AECOM

Prepared for:
UTC Aerospace Systems
Rockford, IL

Prepared by:
AECOM
Warrenville, IL
60312350
June 2014

First Quarter 2014 GMZ Monitoring and System Performance Report

UTC Aerospace Systems Plants 1/2 Facility
Area 9/10 Remedial Action
Southeast Rockford Groundwater Contamination
Superfund Site
2421 11th Street
Rockford, IL 61104
ILD 981000417

US EPA RECORDS CENTER REGION 5
521799

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Letter of Transmittal

Attention:	Mr. Timothy Drexler (USEPA) Mr. Doyle Wilson (IEPA)	Date:	June 10, 2014
	UTC Aerospace Systems Plants 1/2 Facility Area 9/10 Remedial Action Southeast Rockford Groundwater Contamination Superfund Site 2421 11th Street Rockford, Illinois 61104		
Project reference:	ILD981000417	Project number:	60312350

We are sending you the following:

Number of originals:	Number of copies:	Description:
1	1	First Quarter 2014 GMZ Monitoring and System Performance Report

Enclosed please find the First Quarter 2014 GMZ Monitoring and System Performance Report for UTC Aerospace Systems Plants 1/2 Facility, Area 9/10 Remedial Action, Southeast Rockford Groundwater Contamination Superfund Site, Rockford, Illinois

Thank You.

Peter Hollatz, P.E.

cc: Mr. Scott Moyer, United Technologies Corporation (cd only)
Ms. Diane Bellantoni, United Technologies Corporation (cd only)
Mr. Jon Alberg, AECOM
Mr. William Elwell, AECOM
Project File

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June 10, 2014

Mr. Timothy Drexler
Remedial Project Manager
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77 West Jackson Boulevard
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Mr. Doyle W. Wilson
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Federal Sites Remediation Section
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Bureau of Land
Illinois Environmental Protection Agency
1021 N. Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

Subject: First Quarter 2014 GMZ Monitoring and System Performance Report
UTC Aerospace Systems Plants 1/2 Facility
Area 9/10 Remedial Action
Southeast Rockford Groundwater Contamination Superfund Site
2421 11th Street
Rockford, Illinois 61104
ILD981000417
AECOM Project No. 60312350

Dear Messrs. Drexler and Wilson:

This Quarterly Groundwater Management Zone (GMZ) Monitoring and System Performance Report has been prepared by AECOM Technical Services Inc. (AECOM) on behalf of UTC Aerospace Systems (UTAS, fka Hamilton Sundstrand or HS). In accordance with the approved March 2007 Operation, Maintenance, and Monitoring Plan (OM&M Plan) and the Environmental Protection Agency (EPA) Letter dated April 15, 2011 providing approval for combining project reporting documents, this report contains a summary of the following: 1) GMZ groundwater monitoring data; 2) the Phase 1 and Phase 2 air sparge/soil vapor extraction (AS/SVE) system performance data; 3) the Phase 1 and Phase 2 AS/SVE system process air analytical data; 4) GMZ wells that contain contaminants of concern (COCs) above Preliminary Remediation Goals (PRGs); and 5) Quarterly Progress Report for Second Quarter 2014.

As approved in the April 15, 2011 letter from Timothy Drexler, interpretation of all sampling and system performance data will be included in the Annual GMZ Monitoring and System Performance Report submitted in March of the subsequent year.

The following GMZ wells contained COCs at concentrations above PRGs:

GMZ Monitoring Well ID	COCs > PRG Increase or Decrease from Previous Quarter (+ or -)	
GMZ01	TCE (+), PCE (+)	No. No trend
MW203	PCE (-)	Yes
SMW04	TCE (+), PCE (-), VC (+)	
SMW08	PCE (-)	No, No trend.
SMW19	TCE (+)	
PMW01	PCE (-)	Yes! The only well under active influence.
PMW02	PCE (+)	

Trichloroethene (TCE), Tetrachloroethene (PCE), Vinyl Chloride (VC)

The above referenced COC decreases and/or increases represent only concentration changes from the previous quarters' sampling and should not be viewed as indication of a trend without the use of proper statistical methods.

Included in this report are data tables and figures summarizing the results of first quarter 2014 GMZ monitoring and AS/SVE system performance, laboratory analytical reports, supporting field documentation sheets and the Quarterly Progress Report covering the period from March 1, 2014 to May 31, 2014.

Please contact either of the undersigned with any questions you may have on the information provided.

Prepared by:

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Reviewed by:

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cc: Mr. Scott R. Moyer, P.G. – United Technologies Corporation
Ms. Diane Bellantoni – United Technologies Corporation
Mr. Jon Alberg – AECOM
Project File

Attachments:

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Tables

Table 1
Second Quarter 2013 to First Quarter 2014 Cumulative Groundwater Elevations
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

Well ID	Top of Casing Elevation (ft)	Depth to Groundwater (ft BTOC)	Groundwater Elevation (ft AMSL)	Depth to Groundwater (ft BTOC)	Groundwater Elevation (ft AMSL)	Depth to Groundwater (ft BTOC)	Groundwater Elevation (ft AMSL)	Depth to Groundwater (ft BTOC)	Groundwater Elevaion (ft AMSL)
		5/6/2013		8/5/2013		12/2/2013		2/24/2014	
MW07FGA	727.49	29.87	697.62	27.45	700.04	28.39	699.10	29.15	698.34
MW203	728.58	29.65	698.93	28.22	700.36	29.10	699.48	29.91	698.67
SMW01	729.71	31.42	698.29	30.11	699.60	31.20	698.51	31.91	697.80
SMW02	726.77	28.11	698.66	26.71	700.06	27.66	699.11	28.43	698.34
SMW04	728.51	30.49	698.02	29.19	699.32	30.42	698.09	31.13	697.38
SMW08	728.81	30.71	698.10	29.48	699.33	30.61	698.20	31.34	697.47
SMW19	728.49	29.77	698.72	28.33	700.16	29.32	699.17	30.11	698.38
SMW20	727.69	29.65	698.04	28.30	699.39	29.51	698.18	30.27	697.42
SMW21	727.25	29.08	698.17	27.81	699.44	28.93	698.32	29.70	697.55
GMZ01	731.41	33.28	698.13	32.04	699.37	33.17	698.24	33.90	697.51
GMZ02	728.76	30.75	698.01	29.60	699.16	30.70	698.06	31.48	697.28
GMZ03	728.22	30.21	698.01	29.00	699.22	30.12	698.10	30.87	697.35
GMZ04	726.84	28.61	698.23	27.29	699.55	28.38	698.46	29.13	697.71
BGW01	728.19	29.59	698.60	28.18	700.01	29.11	699.08	29.92	698.27
BGW02	728.81	30.09	698.72	28.61	700.20	29.59	699.22	30.05	698.76
BGW03	728.96	30.12	698.84	28.66	700.30	29.62	699.34	30.42	698.54
RAMW01	728.91	30.85	698.06	29.61	699.30	30.74	698.17	31.49	697.42
RAMW02	728.90	30.75	698.15	29.50	699.40	30.61	698.29	31.35	697.55
RAMW03	728.71	30.58	698.13	29.32	699.39	30.41	698.30	31.15	697.56
RAMW04	728.80	33.93	698.30	29.19	699.61	30.23	698.57	30.94	697.86
RAMW05	727.65	29.37	698.28	28.08	699.57	29.15	698.50	29.88	697.77
RAMW06	727.64	29.40	698.24	28.09	699.55	29.17	698.47	29.91	697.73
RAMW07	732.20	33.90	698.30	32.57	699.63	33.61	698.59	34.35	697.85
RAMW08	728.45	30.07	698.38	28.74	699.71	29.74	698.71	30.50	697.95
PMW01	728.88	30.90	697.98	29.65	699.23	30.89	697.99	31.60	697.28
PMW02	728.88	30.89	697.99	29.61	699.27	30.84	698.04	31.55	697.33

