

US EPA ARCHIVE DOCUMENT

## ANALYTICAL REPORT

Job Number: 680-59177-1

Job Description: WGK Vapor Sampling 7/6/10

For:

Solutia Inc.

575 Maryville Centre Dr.

Saint Louis, MO 63141

Attention: Mr. William G Johnson



Approved for release.  
Lidya Gulizia  
Project Manager I  
7/29/2010 12:02 PM

Lidya Gulizia

Project Manager I

lidya.gulizia@testamericainc.com

07/29/2010

cc: Mr. Scott Crawford  
Erin Stanisewski

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 680-59177-1 / Knoxville H0G070420**

**Receipt**

Following sample collection, the air sample was sent directly to TestAmerica Knoxville for analysis and was received in good condition on July 7, 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: 680-59177-1

Description	Lab Location	Method	Preparation Method
<b>Matrix: Air - Tedlar Bag</b>			
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: 680-59177-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-59177-1	WGK-BIGMO-SVE-Line A-V	Air - Tedlar Bag	07/06/2010 1510	07/07/2010 1000
680-59177-2	WGK-BIGMO-TMX-INF-A	Air - Tedlar Bag	07/06/2010 1505	07/07/2010 1000
680-59177-3	WGK-BIGMO-TMX-EFF-A	Air - Tedlar Bag	07/06/2010 1500	07/07/2010 1000

## SAMPLE RESULTS

H0G070420 Analytical Report .....	1
Sample Receipt Documentation .....	17
Total Number of Pages .....	19

## ANALYTICAL REPORT

PROJECT NO. 680-59177

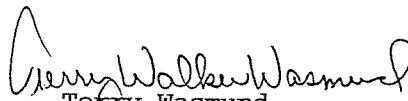
Solutia Vapor Sampling

Lot #: H0G070420

Lidya Gulizia

TestAmerica Savannah  
5102 Laroche Avenue  
Savannah, GA 31404

TESTAMERICA LABORATORIES, INC.

  
Terry Wasmund  
Project Manager

July 27, 2010



## ANALYTICAL METHODS SUMMARY

H0G070420

<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

H0G070420

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
L3VJW	001	WGK-BIGMO-SVE-LINE A-V	07/06/10	15:10
L3VJX	002	WGK-BIGMO-TMX-INF-A	07/06/10	15:05
L3VJ1	003	WGK-BIGMO-TMX-EFF-A	07/06/10	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 HOG070420

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 7/7/10 in Tedlar bags and transferred into Summa Canisters within 72 hours of sampling.

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.

## TestAmerica Savannah

Client Sample ID: W GK-BIGMO-SVE-LINE A-V

## GC/MS Volatiles

Lot-Sample #.... H0G070420-001    Work Order #.... L3VJW1AA    Matrix.....: AIR  
 Date Sampled.... 07/06/10    Date Received... 07/07/10  
 Prep Date..... 07/20/10    Analysis Date... 07/21/10  
 Prep Batch #.... 0202161  
 Dilution Factor: 100329.2    Method.....: EPA-2 TO-15

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Dichlorodifluoromethane	ND	20000	ppb (v/v)
1,2-Dichloro- 1,1,2,2-tetrafluoroethane	ND	20000	ppb (v/v)
Chloromethane	ND	50000	ppb (v/v)
Vinyl chloride	ND	20000	ppb (v/v)
Bromomethane	ND	20000	ppb (v/v)
Chloroethane	ND	20000	ppb (v/v)
Trichlorofluoromethane	ND	20000	ppb (v/v)
1,1-Dichloroethene	ND	20000	ppb (v/v)
1,1,2-Trichloro- 1,2,2-trifluoroethane	ND	20000	ppb (v/v)
Methylene chloride	ND	50000	ppb (v/v)
1,1-Dichloroethane	ND	20000	ppb (v/v)
cis-1,2-Dichloroethene	ND	20000	ppb (v/v)
Chloroform	ND	20000	ppb (v/v)
1,1,1-Trichloroethane	ND	20000	ppb (v/v)
Carbon tetrachloride	ND	20000	ppb (v/v)
<b>Benzene</b>	<b>1000000</b>	<b>20000</b>	<b>ppb (v/v)</b>
1,2-Dichloroethane	ND	20000	ppb (v/v)
Trichloroethene	ND	20000	ppb (v/v)
1,2-Dichloropropane	ND	20000	ppb (v/v)
cis-1,3-Dichloropropene	ND	20000	ppb (v/v)
Toluene	ND	20000	ppb (v/v)
trans-1,3-Dichloropropene	ND	20000	ppb (v/v)
1,1,2-Trichloroethane	ND	20000	ppb (v/v)
Tetrachloroethene	ND	20000	ppb (v/v)
1,2-Dibromoethane (EDB)	ND	20000	ppb (v/v)
Chlorobenzene	ND	20000	ppb (v/v)
Ethylbenzene	ND	20000	ppb (v/v)
m-Xylene & p-Xylene	ND	20000	ppb (v/v)
o-Xylene	ND	20000	ppb (v/v)
Styrene	ND	20000	ppb (v/v)
1,1,2,2-Tetrachloroethane	ND	20000	ppb (v/v)
1,3,5-Trimethylbenzene	ND	20000	ppb (v/v)
1,2,4-Trimethylbenzene	ND	20000	ppb (v/v)
1,3-Dichlorobenzene	ND	20000	ppb (v/v)
1,4-Dichlorobenzene	ND	20000	ppb (v/v)
1,2-Dichlorobenzene	ND	20000	ppb (v/v)
Benzyl chloride	ND	40000	ppb (v/v)

