) | 75 | EPA-2 TO-15 |
| 1,1-Dichloroethane | 10.0 | 8.52 | ppb(v/v) | 85 | EPA-2 TO-15 |
| cis-1,2-Dichloroethene | 10.0 | 8.24 | ppb(v/v) | 82 | EPA-2 TO-15 |
| Chloroform | 10.0 | 8.73 | ppb(v/v) | 87 | EPA-2 TO-15 |
| 1,1,1-Trichloroethane | 10.0 | 11.0 | ppb(v/v) | 110 | EPA-2 TO-15 |
| Carbon tetrachloride | 10.0 | 10.6 | ppb(v/v) | 106 | EPA-2 TO-15 |
| Benzene | 10.0 | 7.65 | ppb(v/v) | 77 | EPA-2 TO-15 |
| 1,2-Dichloroethane | 10.0 | 9.19 | ppb(v/v) | 92 | EPA-2 TO-15 |
| Trichloroethene | 10.0 | 7.69 | ppb(v/v) | 77 | EPA-2 TO-15 |
| 1,2-Dichloropropane | 10.0 | 8.11 | ppb(v/v) | 81 | EPA-2 TO-15 |
| cis-1,3-Dichloropropene | 10.0 | 8.07 | ppb(v/v) | 81 | EPA-2 TO-15 |
| Toluene | 10.0 | 8.69 | ppb(v/v) | 87 | EPA-2 TO-15 |
| trans-1,3-Dichloropropene | 10.0 | 9.30 | ppb(v/v) | 93 | EPA-2 TO-15 |
| 1,1,2-Trichloroethane | 10.0 | 9.20 | ppb(v/v) | 92 | EPA-2 TO-15 |
| Tetrachloroethene | 10.0 | 9.62 | ppb(v/v) | 96 | EPA-2 TO-15 |
| 1,2-Dibromoethane (EDB) | 10.0 | 9.27 | ppb(v/v) | 93 | EPA-2 TO-15 |
| Chlorobenzene | 10.0 | 9.55 | ppb(v/v) | 96 | EPA-2 TO-15 |
| Ethylbenzene | 10.0 | 10.0 | ppb(v/v) | 100 | EPA-2 TO-15 |
| m-Xylene & p-Xylene | 20.0 | 20.5 | ppb(v/v) | 103 | EPA-2 TO-15 |
| o-Xylene | 10.0 | 10.3 | ppb(v/v) | 103 | EPA-2 TO-15 |
| Styrene | 10.0 | 10.9 | ppb(v/v) | 109 | EPA-2 TO-15 |
| 1,1,2,2-Tetrachloroethane | 10.0 | 9.65 | ppb(v/v) | 97 | EPA-2 TO-15 |
| 1,3,5-Trimethylbenzene | 10.0 | 10.4 | ppb(v/v) | 104 | EPA-2 TO-15 |

(Continued on next page)

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

**Client Lot #...:** H0F110411 **Work Order #...:** L2WKV1AC **Matrix.....:** AIR
**LCS Lot-Sample#:** H0F150000-055

| PARAMETER | SPIKE AMOUNT | MEASURED AMOUNT | UNITS | PERCENT RECOVERY | METHOD |
|---|---|---|---|---|---|
| **1,2,4-Trimethylbenzene** | **10.0** | **11.0** | **ppb(v/v)** | **110** | **EPA-2 TO-15** |
| **1,3-Dichlorobenzene** | **10.0** | **10.7** | **ppb(v/v)** | **107** | **EPA-2 TO-15** |
| **1,4-Dichlorobenzene** | **10.0** | **10.7** | **ppb(v/v)** | **107** | **EPA-2 TO-15** |
| **1,2-Dichlorobenzene** | **10.0** | **10.9** | **ppb(v/v)** | **109** | **EPA-2 TO-15** |
| **Benzyl chloride** | **10.0** | **10.9** | **ppb(v/v)** | **109** | **EPA-2 TO-15** |
| **1,2,4-Trichloro-benzene** | **10.0** | **7.83** | **ppb(v/v)** | **78** | **EPA-2 TO-15** |
| **Hexachlorobutadiene** | **10.0** | **9.60** | **ppb(v/v)** | **96** | **EPA-2 TO-15** |

| SURROGATE | PERCENT RECOVERY | RECOVERY LIMITS |
|---|---|---|
| 4-Bromofluorobenzene | 97 | (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.