Notes:
NM = Not monitored
ft = feet
ft BTOC = feet below top of casing
ft AMSL = feet above mean sea level
All site well top of casing elevations re-surveyed on May 24, 2011.
RAMW04 riser was lowered due to ice damage that occurred during the previous winter. Well was resurveyed on July 1, 2013.

Table 2
Second Quarter 2013 to First Quarter 2014 VOC Analytical Results - GMZ Wells
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

Well	Sample ID	Sample Date	Sample Type	Trichloroethene (TCE)	Methylene Chloride (Dichloromethane)	1,1-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Ethylbenzene	Tetrachloroethene (PCE)	Toluene	Vinyl chloride
			Preliminary Remediation Goals (PRG)[A]	0.005[c,A]	0.005[c,A]	0.007[b,c,A]	0.7[A]	0.005[c,A]	0.07[c,A]	0.1[c,A]	0.2[b,c,A]	0.005[c,A]	0.7[c,A]	0.005[c,A]	1.0[c,A]	0.002[c,A]
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
GMZ01	HS SER-GMZ01-050713	7-May-13		**0.0020**	0.0010 U	0.00026 J	**0.0066**	0.0010 U	**0.0023**	0.0010 U	**0.0100**	0.0010 U	0.0010 U	**0.0210[A]**	0.0010 U	0.0010 U
	HS SER-GMZ01-080613	6-Aug-13		**0.0063[A]**	0.0020 U	0.0016 J	**0.0120**	0.0020 U	**0.0059**	0.0020 U	**0.0240**	0.0020 U	0.0020 U	**0.0330[A]**	0.0020 U	0.0020 U
	HS SER-GMZ01-120213	2-Dec-13		**0.0022**	0.0010 U	0.00044 J	**0.0064**	0.0010 U	**0.0022**	0.0010 U	**0.0083**	0.0010 U	0.0010 U	**0.0230[A]**	0.0010 U	0.0010 U
	HS SER-GMZ01-022514	25-Feb-14		**0.0052[A]**	0.0017 U	0.0013 J	**0.0051**	0.0017 U	**0.0024**	0.0017 U	**0.0160**	0.0017 U	0.0017 U	**0.0360[A]**	0.0017 U	0.0017 U
GMZ02	HS SER-GMZ02-050813	8-May-13		0.00039 J	0.0010 U	0.0010 U	**0.0021**	0.0010 U	0.00039 J	0.0010 U	**0.0067**	0.0010 U	0.0010 U	0.00035 J	0.0010 U	0.0010 U
	HS SER-GMZ02-080813	8-Aug-13		0.00028 J	0.0010 U	0.00021 J	**0.0011**	0.0010 U	0.0010 U	0.0010 U	**0.0026**	0.0010 U	0.0010 U	0.00057 J	0.0010 U	0.0010 U
	HS SER-GMZ02-120413	4-Dec-13		0.00056 J	0.0010 U	0.0010 U	**0.0014**	0.0010 U	0.0010 U	0.0010 U	**0.0042**	0.0010 U	0.0010 U	0.00075 J	0.0010 U	0.0010 U
	HS SER-GMZ02-022614	26-Feb-14		0.00025 J	0.0010 U	0.00074 J	**0.0036**	0.0010 U	0.00096 J	0.0010 U	**0.0094**	0.0010 U	0.0010 U	0.00063 J	0.0010 U	0.0010 U
GMZ03	HS SER-GMZ03-050813	8-May-13		0.0010 U	0.0010 U	0.0010 U	0.00072 J	0.0010 U	0.00042 J	0.0010 U	**0.0010**	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
	HS SER-DUP01-050813	8-May-13	Field Duplicate	0.0010 U	0.0010 U	0.0010 U	0.00071 J	0.0010 U	0.0010 U	0.0010 U	**0.0011**	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
	HS SER-GMZ02-080713	7-Aug-13		0.0010 U	0.0010 U	0.0010 U	**0.0014**	0.0010 U	0.00048 J	0.0010 U	0.00043 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
	HS SER-DUP01-080713	7-Aug-13	Field Duplicate	0.0010 U	0.0010 U	0.0010 U	**0.0013**	0.0010 U	0.00043 J	0.0010 U	0.00037 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
	HS SER-GMZ03-120413	4-Dec-13		0.0010 U	0.0010 U	0.0010 U	0.00038 J	0.0010 U	0.0010 U	0.0010 U	0.00084 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
	HS SER-DUP01-120413	4-Dec-13	Field Duplicate	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00076 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
	HS SER-GMZ03-022614	26-Feb-14		0.0010 U	0.0010 U	0.0010 U	0.00051 J	0.0010 U	0.00062 J	0.0010 U	**0.0011**	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
	HS SER-DUP01-022614	26-Feb-14	Field Duplicate	0.0010 U	0.00034 JB	0.0010 U	0.00056 J	0.0010 U	0.00058 J	0.0010 U	**0.0010**	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
GMZ04	HS SER-GMZ04-050813	8-May-13		0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00073 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
	HS SER-GMZ04-080713	7-Aug-13		0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00086 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
	HS SER-GMZ04-120413	4-Dec-13		0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
	HS SER-GMZ04-022614	26-Feb-14		0.0010 U	0.00052 J	0.0010 U	0.00028 J	0.0010 U	**0.0013**	0.0010 U	**0.0025**	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
MW07FGA	HS SER-MW07FGA-050713	7-May-13		0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0007 J	0.0010 U	0.0010 U	0.00092 J	0.0010 U	0.0010 U
	HS SER-MW07FGA-080613	6-Aug-13		0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00046 J	0.0010 U	0.0010 U	**0.0011**	0.0010 U	0.0010 U
	HS SER-MW07FGA-120313	3-Dec-13		0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	**0.0011**	0.0010 U	0.0010 U	0.00083 J	0.0010 U	0.0010 U
	HS SER-MW07FGA-022514	25-Feb-14		0.0010 U	0.00050 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	**0.0016**	0.0010 U	0.0010 U	0.00098 J	0.0010 U	0.0010 U
MW203	HS SER-MW203-050713	7-May-13		0.00043 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	**0.0160[A]**	0.0010 U	0.0010 U
	HS SER-MW203-080613	6-Aug-13		0.00027 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	**0.0130[A]**	0.0010 U	0.0010 U
	HS SER-MW203-120313	3-Dec-13		0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	**0.0064[A]**	0.0010 U	0.0010 U
	HS SESR-MW203-022514	25-Feb-14		0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	**0.0060[A]**	0.0010 U	0.0010 U
SMW01	HS SER-SMW01-050713	7-May-13		0.00019 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	**0.0020**	0.0010 U	0.0010 U	**0.0022**	0.0010 U	0.0010 U
	HS SER-SMW01-080613	6-Aug-13		0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	**0.0020**	0.0010 U	0.0010 U	**0.0023**	0.0010 U	0.0010 U
	HS SER-SMW01-120313	3-Dec-13		0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00087 J	0.0010 U	0.0010 U	**0.0012**	0.0010 U	0.0010 U
	HS SER-SMW01-022514	25-Feb-14		0.0010 U	0.00057 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	**0.0010**	0.0010 U	0.0010 U	**0.0020**	0.0010 U	0.0010 U
SMW02	HS SER-SMW02-050713	7-May-13		0.0010 U	0.0010 U	0.0010 U	**0.0010**	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00047 J	0.0010 U	0.0010 U
	HS SER-SMW02-080613	6-Aug-13		0.0010 U	0.0010 U	0.0010 U	0.00024 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00032 J	0.0010 U	0.0010 U
	HS SER-SMW02-120313	3-Dec-13		0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00069 J	0.0010 U	0.0010 U
	HS SER-SMW02-022514	25-Feb-14		0.0010 U	0.00041 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00026 J	0.0010 U	0.0010 U	0.00065 J	0.0010 U	0.0010 U
SMW04	HS SER-SMW04-050813	8-May-13		**0.0039**	0.0010 U	0.00075 J	**0.0050**	0.0010 U	**0.0130**	0.0010 U	**0.0035**	0.0010 U	0.0010 U	**0.0084[A]**	0.0010 U	**0.0210[A]**
	HS SER-SMW04-080713	7-Aug-13		**0.0035**	0.0010 U	0.0006 J	**0.0065**	0.0010 U	**0.0130**	0.0010 U	**0.0037**	0.0010 U	0.0010 U	**0.0110[A]**	0.0010 U	**0.0068[A]**
	HS SER-SMW04-120513	5-Dec-13		**0.0042**	0.0010 U	0.00093 J	**0.0095**	0.0010 U	**0.0440**	0.00033 J	**0.0012**	0.0010 U	0.0010 U	**0.0260[A]**	0.0010 U	**0.0051[A]**
	HS SER-SMW04-022814	28-Feb-14		**0.007[A]**	0.00040 JB	**0.0017**	**0.0075**	0.0010 U	**0.0290**	0.00045 J	0.00080 J	0.0010 U	0.0010 U	**0.0160[A]**	0.0010 U	**0.019[A]**