(Continued on next page)

## TestAmerica Savannah

Client Sample ID: W GK-BIGMO-SVE-LINE A-V

## GC/MS Volatiles

Lot-Sample #....: H0G070420-001 Work Order #....: L3VJW1AA Matrix.....: AIR

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	100000	ppb (v/v)
Hexachlorobutadiene	ND	100000	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 #....: H0G070420-002      Work Order #....: L3VJX1AA      Matrix.....: AIR  
 Date Sampled....: 07/06/10      Date Received...: 07/07/10  
 Prep Date.....: 07/20/10      Analysis Date...: 07/21/10  
 Prep Batch #....: 0202161  
 Dilution Factor: 31535.3      Method.....: EPA-2 TO-15

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Dichlorodifluoromethane	ND	6300	ppb (v/v)
1,2-Dichloro- 1,1,2,2-tetrafluoroethane	ND	6300	ppb (v/v)
Chloromethane	ND	16000	ppb (v/v)
Vinyl chloride	ND	6300	ppb (v/v)
Bromomethane	ND	6300	ppb (v/v)
Chloroethane	ND	6300	ppb (v/v)
Trichlorofluoromethane	ND	6300	ppb (v/v)
1,1-Dichloroethene	ND	6300	ppb (v/v)
1,1,2-Trichloro- 1,2,2-trifluoroethane	ND	6300	ppb (v/v)
Methylene chloride	ND	16000	ppb (v/v)
1,1-Dichloroethane	ND	6300	ppb (v/v)
cis-1,2-Dichloroethene	ND	6300	ppb (v/v)
Chloroform	ND	6300	ppb (v/v)
1,1,1-Trichloroethane	ND	6300	ppb (v/v)
Carbon tetrachloride	ND	6300	ppb (v/v)
<b>Benzene</b>	<b>360000</b>	<b>6300</b>	<b>ppb (v/v)</b>
1,2-Dichloroethane	ND	6300	ppb (v/v)
Trichloroethene	ND	6300	ppb (v/v)
1,2-Dichloropropane	ND	6300	ppb (v/v)
cis-1,3-Dichloropropene	ND	6300	ppb (v/v)
Toluene	ND	6300	ppb (v/v)
trans-1,3-Dichloropropene	ND	6300	ppb (v/v)
1,1,2-Trichloroethane	ND	6300	ppb (v/v)
Tetrachloroethene	ND	6300	ppb (v/v)
1,2-Dibromoethane (EDB)	ND	6300	ppb (v/v)
Chlorobenzene	ND	6300	ppb (v/v)
Ethylbenzene	ND	6300	ppb (v/v)
m-Xylene & p-Xylene	ND	6300	ppb (v/v)
o-Xylene	ND	6300	ppb (v/v)
Styrene	ND	6300	ppb (v/v)
1,1,2,2-Tetrachloroethane	ND	6300	ppb (v/v)
1,3,5-Trimethylbenzene	ND	6300	ppb (v/v)
1,2,4-Trimethylbenzene	ND	6300	ppb (v/v)
1,3-Dichlorobenzene	ND	6300	ppb (v/v)
1,4-Dichlorobenzene	ND	6300	ppb (v/v)
1,2-Dichlorobenzene	ND	6300	ppb (v/v)
Benzyl chloride	ND	13000	ppb (v/v)