HOF110411

# Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

| Client Information | Sampler: Reggie Gardner - PSC | Lab PM: Lidya Gulizia | Carrier Tracking No(s): FEDEX | COC No: |
|---|---|---|---|---|
| Client Contact: William Johnson | Phone: 618-407-3811 | E-Mail: rgardner@pscnow.com | | Page: 1 of 1 |
| Company: Solutia Inc. | | | | TA Job #: |
| Address: 575 Maryville Centre Dr. | Due Date Requested: | | | |
| City: Saint Louis | TAT Requested (days): Standard | | | |
| State, Zip: Missouri 63141 | | | | |
| Phone: 603-778-1100 x234 | PO #: | | | |
| Email: crawford@xdd-llc.com | WO #: | | | |
| Project Name: XDD - Solutia BIG MO | Project #: Solutia - Sauget BIG MO | | | |
| Site: Sauget, IL | SSOW#: | | | |

**Analysis Requested**

**Preservation Codes:**

| | |
|---|---|
| A - HCL | M - Hexane |
| B - NaOH | N - None |
| C - Zn Acetate | O - AsNaO2 |
| D - Nitric Acid | P - Na2O4S |
| E - NaHSO4 | Q - Na2SO3 |
| F - MeOH | R - Na2S2SO3 |
| G - Amchlor | S - H2SO4 |
| H - Ascorbic Acid | T - TSP Dodecahydrate |
| I - Ice | U - Acetone |
| J - DI Water | V - MCAA |
| K - EDTA | W - ph 4-5 |
| L - EDA | Z - other (specify) |

Other:

| Sample Identification | Sample Date | Sample Time | Sample Type (C=comp, G=grab) | Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air) | Field Filtered Sample (Yes or No) | Perform MS/MSD (Yes or No) | US EPA TO-15 (Level 2) | Total Number of containers | Special Instructions/Note: |
|---|---|---|---|---|---|---|---|---|---|
| | | | Preservation Code: | | | | | | |
| WGK-BIGMO-SVE-Line A-V | 6/9/2010 | 1500 | G | A | | | x | | |
| ~~WGK-BIGMO-TMX-INF-A~~ | /2010 | | G | A | | | x | | 1 BOX DRY ICE AMBIENT FED EX # 8708 2971 9443 NO CUSTODY SEAL TS 6/11/10 |

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***Possible Hazard Identification***

☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

***Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month)***

☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

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

| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
|---|---|---|---|---|---|
| | 6/9/10 1600 | PSC | | 6/11/10 0945 | TA KNOX |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |
| Relinquished by: | Date/Time: | Company | Received by: | Date/Time: | Company |

| Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: |
|---|---|---|

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# TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

**Lot Number:** 140F110411

| Review Items | Yes | No | NA | If No, what was the problem? | Comments/Actions Taken |
|---|---|---|---|---|---|
| 1. Do sample container labels match COC? (IDs, Dates, Times) | ✓ | | | ☐ **1a** Do not match COC<br>☐ **1b** Incomplete information<br>☐ **1c** Marking smeared<br>☐ **1d** Label torn<br>☐ **1e** No label<br>☐ **1f** COC not received<br>☐ **1g** Other: | NA |
| 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) | | | ✓ | ☐ **2a** Temp Blank = _____<br>☐ **2b** Cooler Temp = _____ | |
| 3. Were samples received with correct chemical preservative (excluding Encore)? | | | ✓ | ☐ **3a** Sample preservative = | |
| 4. Were custody seals present/intact on cooler and/or containers? | | ✓ | | ☒ **4a** Not present<br>☐ **4b** Not intact<br>☐ **4c** Other: | |
| 5. Were all of the samples listed on the COC received? | ✓ | | | ☐ **5a** Samples received-not on COC<br>☐ **5b** Samples not received-on COC | |
| 6. Were all of the sample containers received intact? | ✓ | | | ☐ **6a** Leaking<br>☐ **6b** Broken | |
| 7. Were VOA samples received without headspace? | ✓ | | ✓ | ☐ **7a** Headspace (VOA only) | |
| 8. Were samples received in appropriate containers? | ✓ | | | ☐ **8a** Improper container | |
| 9. Did you check for residual chlorine, if necessary? | | | ✓ | ☐ **9a** Could not be determined due to matrix interference | |
| 10. Were samples received within holding time? | ✓ | | | ☐ **10a** Holding time expired | |
| 11. For rad samples, was sample activity info. provided? | | | ✓ | ☐ 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? | ✓ | | | ☐ **13a** Leaking<br>☐ **13b** Other: | |
| 14. Was COC relinquished? (Signed/Dated/Timed) | ✓ | | | ☐ **14a** Not relinquished | |
| 15. Are tests/parameters listed for each sample? | ✓ | | | ☐ **15a** Incomplete information | |
| 16. Is the matrix of the samples noted? | ✓ | | | ☐ **15a** Incomplete information | |
| 17. Is the date/time of sample collection noted? | ✓ | | | ☐ **15a** Incomplete information | |
| 18. Is the client and project name/# identified? | ✓ | | | ☐ **15a** Incomplete information | |
| 19. Was the sampler identified on the COC? | ✓ | | | | |

Quote #: 80050 PM Instructions: _____

Sample Receiving Associate: _____ Date: 6/11/10

QA026R21.doc, 090409

# Test America - Knoxville ---- Air Canister Dilution Log

## Lot Number: *H0F110411*

| 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 InCan Final Pres. Pf (psig) | Second In-can Final Pres. Pf (psig) | Third InCan Final Pres. Pf (psig) | Serial Dilution Can # | Vol (mL) | Final Pres. Pf (psig) | Comments |
| DPF 6-11-10 | 1410 | 29.02 | L2Q24 | 12734 | | | | | | | | | ⑤ +29.7 | | 12734 | 2 | +29.9 | 8672 |