No trend / increasing

See next page for notes.

Table 2
Second Quarter 2013 to First Quarter 2014 VOC Analytical Results - GMZ Wells
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

Well	Sample ID	Sample Date	Sample Type	Trichloroethene (TCE)	Methylene Chloride (Dichloromethane)	1,1-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Ethylbenzene	Tetrachloroethene (PCE)	Toluene	Vinyl chloride
			Preliminary Remediation Goals (PRG)[A]	0.005[c,A]	0.005[c,A]	0.007[b,c,A]	0.7[A]	0.005[c,A]	0.07[c,A]	0.1[c,A]	0.2[b,c,A]	0.005[c,A]	0.7[c,A]	0.005[c,A]	1.0[c,A]	0.002[c,A]
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
SMW08	HS SER-SMW08-050813	8-May-13		**0.0033**	0.0010 U	0.0010 U	**0.0035**	0.0010 U	**0.0017**	0.0010 U	**0.0150**	0.0010 U	0.0010 U	**0.0380[A]**	0.0010 U	0.0010 U
	HS SER-SMW08-080613	6-Aug-13		**0.0044**	0.0020 U	0.0010 J	**0.0070**	0.0020 U	**0.0085**	0.0020 U	**0.0180**	0.0020 U	0.0020 U	**0.0420[A]**	0.0020 U	0.0020 U
	HS SER-SMW08-120213	2-Dec-13		**0.0054 J[A]**	***0.0067 U***	0.0067 U	**0.0180**	***0.0067 U***	**0.3[A]**	0.0067 U	**0.0140**	***0.0067 U***	0.0067 U	**0.0690[A]**	0.0067 U	***0.0067 U***
	HS SER-SMW08-022514	25-Feb-14		0.0014 J	0.0020 U	0.0020 U	**0.0075**	0.0020 U	**0.0020**	0.00046 J	**0.0047**	0.0020 U	0.0020 U	**0.0450[A]**	0.0020 U	0.0020 U
SMW19	HS SER-SMW19-050813	8-May-13		**0.0089[A]**	0.0010 U	0.00029 J	0.00075 J	0.0010 U	0.00049 J	0.0010 U	0.00046 J	0.0010 U	0.0010 U	0.00064 J	0.0010 U	0.0010 U
	HS SER-SMW19-080713	7-Aug-13		**0.0013**	0.0010 U	0.00024 J	0.00084 J	0.0010 U	**0.0010**	0.0010 U	0.00077 J	0.0010 U	0.0010 U	0.00076 J	0.0010 U	0.0010 U
	HS SER-SMW19-120513	5-Dec-13		**0.017[A]**	0.0010 U	0.0010 U	0.0010 U	0.0010 U	**0.0010**	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00075 J	0.0010 U	0.0010 U
	HS SER-SMW19-022814	28-Feb-14		**0.023[A]**	0.0010 U	0.0010 U	0.00035 J	0.0010 U	**0.0020**	0.00032 J	0.00049 J	0.0010 U	0.0010 U	**0.0010**	0.0010 U	0.0010 U
SMW20	HS SER-SMW20-050813	8-May-13		0.0010 U	0.0010 U	0.0010 U	0.00032 J	0.0010 U	0.0010 U	0.0010 U	0.00084 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
	HS SER-SMW20-080713	7-Aug-13		0.0010 U	0.0010 U	0.0010 U	0.0002 J	0.0010 U	0.00029 J	0.0010 U	0.00028 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
	HS SER-SMW20-120413	4-Dec-13		0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
	HS SER-SMW20-022614	26-Feb-14		0.0010 U	0.0010 U	0.0010 U	0.00019 J	0.0010 U	0.00041 J	0.0010 U	0.00054 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
SMW21	HS SER-SMW21-050813	8-May-13		**0.0024**	0.0010 U	0.0010 U	0.00043 J	0.0010 U	0.0010 U	0.0010 U	**0.0200**	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
	HS SER-SMW21-080713	7-Aug-13		0.00041 J	0.0010 U	0.00026 J	0.0010 U	0.0010 U	0.00055 J	0.0010 U	**0.0041**	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
	HS SER SMW21-120413	4-Dec-13		0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	**0.0031**	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
	HS SER-SMW21-022614	26-Feb-14		**0.0026**	0.0010 U	**0.0022**	0.00076 J	0.0010 U	**0.0051**	0.0010 U	**0.0360**	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
PMW01	HS SER-PMW01-050813	8-May-13		**0.0012**	0.0010 U	0.0010 U	**0.0250**	0.0010 U	**0.0020**	0.0010 U	**0.0097**	0.0010 U	0.0010 U	**0.0220[A]**	0.0010 U	0.0010 U
	HS SER-PMW01-080713	7-Aug-13		**0.0014**	0.0010 U	0.00053 J	**0.0170**	0.0010 U	**0.0012**	0.00019 J	**0.0090**	0.0003 J	0.0010 U	**0.0260[A]**	0.0010 U	0.0010 U
	HS SER-PMW01-120413	4-Dec-13		0.00090 J	0.0010 U	0.0010 U	**0.0130**	0.0010 U	0.00099 J	0.0010 U	**0.0066**	0.0010 U	0.0010 U	**0.021[A]**	0.0010 U	0.0010 U
	HS SER-PMW01-022814	28-Feb-14		**0.0016**	0.00038 JB	0.00023 J	**0.0130**	0.0010 U	**0.0011**	0.0010 U	**0.0150**	0.0010 U	0.0010 U	**0.017[A]**	0.0010 U	0.0010 U
PMW02	HS SER-PMW02-050813	8-May-13		**0.0027**	0.0010 U	0.0010 U	**0.0130**	0.0010 U	**0.0016**	0.0010 U	**0.0120**	0.0010 U	0.0010 U	**0.0200[A]**	0.0010 U	**0.0024[A]**
	HS SER-PMW02-080713	7-Aug-13		**0.0020**	0.0010 U	0.0008 J	**0.0110**	0.0010 U	0.00071 J	0.0010 U	**0.0150**	0.0010 U	0.0010 U	**0.0200[A]**	0.0010 U	0.0010 U
	HSSER-PMW02-120513	5-Dec-13		**0.0028**	0.0010 U	0.00024 J	**0.0082**	0.0010 U	**0.0018**	0.0010 U	**0.0180**	0.0010 U	0.0010 U	**0.028[A]**	0.0010 U	0.0010 U
	HS SER-PMW02-022814	28-Feb-14		**0.0034**	0.0010 U	0.0010 U	**0.0062**	0.0010 U	**0.0014**	0.0010 U	**0.0120**	0.0010 U	0.0010 U	**0.035[A]**	0.0010 U	0.0010 U