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## TestAmerica Savannah

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

## GC/MS Volatiles

Lot-Sample #...: H0G070420-002    Work Order #...: L3VJX1AA    Matrix.....: AIR

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	32000	ppb (v/v)
Hexachlorobutadiene	ND	32000	ppb (v/v)

<u>SURROGATE</u>	<u>PERCENT</u> <u>RECOVERY</u>	<u>RECOVERY</u> <u>LIMITS</u>
4-Bromofluorobenzene	94	(60 - 140)

## TestAmerica Savannah

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

## GC/MS Volatiles

Lot-Sample #....: H0G070420-003      Work Order #....: L3VJ11AA      Matrix.....: AIR  
 Date Sampled....: 07/06/10      Date Received...: 07/07/10  
 Prep Date.....: 07/20/10      Analysis Date...: 07/21/10  
 Prep Batch #....: 0202161  
 Dilution Factor: 19.97      Method.....: EPA-2 TO-15

PARAMETER	RESULT	REPORTING	
		LIMIT	UNITS
Dichlorodifluoromethane	ND	4.0	ppb (v/v)
1,2-Dichloro- 1,1,2,2-tetrafluoroethane	ND	4.0	ppb (v/v)
Chloromethane	ND	10	ppb (v/v)
Vinyl chloride	ND	4.0	ppb (v/v)
Bromomethane	ND	4.0	ppb (v/v)
Chloroethane	ND	4.0	ppb (v/v)
Trichlorofluoromethane	ND	4.0	ppb (v/v)
1,1-Dichloroethene	ND	4.0	ppb (v/v)
1,1,2-Trichloro- 1,2,2-trifluoroethane	ND	4.0	ppb (v/v)
<b>Methylene chloride</b>	<b>14</b>	<b>10</b>	<b>ppb (v/v)</b>
1,1-Dichloroethane	ND	4.0	ppb (v/v)
cis-1,2-Dichloroethene	ND	4.0	ppb (v/v)
Chloroform	ND	4.0	ppb (v/v)
1,1,1-Trichloroethane	ND	4.0	ppb (v/v)
Carbon tetrachloride	ND	4.0	ppb (v/v)
<b>Benzene</b>	<b>6.7</b>	<b>4.0</b>	<b>ppb (v/v)</b>
1,2-Dichloroethane	ND	4.0	ppb (v/v)
Trichloroethene	ND	4.0	ppb (v/v)
1,2-Dichloropropane	ND	4.0	ppb (v/v)
cis-1,3-Dichloropropene	ND	4.0	ppb (v/v)
Toluene	ND	4.0	ppb (v/v)
trans-1,3-Dichloropropene	ND	4.0	ppb (v/v)
1,1,2-Trichloroethane	ND	4.0	ppb (v/v)
Tetrachloroethene	ND	4.0	ppb (v/v)
1,2-Dibromoethane (EDB)	ND	4.0	ppb (v/v)
Chlorobenzene	ND	4.0	ppb (v/v)
Ethylbenzene	ND	4.0	ppb (v/v)
m-Xylene & p-Xylene	ND	4.0	ppb (v/v)
o-Xylene	ND	4.0	ppb (v/v)
Styrene	ND	4.0	ppb (v/v)
1,1,2,2-Tetrachloroethane	ND	4.0	ppb (v/v)
1,3,5-Trimethylbenzene	ND	4.0	ppb (v/v)
1,2,4-Trimethylbenzene	ND	4.0	ppb (v/v)
1,3-Dichlorobenzene	ND	4.0	ppb (v/v)
1,4-Dichlorobenzene	ND	4.0	ppb (v/v)
1,2-Dichlorobenzene	ND	4.0	ppb (v/v)
Benzyl chloride	ND	8.0	ppb (v/v)

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## TestAmerica Savannah

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

## GC/MS Volatiles

Lot-Sample #....: H0G070420-003    Work Order #....: L3VJ11AA    Matrix.....: AIR

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>
1,2,4-Trichloro- benzene	ND	20	ppb (v/v)
Hexachlorobutadiene	ND	20	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 #...: H0G070420  
 MB Lot-Sample #: H0G210000-161