Notes:

PRG	Preliminary Remediation Goals (PRGs) from ROD
A	Class 1 - Groundwater Remediation Objectives
6.5[A]	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards.
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
b,c	Oral Reference Dose and/or Reference Concentration under review by USEPA. Listed values subject to change. Value listed is also the Groundwater Quality Standard for this chemical pursuant to 35 Ill.Adm.Code 620.410 for Class I Groundwater or 35 Ill.Adm.Code 620.420 for Class II Groundwater.
c	Value listed is also the Groundwater Quality Standard for this chemical pursuant to 35 Ill.Adm.Code 620.410 for Class I Groundwater or 35 Ill.Adm.Code 620.420 for Class II Groundwater.
*	LCS or LCSD exceeds the control limits
B	The analyte was detected in the method, field and/or trip blank.
H	Sample was prepped or analyzed beyond the specified holding time
J	Indicates estimated value.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

Table 3
Second Quarter 2013 to First Quarter 2014 VOC Analytical Results - Performance Wells
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

Well	Sample ID	Sample Date	Sample Type	Trichloroethene (TCE)	Methylene Chloride (Dichloromethane)	1,1-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Ethylbenzene	Tetrachloroethene (PCE)	Toluene	Vinyl chloride
			Preliminary Remediation Goals (PRG)[A]	0.005[c][A]	0.005[c][A]	0.007[b,c][A]	0.7[A]	0.005[c][A]	0.07[c][A]	0.1[c][A]	0.2[b,c][A]	0.005[c][A]	0.7[c][A]	0.005[c][A]	1.0[c][A]	0.002[c][A]
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
RAMW01	HS SER-RAMW01-050813	8-May-13		**0.0014**	0.0010 U	**0.0013**	**0.0120**	0.0010 U	**0.0030**	0.0010 U	**0.0073**	0.0010 U	0.0010 U	**0.0120[A]**	0.0010 U	0.00029 J
	HS SER-RAMW01-080713	7-Aug-13		**0.0017**	0.0010 U	0.0010 U	**0.0190**	0.0010 U	**0.0024**	0.0010 U	**0.0075**	0.00048 J	0.0010 U	**0.0120[A]**	0.0010 U	0.0010 U
	HS SER-RAMW01-120413	4-Dec-13		**0.0013**	0.0010 U	0.0010 U	**0.0160**	0.0010 U	**0.0021**	0.0010 U	**0.0085**	0.0010 U	0.0010 U	**0.014[A]**	0.0010 U	0.0010 U
	HS SER-RAMW01-022814	28-Feb-14		**0.0016**	0.00044 JB	0.0010 U	**0.0084**	0.0010 U	**0.0011**	0.0010 U	**0.0071**	0.0010 U	0.0010 U	**0.016[A]**	0.0010 U	0.0010 U
RAMW02	HS SER-RAMW02-050713	7-May-13		0.00075 J	0.0010 U	0.00091 J	**0.0150**	0.0010 U	**0.0023**	0.0010 U	**0.0060**	0.0010 U	0.0010 U	**0.0042**	0.0010 U	0.00033 J
	HS SER-RAMW02-080613	6-Aug-13		0.00091 J	0.0010 U	0.0010 U	**0.0200**	0.0010 U	0.00094 J	0.0010 U	**0.0049**	0.0010 U	0.0010 U	**0.0028**	0.0010 U	0.0010 U
	HS SER-RAMW02-120313	3-Dec-13		**0.0016**	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00064 J	0.0010 U	**0.0057**	0.0010 U	0.0010 U	**0.0054[A]**	0.0010 U	0.0010 U
	HS SER-RAMW02-022814	28-Feb-14		**0.0012**	0.00053 JB	0.0010 U	**0.0025**	0.0010 U	0.00041 J	0.0010 U	**0.0036**	0.0010 U	0.0010 U	**0.0050**	0.0010 U	0.0010 U
RAMW03	HS SER-RAMW03-050713	7-May-13		0.00049 J	0.0010 U	0.0010 U	0.00084 J	0.0010 U	**0.0014**	0.0010 U	**0.0017**	0.0010 U	0.0010 U	**0.0010**	0.0010 U	0.0010 U
	HS SER-DUP02-050713	7-May-13	Field Duplicate	0.00062 J	0.0010 U	0.0010 U	0.00078 J	0.0010 U	**0.0012**	0.0010 U	**0.0017**	0.0010 U	0.0010 U	**0.0011**	0.0010 U	0.0010 U
	HS SER-RAMW03-080613	6-Aug-13		0.00026 J	0.0010 U	0.0010 U	0.00042 J	0.0010 U	**0.0011**	0.0010 U	0.00074 J	0.0010 U	0.0010 U	0.00029 J	0.0010 U	0.0010 U
	HS SER-DUP02-080613	6-Aug-13	Field Duplicate	0.0002 J	0.0010 U	0.0010 U	0.0004 J	0.0010 U	**0.0010**	0.0010 U	0.00074 J	0.0010 U	0.0010 U	0.00035 J	0.0010 U	0.0010 U
	HS SER-RAMW03-120313	3-Dec-13		0.00028 J	0.0010 U	0.0010 U	0.00058 J	0.0010 U	0.0010 U	0.0010 U	0.00081 J	0.0010 U	0.0010 U	**0.0011**	0.0010 U	0.0010 U
	HS SER-DUP02-120313	3-Dec-13	Field Duplicate	0.00031 J	0.0010 U	0.0010 U	0.00060 J	0.0010 U	0.0010 U	0.0010 U	0.00075 J	0.0010 U	0.0010 U	**0.0012**	0.0010 U	0.0010 U
	HS SER-RAMW03-022814	28-Feb-14		0.00037 J	0.00039 JB	0.0010 U	0.00058 J	0.0010 U	0.00037 J	0.0010 U	0.00066 J	0.0010 U	0.0010 U	0.00098 J	0.0010 U	0.0010 U
	HS SER-DUP02-022814	28-Feb-14	Field Duplicate	0.00033 J	0.00061 JB	0.0010 U	0.00060 J	0.0010 U	0.00035 J	0.0010 U	0.00065 J	0.0010 U	0.0010 U	0.00090 J	0.0010 U	0.0010 U
RAMW04	HS SER-RAMW04-050813	8-May-13		0.0010 U	0.0010 U	0.0010 U	0.00034 J	0.0010 U	0.0010 U	0.0010 U	0.00064 J	0.0010 U	0.0010 U	0.00055 J	0.0010 U	0.0010 U
	HS SER-RAMW04-080613	6-Aug-13		0.0010 U	0.0010 U	0.0010 U	0.0005 J	0.0010 U	0.0010 U	0.0010 U	**0.0012**	0.0010 U	0.0010 U	0.00055 J	0.0010 U	0.0010 U
	HS SER-RAMW04-120313	3-Dec-13		0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.00062 J	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
	HS SER-RAMW04-022814	28-Feb-14		0.00026 J	0.0010 U	0.0010 U	**0.0010**	0.0010 U	0.0010 U	0.0010 U	**0.0034**	0.0010 U	0.0010 U	0.00071 J	0.0010 U	0.0010 U
RAMW05	HS SER-RAMW05-050713	7-May-13		**0.0080[A]**	0.0029 U	**0.0230[A]**	0.0026 J	0.0029 U	0.0028 J	0.0029 U	**0.1700**	0.0029 U	0.0029 U	0.0029 U	0.0029 U	***0.0029 U***
	HS SER-RAMW05-080613	6-Aug-13		0.00093 J	0.0010 U	0.0010 U	0.00037 J	0.0010 U	0.00048 J	0.0010 U	**0.0077**	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
	HS SER-RAMW05-120313	3-Dec-13		**0.0012**	0.0010 U	0.00029 J	0.00053 J	0.0010 U	**0.0028**	0.0010 U	**0.0210**	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
	HS SER-RAMW05-022814	28-Feb-14		**0.014[A]**	0.0010 U	0.0026 J	0.0038 J	0.0010 U	**0.0200**	0.0010 U	**0.37[A]**	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
RAMW06	HS SER-RAMW06-050713	7-May-13		**0.0100[A]**	0.00096 JB	**0.0210[A]**	**0.0031**	0.0025 U	**0.0200**	0.0025 U	**0.1500**	0.0025 U	0.0025 U	0.0025 U	0.0025 U	***0.0025 U***
	HS SER-RAMW06-080613	6-Aug-13		0.0021 J	0.0050 U	0.0011 J	0.0031 J	0.0050 U	0.0044 J	0.0050 U	**0.0660**	0.0050 U	0.0050 U	0.0050 U	0.0050 U	***0.0050 U***
	HS SER-RAMW06-120313	3-Dec-13		**0.012 J[A]**	***0.017 U***	**0.013 J[A]**	0.0099 J	***0.017 U***	**0.0380**	0.017 U	**0.84 J[A]**	***0.017 U***	0.017 U	***0.017 U***	0.017 U	***0.017 U***
	HS SER-RAMW06-022814	28-Feb-14		0.00036 J	0.00062 JB	0.0010 U	0.0010 U	0.0010 U	**0.0052**	0.0010 U	**0.0120**	0.0010 U	0.0010 U	0.0010 U	0.0010 U	0.0010 U
RAMW07	HS SER-RAMW07-050713	7-May-13		**0.0820[A]**	**0.0083 JB[A]**	**0.1600[A]**	**0.0220**	***0.020 U***	**0.0410**	0.020 U	**1.0000[A]**	***0.020 U***	0.020 U	**0.0082 J[A]**	0.020 U	***0.020 U***
	HS SER-RAMW07-080613	6-Aug-13		**0.0210 J[A]**	***0.040 U***	***0.040 U***	0.040 U	***0.040 U***	0.040 U	0.040 U	**0.3800[A]**	***0.040 U***	0.040 U	***0.040 U***	0.040 U	***0.040 U***
	HS SER-RAMW07-120313	3-Dec-13		**0.0050**	0.0025 U	0.00076 J	0.0015 J	0.0025 U	**0.0074**	0.0025 U	**0.11**	0.0025 U	0.0025 U	**0.0026**	0.0025 U	***0.0025 U***
	HS SER-RAMW07-022814	28-Feb-14		0.0043 J	***0.0071 U***	0.0028 J	0.0042 J	***0.0071 U***	0.0042 J	0.0071 U	**0.2800[A]**	***0.0071 U***	0.0071 U	0.0043 J	0.0071 U	***0.0071 U***

See next page for notes.

Table 3
Second Quarter 2013 to First Quarter 2014 VOC Analytical Results - Performance Wells
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

Well	Sample ID	Sample Date	Sample Type	Trichloroethene (TCE)	Methylene Chloride (Dichloromethane)	1,1-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Ethylbenzene	Tetrachloroethene (PCE)	Toluene	Vinyl chloride
			Preliminary Remediation Goals (PRG)[A]	0.005[c,A]	0.005[c,A]	0.007[b,c,A]	0.7[A]	0.005[c,A]	0.07[c,A]	0.1[c,A]	0.2[b,c,A]	0.005[c,A]	0.7[c,A]	0.005[c,A]	1.0[c,A]	0.002[c,A]
				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
RAMW08	HS SER-RAMW08-050713	7-May-13		**0.0012**	0.0010 U	**0.0090[A]**	**0.0048**	0.0010 U	**0.0065**	0.0010 U	**0.0300**	0.0010 U	**0.0010**	**0.0051[A]**	0.0010 U	0.0010 U
	HS SER-RAMW08-080613	6-Aug-13		0.0007 J	0.0010 U	0.00022 J	**0.0039**	0.0010 U	**0.0012**	0.0010 U	**0.0150**	0.0010 U	0.00017 J	**0.0017**	0.0010 U	0.0010 U
	HS SER-RAMW08-120313	3-Dec-13		0.0010 U	0.0010 U	0.0010 U	**0.0025**	0.0010 U	0.0010 U	0.0010 U	**0.0091**	0.0010 U	0.0010 U	**0.0013**	0.0010 U	0.0010 U
	HS SER-RAMW08-022814	28-Feb-14		0.00023 J	0.00042 JB	0.0010 U	**0.0032**	0.0010 U	0.0010 U	0.0010 U	**0.0025**	0.0010 U	0.0010 U	0.00073 J	0.0010 U	0.0010 U

Notes:

PRG	Preliminary Remediation Goals (PRGs) from ROD
A	Class 1 - Groundwater Remediation Objectives
6.5[A]	Concentration exceeds the indicated standard at specified well; however, compliance with the standard is only applicable to GMZ wells.
15.2	Concentration was detected but did not exceed applicable standards.
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available.
b,c	Oral Reference Dose and/or Reference Concentration under review by USEPA. Listed values subject to change. Value listed is also the Groundwater Quality Standard for this chemical pursuant to 35 Ill.Adm.Code 620.410 for Class I Groundwater or 35 Ill.Adm.Code 620.420 for Class II Groundwater.
c	Value listed is also the Groundwater Quality Standard for this chemical pursuant to 35 Ill.Adm.Code 620.410 for Class I Groundwater or 35 Ill.Adm.Code 620.420 for Class II Groundwater.
B	The analyte was detected in the method, field and/or trip blank.
J	Indicates estimated value.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

Groundwater monitoring wells located within the influence of active treatment systems yield groundwater sample data that is potentially biased by the treatment activities. This potential bias should be considered during evaluation of this data.

Table 4.1
Cell 1 - Phase 1 SVE System Data
December 2009 - March 2014
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