Work Order #...: L4F7L1AA

Matrix.....: AIR

Analysis Date...: 07/20/10  
 Dilution Factor: 1

Prep Date.....: 07/20/10  
 Prep Batch #...: 0202161

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 #...: H0G070420

Work Order #...: L4F7L1AA

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	97	(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 #....: H0G070420      Work Order #....: L4F7L1AC      Matrix.....: AIR  
 LCS Lot-Sample#: H0G210000-161  
 Prep Date.....: 07/20/10      Analysis Date...: 07/20/10  
 Prep Batch #....: 0202161  
 Dilution Factor: 1

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Dichlorodifluoromethane	100	(60 - 140)	EPA-2 TO-15
1,2-Dichloro- 1,1,2,2-tetrafluoroethane	103	(60 - 140)	EPA-2 TO-15
Chloromethane	103	(60 - 140)	EPA-2 TO-15
Vinyl chloride	101	(70 - 130)	EPA-2 TO-15
Bromomethane	98	(70 - 130)	EPA-2 TO-15
Chloroethane	98	(70 - 130)	EPA-2 TO-15
Trichlorofluoromethane	97	(60 - 140)	EPA-2 TO-15
1,1-Dichloroethene	100	(70 - 130)	EPA-2 TO-15
1,1,2-Trichloro- 1,2,2-trifluoroethane	99	(70 - 130)	EPA-2 TO-15
Methylene chloride	94	(70 - 130)	EPA-2 TO-15
1,1-Dichloroethane	96	(70 - 130)	EPA-2 TO-15
cis-1,2-Dichloroethene	97	(70 - 130)	EPA-2 TO-15
Chloroform	94	(70 - 130)	EPA-2 TO-15
1,1,1-Trichloroethane	95	(70 - 130)	EPA-2 TO-15
Carbon tetrachloride	107	(70 - 130)	EPA-2 TO-15
Benzene	100	(70 - 130)	EPA-2 TO-15
1,2-Dichloroethane	96	(70 - 130)	EPA-2 TO-15
Trichloroethene	100	(70 - 130)	EPA-2 TO-15
1,2-Dichloropropane	103	(70 - 130)	EPA-2 TO-15
cis-1,3-Dichloropropene	101	(70 - 130)	EPA-2 TO-15
Toluene	100	(70 - 130)	EPA-2 TO-15
trans-1,3-Dichloropropene	99	(70 - 130)	EPA-2 TO-15
1,1,2-Trichloroethane	104	(70 - 130)	EPA-2 TO-15
Tetrachloroethene	97	(70 - 130)	EPA-2 TO-15
1,2-Dibromoethane (EDB)	100	(70 - 130)	EPA-2 TO-15
Chlorobenzene	102	(70 - 130)	EPA-2 TO-15
Ethylbenzene	107	(70 - 130)	EPA-2 TO-15
m-Xylene & p-Xylene	110	(70 - 130)	EPA-2 TO-15
o-Xylene	113	(70 - 130)	EPA-2 TO-15
Styrene	117	(70 - 130)	EPA-2 TO-15
1,1,2,2-Tetrachloroethane	117	(70 - 130)	EPA-2 TO-15
1,3,5-Trimethylbenzene	120	(70 - 130)	EPA-2 TO-15

(Continued on next page)

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## GC/MS Volatiles

Client Lot #...: H0G070420      Work Order #...: L4F7L1AC      Matrix.....: AIR  
 LCS Lot-Sample#: H0G210000-161

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
1,2,4-Trimethylbenzene	118	(70 - 130)	EPA-2 TO-15
1,3-Dichlorobenzene	108	(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	107	(70 - 130)	EPA-2 TO-15
1,2,4-Trichloro- benzene	100	(60 - 140)	EPA-2 TO-15
Hexachlorobutadiene	102	(60 - 140)	EPA-2 TO-15
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	
4-Bromofluorobenzene	107	(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 #....: H0G070420      Work Order #....: L4F7L1AC      Matrix.....: AIR  
 LCS Lot-Sample#: H0G210000-161  
 Prep Date.....: 07/20/10      Analysis Date...: 07/20/10  
 Prep Batch #....: 0202161  
 Dilution Factor: 1