CELL 1 SVE EFFLUENT

Date	Sample Type	SVE Run Time (hr)	Cell 1 Run Time (hr)	SVE Flow Rate (scfm)	1,1,1-Trichloroethane		1,1,2-Trichloroethane		1,1-Dichloroethane		1,2-Dichloroethane		1,1-Dichloroethene		cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Tetrachloroethene	
					Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)
12/10/2009		159	53	140	13000	3.76E-02	140 U	0.00E+00	45000	9.67E-02	140 U	0.00E+00	910	1.91E-03	18000	3.79E-02	140 U	0.00E+00	940	3.38E-03
12/22/2009		372	124	140	980	2.84E-03	26 U	0.00E+00	11000	2.36E-02	26 U	0.00E+00	130	2.74E-04	7300	1.54E-02	26 U	0.00E+00	390	1.40E-03
2/24/2010		1893	631	150	640	1.99E-03	6.0 U	0.00E+00	1900	4.37E-03	6.0 U	0.00E+00	28	6.31E-05	630	1.42E-03	6.0 U	0.00E+00	150	5.78E-04
3/15/2010		2345	782	140	1100	3.19E-03	8.4 U	0.00E+00	2800	6.01E-03	8.4 U	0.00E+00	37	7.79E-05	1300	2.74E-03	8.4 U	0.00E+00	180	6.48E-04
4/14/2010		2804	935	150	1400	4.34E-03	12 U	0.00E+00	4100	9.44E-03	12 U	0.00E+00	31	6.99E-05	1400	3.16E-03	12 U	0.00E+00	790	3.05E-03
5/13/2010		3495	1165	140	590	1.71E-03	7.0 U	0.00E+00	2600	5.58E-03	7.0 U	0.00E+00	13	2.74E-05	1100	2.31E-03	7.0 U	0.00E+00	300	1.08E-03
6/21/2010		4430	1477	108	710	1.59E-03	8.6 U	0.00E+00	2600	4.31E-03	8.6 U	0.00E+00	16 J	2.60E-05	570	9.25E-04	8.6 U	0.00E+00	290	8.05E-04
7/21/2010		5058	1686	140	480	1.39E-03	7.0 U	0.00E+00	2600	5.58E-03	7.0 U	0.00E+00	10	2.10E-05	630	1.33E-03	7.0 U	0.00E+00	710	2.56E-03
8/23/2010		5784	1928	0	370	0.00E+00	8.2 U	0.00E+00	2400	0.00E+00	8.2 U	0.00E+00	8.2 U	0.00E+00	540	0.00E+00	8.2 U	0.00E+00	500	0.00E+00
9/23/2010		6523	2174	145	480	1.44E-03	7.2 U	0.00E+00	2000	4.45E-03	7.2 U	0.00E+00	7.2 U	0.00E+00	250	5.45E-04	7.2 U	0.00E+00	380	1.42E-03
10/22/2010		7219	2406	140	390	1.13E-03	5.0 U	0.00E+00	1600	3.44E-03	5.0 U	0.00E+00	5.0 U	0.00E+00	160	3.37E-04	5.0 U	0.00E+00	240	8.64E-04
10/22/2010	Dup	7219	2406	140	2600	7.53E-03	10 U	0.00E+00	960	2.06E-03	10 U	0.00E+00	120	2.53E-04	490	1.03E-03	10 U	0.00E+00	140	5.04E-04
11/15/2010		7794	2598	140	420	1.22E-03	4.3 U	0.00E+00	1700	3.65E-03	4.3 U	0.00E+00	4.3 U	0.00E+00	140	2.95E-04	4.3 U	0.00E+00	140	5.04E-04
12/22/2010		8508	2777	150	600	1.86E-03	4.2 U	0.00E+00	1600	3.68E-03	4.2 U	0.00E+00	8.5	1.92E-05	510	1.15E-03	4.2 U	0.00E+00	75	2.89E-04
1/24/2011		9302	2975	170	360	1.27E-03	5.2 U	0.00E+00	1700	4.43E-03	5.2 U	0.00E+00	5.2 U	0.00E+00	140	3.58E-04	5.2 U	0.00E+00	45	1.97E-04
2/25/2011		10071	3167	165	280	9.56E-04	4.0 U	0.00E+00	1600	4.05E-03	4.0 U	0.00E+00	4.5	1.12E-05	120	2.98E-04	4.0 U	0.00E+00	34	1.44E-04
3/18/2011		10573	3293	165	200	6.83E-04	6.3 U	0.00E+00	1900	4.81E-03	6.3 U	0.00E+00	6.3 U	0.00E+00	130	3.22E-04	6.3 U	0.00E+00	32	1.36E-04
4/15/2011		11241	3460	160	180 J,B	5.96E-04	4.5 U	0.00E+00	1700	4.17E-03	4.5 U	0.00E+00	4.5 U	0.00E+00	110	2.65E-04	4.5 U	0.00E+00	43	1.77E-04
5/19/2011		12061	3665	160	110	3.64E-04	4.3 U	0.00E+00	1100	2.70E-03	4.3 U	0.00E+00	4.3 U	0.00E+00	85	2.04E-04	4.3 U	0.00E+00	55	2.26E-04
6/16/2011		12722	3830	170	150	5.27E-04	2.3 U	0.00E+00	730	1.90E-03	2.3 U	0.00E+00	2.8	7.15E-06	63	1.61E-04	2.3 U	0.00E+00	110	4.81E-04
7/15/2011		13417	4472	170	140	4.92E-04	1.2 U	0.00E+00	390	1.02E-03	1.2 U	0.00E+00	2.2	5.62E-06	47	1.20E-04	1.2	3.07E-06	170	7.43E-04
8/22/2011		14324	4775	170	150	5.27E-04	1.1 U	0.00E+00	210	5.48E-04	1.1 U	0.00E+00	2.1	5.37E-06	36	9.20E-05	1.1 U	0.00E+00	180	7.87E-04
9/15/2011		14905	4968	170	130	4.57E-04	1.1 U	0.00E+00	130	3.39E-04	1.1 U	0.00E+00	1.5	3.83E-06	40	1.02E-04	1.1 U	0.00E+00	180	7.87E-04
10/14/2011		15598	5199	160	65	2.15E-04	0.74 U	0.00E+00	100	2.45E-04	0.74 U	0.00E+00	1.4	3.37E-06	43	1.03E-04	0.86	2.07E-06	130	5.35E-04
11/21/2011		16510	5503	170	49 J,B	1.72E-04	0.74 U	0.00E+00	68		0.74 U	0.00E+00	2.9	7.41E-06	28	7.15E-05	1.1	2.81E-06	61	2.67E-04
12/14/2011		17010	5670	170	53	1.86E-04	0.78 U	0.00E+00	45	1.17E-04	0.78 U	0.00E+00	2.7	6.90E-06	18	4.60E-05	0.78 U	0.00E+00	57	2.49E-04
1/19/2012		17923	5974	170	51	1.79E-04	0.79 U	0.00E+00	41	1.07E-04	0.79 U	0.00E+00	1	2.56E-06	12	3.07E-05	0.79 U	0.00E+00	39	1.70E-04
2/15/2012		18566	6189	170	46	1.62E-04	0.78 U	0.00E+00	30	7.82E-05	0.78 U	0.00E+00	9.4	2.40E-05	10	2.56E-05	0.78 U	0.00E+00	37	1.62E-04
3/15/2012		19262	6421	170	38 J,B	1.34E-04	0.71 U	0.00E+00	34	8.87E-05	0.71 U	0.00E+00	0.8	2.04E-06	7.8	1.99E-05	0.71 U	0.00E+00	32	1.40E-04
4/19/2012		20102	6701	160	55	1.82E-04	0.76 U	0.00E+00	38	9.33E-05	0.76 U	0.00E+00	0.76 U	0.00E+00	7.4	1.78E-05	0.76 U	0.00E+00	58	2.39E-04
5/16/2012		20748	6916	160	51	1.69E-04	0.76 U	0.00E+00	36	8.84E-05	0.76 U	0.00E+00	0.76 U	0.00E+00	7.1	1.71E-05	0.76 U	0.00E+00	77	3.17E-04
Pulse -off period June 1, 2012 to August 14, 2012																				
8/14/2012		21282	7094	160	120	3.97E-04	1.3 U	0.00E+00	51	1.25E-04	1.3 U	0.00E+00	1.3 U	0.00E+00	8.3	2.00E-05	1.3 U	0.00E+00	350	1.44E-03
9/17/2012		21952	7317	160	190	6.29E-04	1.1 U	0.00E+00	77	1.89E-04	1.1 U	0.00E+00	2	4.81E-06	9.8	2.36E-05	1.1 U	0.00E+00	270	1.11E-03
Pulse -off period September 17, 2012 to November 15, 2012																				
11/15/2012		21959	7320	160	160	5.29E-04	1.0 U	0.00E+00	56	1.37E-04	1.0 U	0.00E+00	7.2	1.73E-05	9.1	2.19E-05	1.0 U	0.00E+00	220	9.05E-04
12/14/2012		22554	7518	170	140	4.92E-04	1.2 U	0.00E+00	99	2.58E-04	1.2 U	0.00E+00	3.5	8.94E-06	7.4	1.89E-05	1.2 U	0.00E+00	87	3.80E-04
Pulse -off period December 14, 2012 to February 26, 2013																				
2/26/2013		22556	7518	160	110	3.64E-04	0.99 U	0.00E+00	83	2.04E-04	0.99 U	0.00E+00	0.99 U	1.73E-05	5.6	1.35E-05	0.99 U	0.00E+00	62	2.55E-04
4/11/2013		23581	7723	160	85	2.81E-04	1.2 U	0.00E+00	54	1.33E-04	1.2 U	0.00E+00	3.8	1.26E-05	7.4	1.78E-05	1.2 U	0.00E+00	38	1.56E-04
Pulse -off period April 11, 2013 to May 10, 2013																				
5/10/2013		23583	7724	160	71	2.35E-04	1.1 U	0.00E+00	55	1.35E-04	1.1 U	0.00E+00	1.7	5.63E-06	6	1.44E-05	1.1 U	0.00E+00	37	1.52E-04
7/15/2013		25160	8039	160	190	6.29E-04	1.2 U	0.00E+00	79	1.94E-04	1.2 U	0.00E+00	4.7	1.56E-05	11	2.65E-05	1.2 U	0.00E+00	190	7.82E-04
Pulse -off period July 15, 2013 to September 9, 2013																				
9/9/2013		25162	8040	160	180	5.96E-04	1.3 U	0.00E+00	67	1.64E-04	1.3 U	0.00E+00	1.6	3.85E-06	9.3	2.24E-05	1.3 U	0.00E+00	270	1.11E-03
11/18/2013		26825	8372	160	120	3.97E-04	1.1 U	0.00E+00	35	8.59E-05	1.1 U	0.00E+00	3.2	7.70E-06	7.3	1.76E-05	1.1 U	0.00E+00	81	3.33E-04
Pulse -off period November 18, 2013 to January 15, 2014																				
1/15/2014		28218	8651	160	100	3.31E-04	1.1 U	0.00E+00	30	7.36E-05	1.1 U	0.00E+00	1.3	3.13E-06	4.7	1.13E-05	1.1 U	0.00E+00	69	2.84E-04
3/14/2014		29432	8894	160	78	2.58E-04	1.1 U	0.00E+00	34	8.35E-05	1.1 U	0.00E+00	3.8	9.14E-06	6.1	1.47E-05	1.1 U	0.00E+00	30	1.23E-04

Notes:

Mass removal rate = (flow rate in scfm)(concentration in ppmv)(60)(MW) / (387*1000000)

"U" indicates non-detection at the specified reporting limit; for ND compounds, zero is used in mass removal calculations.

MW *molecular weight (values from the U.S. National Library of Medicine)*

SCFM standard cubic feet per minute

J Indicates estimated value.