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Dichlorodifluoromethane	5.00	5.00	ppb (v/v)	100	EPA-2 TO-15
1,2-Dichloro- 1,1,2,2-tetrafluoroethane	5.00	5.14	ppb (v/v)	103	EPA-2 TO-15
Chloromethane	5.00	5.17	ppb (v/v)	103	EPA-2 TO-15
Vinyl chloride	5.00	5.03	ppb (v/v)	101	EPA-2 TO-15
Bromomethane	5.00	4.88	ppb (v/v)	98	EPA-2 TO-15
Chloroethane	5.00	4.89	ppb (v/v)	98	EPA-2 TO-15
Trichlorofluoromethane	5.00	4.83	ppb (v/v)	97	EPA-2 TO-15
1,1-Dichloroethene	5.00	5.02	ppb (v/v)	100	EPA-2 TO-15
1,1,2-Trichloro- 1,2,2-trifluoroethane	5.00	4.96	ppb (v/v)	99	EPA-2 TO-15
Methylene chloride	5.00	4.72	ppb (v/v)	94	EPA-2 TO-15
1,1-Dichloroethane	5.00	4.81	ppb (v/v)	96	EPA-2 TO-15
cis-1,2-Dichloroethene	5.00	4.84	ppb (v/v)	97	EPA-2 TO-15
Chloroform	5.00	4.72	ppb (v/v)	94	EPA-2 TO-15
1,1,1-Trichloroethane	5.00	4.75	ppb (v/v)	95	EPA-2 TO-15
Carbon tetrachloride	5.00	5.35	ppb (v/v)	107	EPA-2 TO-15
Benzene	5.00	5.01	ppb (v/v)	100	EPA-2 TO-15
1,2-Dichloroethane	5.00	4.79	ppb (v/v)	96	EPA-2 TO-15
Trichloroethene	5.00	5.00	ppb (v/v)	100	EPA-2 TO-15
1,2-Dichloropropane	5.00	5.16	ppb (v/v)	103	EPA-2 TO-15
cis-1,3-Dichloropropene	5.00	5.04	ppb (v/v)	101	EPA-2 TO-15
Toluene	5.00	5.00	ppb (v/v)	100	EPA-2 TO-15
trans-1,3-Dichloropropene	5.00	4.93	ppb (v/v)	99	EPA-2 TO-15
1,1,2-Trichloroethane	5.00	5.18	ppb (v/v)	104	EPA-2 TO-15
Tetrachloroethene	5.00	4.86	ppb (v/v)	97	EPA-2 TO-15
1,2-Dibromoethane (EDB)	5.00	5.00	ppb (v/v)	100	EPA-2 TO-15
Chlorobenzene	5.00	5.12	ppb (v/v)	102	EPA-2 TO-15
Ethylbenzene	5.00	5.36	ppb (v/v)	107	EPA-2 TO-15
m-Xylene & p-Xylene	10.0	11.0	ppb (v/v)	110	EPA-2 TO-15
o-Xylene	5.00	5.63	ppb (v/v)	113	EPA-2 TO-15
Styrene	5.00	5.87	ppb (v/v)	117	EPA-2 TO-15
1,1,2,2-Tetrachloroethane	5.00	5.87	ppb (v/v)	117	EPA-2 TO-15
1,3,5-Trimethylbenzene	5.00	6.02	ppb (v/v)	120	EPA-2 TO-15

(Continued on next page)

## LABORATORY CONTROL SAMPLE DATA REPORT

## GC/MS Volatiles

Client Lot #...: H0G070420

Work Order #...: L4F7L1AC

Matrix.....: AIR

LCS Lot-Sample#: H0G210000-161

<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	5.91	ppb (v/v)	118	EPA-2 TO-15
1,3-Dichlorobenzene	5.00	5.39	ppb (v/v)	108	EPA-2 TO-15
1,4-Dichlorobenzene	5.00	5.34	ppb (v/v)	107	EPA-2 TO-15
1,2-Dichlorobenzene	5.00	5.45	ppb (v/v)	109	EPA-2 TO-15
Benzyl chloride	5.00	5.34	ppb (v/v)	107	EPA-2 TO-15
1,2,4-Trichloro- benzene	5.00	5.00	ppb (v/v)	100	EPA-2 TO-15
Hexachlorobutadiene	5.00	5.08	ppb (v/v)	102	EPA-2 TO-15
<u>SURROGATE</u>		<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>		
4-Bromofluorobenzene		107	(60 - 140)		

**NOTE (S) :**

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

Bold print denotes control parameters



## Chain of Custody Record

<b>Client Information</b> Client Contact: William Johnson Company: Solutia Inc.		Sampler: Reggie Gardner - PSC Phone: 618-407-3811 Lab PM: Lidy Gulizia E-Mail: rgardner@pscnw.com		Carrier Tracking No(s): FEDEX 0703 2907 0697 Page: 1 of 1 TA Job #: 2 boxes					
Address: 575 Maryville Centre Dr. City: Saint Louis State, Zip: Missouri 63141 Phone: 603-778-1100 x234 Email: crawford@xidd-llc.com Project Name: XDD - Solutia BIG MO Site: Sauget, IL		<b>Analysis Requested</b> Due Date Requested: TAT Requested (days): Standard PO #: WO #: Project #: Solutia - Sauget BIG MO SSOW#:							
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/soil, 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:
WGK-BIGMO-SVE-Line A-V	7/6/2010	1510	G	A	X		X		2 boxes
WGK-BIGMO-TMX-INF-A	7/6/2010	1505	G	A	X		X		no custody seals
WGK-BIGMO-TMX-EFF-A	7/6/2010	1500	G	A	X		X		rec. at ambient temp.
									Fed. ex #
									8703 2907 0697
Possible Hazard Identification <input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)									
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months									
Special Instructions/QC Requirements:									
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: _____ Date/Time: 7/6/10 @ 1900 Company: PSC Relinquished by: _____ Date/Time: _____ Company: _____ Relinquished by: _____ Date/Time: _____ Company: _____									
Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cooler Temperature(s) °C and Other Remarks:									



## TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Lot Number: 106D70420

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 checked="" type="checkbox"/>			<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:	<u>4a</u>
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 checked="" type="checkbox"/>		<input type="checkbox"/> 2a Temp Blank = _____ <input type="checkbox"/> 2b Cooler Temp = _____	
3. Were samples received with correct chemical preservative (excluding Encore)?		<input checked="" type="checkbox"/>		<input type="checkbox"/> 3a Sample preservative =	
4. Were custody seals present/intact on cooler and/or containers?		<input checked="" type="checkbox"/>		<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 checked="" type="checkbox"/>			<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 checked="" type="checkbox"/>			<input type="checkbox"/> 6a Leaking <input type="checkbox"/> 6b Broken	
7. Were VOA samples received without headspace?		<input checked="" type="checkbox"/>		<input type="checkbox"/> 7a Headspace (VOA only)	
8. Were samples received in appropriate containers?	<input checked="" type="checkbox"/>			<input type="checkbox"/> 8a Improper container	
9. Did you check for residual chlorine, if necessary?		<input checked="" type="checkbox"/>		<input type="checkbox"/> 9a Could not be determined due to matrix interference	
10. Were samples received within holding time?	<input checked="" type="checkbox"/>			<input type="checkbox"/> 10a Holding time expired	
11. For rad samples, was sample activity info. provided?		<input checked="" type="checkbox"/>		<input type="checkbox"/> Incomplete information	
12. For 1613B water samples is pH<9?		<input checked="" type="checkbox"/>		If no, was pH adjusted to pH 7 - 9 with sulfuric acid? _____	
13. Are the shipping containers intact?	<input checked="" type="checkbox"/>			<input type="checkbox"/> 13a Leaking <input type="checkbox"/> 13b Other:	
14. Was COC relinquished? (Signed/Dated/Timed)	<input checked="" type="checkbox"/>			<input type="checkbox"/> 14a Not relinquished	
15. Are tests/parameters listed for each sample?	<input checked="" type="checkbox"/>			<input type="checkbox"/> 15a Incomplete information	
16. Is the matrix of the samples noted?	<input checked="" type="checkbox"/>			<input type="checkbox"/> 15a Incomplete information	
17. Is the date/time of sample collection noted?	<input checked="" type="checkbox"/>			<input type="checkbox"/> 15a Incomplete information	
18. Is the client and project name/# identified?	<input checked="" type="checkbox"/>			<input type="checkbox"/> 15a Incomplete information	
19. Was the sampler identified on the COC?	<input checked="" type="checkbox"/>				
Quote #: <u>80050</u>				PM Instructions: <u>NA</u>	

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Date: 7/7/10Sample Receiving Associate: David Updyke

Lot Number: H0G070420

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	
ADF 7-8-10	1340	2893	L3VJW									21.2			04392	2	+30.4	8729	
			L3VJX												0177	4	+30.6	8732	
			L3VJ1												0848	300	+0.9	4	
																			0161

0181