B The analyte was detected in the method, field and/or trip blank.

When a duplicate sample was collected, the original sample results are used in the mass calculations.

Table 4.1
Cell 1 - Phase 1 SVE System Data
December 2009 - March 2014
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

CELL 1 SVE EFFLUENT

Date	Sample Type	SVE Run Time (hr)	Cell 1 Run Time (hr)	SVE Flow Rate (scfm)	Trichloroethene		Vinyl chloride		Methylene Chloride		Carbon Tetrachloride		Chloroform		Chloroethane		Benzene		Toluene	
					Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)
12/10/2009		159	53	140	260	7.41E-04	8100	1.10E-02	140 U	0.00E+00	140 U	0.00E+00	140 U	0.00E+00	17000	2.38E-02	140 U	0.00E+00	560	1.12E-03
12/22/2009		372	124	140	41	1.17E-04	470	6.38E-04	26 U	0.00E+00	26 U	0.00E+00	26 U	0.00E+00	1700	2.38E-03	26 U	0.00E+00	32	6.40E-05
2/24/2010		1893	631	150	24	7.33E-05	33	4.80E-05	6.0 U	0.00E+00	6.0 U	0.00E+00	6.0 U	0.00E+00	130	1.95E-04	19	3.45E-05	6.0 U	0.00E+00
3/15/2010		2345	782	140	30	8.56E-05	32	4.34E-05	8.4 U	0.00E+00	8.4 U	0.00E+00	8.4 U	0.00E+00	170	2.38E-04	8.4 U	0.00E+00	8.4 U	0.00E+00
4/14/2010		2804	935	150	86	2.63E-04	91	1.32E-04	12 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00	320	4.80E-04	14	2.54E-05	12 U	0.00E+00
5/13/2010		3495	1165	140	32	9.13E-05	10	1.36E-05	7.0 U	0.00E+00	7.0 U	0.00E+00	7.0 U	0.00E+00	100	1.40E-04	12	2.03E-05	7.0 U	0.00E+00
6/21/2010		4430	1477	108	30	6.60E-05	8.6 U	0.00E+00	8.6 UJ	0.00E+00	8.6 U	0.00E+00	8.6 U	0.00E+00	87 J	9.40E-05	10	1.31E-05	8.6 U	0.00E+00
7/21/2010		5058	1686	140	42	1.20E-04	7.0 U	0.00E+00	7.0 U	0.00E+00	7.0 U	0.00E+00	7.0 U	0.00E+00	60	8.40E-05	7.0 U	0.00E+00	7.0 U	0.00E+00
8/23/2010		5784	1928	0	48	0.00E+00	8.2 U	0.00E+00	8.2 U	0.00E+00	8.2 U	0.00E+00	8.2 U	0.00E+00	38	0.00E+00	24	0.00E+00	8.2 U	0.00E+00
9/23/2010		6523	2174	145	31	9.16E-05	7.2 U	0.00E+00	7.2 U	0.00E+00	7.2 U	0.00E+00	7.2 U	0.00E+00	15	2.18E-05	17	2.99E-05	7.2 U	0.00E+00
10/22/2010		7219	2406	140	21	5.99E-05	5.0 U	0.00E+00	5.0 U	0.00E+00	5.0 U	0.00E+00	5.0 U	0.00E+00	11	1.54E-05	7.1	1.20E-05	5.0 U	0.00E+00
10/22/2010	Dup	7219	2406	140	49	1.40E-04	10 U	0.00E+00	10 U	0.00E+00	10 U	0.00E+00	10 U	0.00E+00	10 U	0.00E+00	10 U	0.00E+00	10 U	0.00E+00
11/15/2010		7794	2598	140	16	4.56E-05	4.3 U	0.00E+00	4.3 U	0.00E+00	4.3 U	0.00E+00	4.3 U	0.00E+00	12	1.68E-05	4.3 U	0.00E+00	4.3 U	0.00E+00
12/22/2010		8508	2777	150	11	3.36E-05	4.2 U	0.00E+00	4.2 U	0.00E+00	4.2 U	0.00E+00	4.2 U	0.00E+00	10	1.50E-05	5.3	9.63E-06	4.2 U	0.00E+00
1/24/2011		9302	2975	170	8.6	2.98E-05	5.2 U	0.00E+00	5.2 U	0.00E+00	5.2 U	0.00E+00	5.2 U	0.00E+00	5.2 U	0.00E+00	5.2 U	0.00E+00	5.2 U	0.00E+00
2/25/2011		10071	3167	165	7.4	2.49E-05	4.0 U	0.00E+00	4.0 U	0.00E+00	4.0 U	0.00E+00	4.0 U	0.00E+00	16 U	0.00E+00	4.0 U	0.00E+00	4.0 U	0.00E+00
3/18/2011		10573	3293	165	6.4	2.15E-05	6.3 U	0.00E+00	6.3 U	0.00E+00	6.3 U	0.00E+00	6.3 U	0.00E+00	25 U	0.00E+00	6.3 U	0.00E+00	6.3 U	0.00E+00
4/15/2011		11241	3460	160	8.6	2.80E-05	4.5 U	0.00E+00	4.5 U	0.00E+00	4.5 U	0.00E+00	4.5 U	0.00E+00	18 U	0.00E+00	4.5 U	0.00E+00	4.5 U	0.00E+00
5/19/2011		12061	3665	160	8	2.61E-05	4.3 U	0.00E+00	4.3 U	0.00E+00	4.3 U	0.00E+00	4.3 U	0.00E+00	17 U	0.00E+00	4.3 U	0.00E+00	4.3 U	0.00E+00
6/16/2011		12722	3830	170	12	4.16E-05	2.3 U	0.00E+00	2.3 U	0.00E+00	2.3 U	0.00E+00	2.3 U	0.00E+00	9.2 U	0.00E+00	2.3 U	0.00E+00	2.3 U	0.00E+00
7/15/2011		13417	4472	170	14	4.85E-05	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.6 U	0.00E+00	1.5	3.09E-06	1.2 U	0.00E+00
8/22/2011		14324	4775	170	16	5.54E-05	1.1 U	0.00E+00	2.3 UJ,B	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	4.5 U	0.00E+00	6.7	1.38E-05	1.1 U	0.00E+00
9/15/2011		14905	4968	170	14	4.85E-05	1.5	2.47E-06	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	4.5 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00
10/14/2011		15598	5199	160	9.8	3.19E-05	3.5	5.43E-06	1.3	2.74E-06	0.74 U	0.00E+00	0.74 U	0.00E+00	3.0 U	0.00E+00	0.74 U	0.00E+00	1.8	4.11E-06
11/21/2011		16510	5503	170	7.3	2.53E-05	1	1.65E-06	7.4 U	0.00E+00	0.74 U	0.00E+00	0.74 U	0.00E+00	3.0 U	0.00E+00	0.74 U	0.00E+00	0.74 U	0.00E+00
12/14/2011		17010	5670	170	5.8	2.01E-05	0.78 U	0.00E+00	7.8 U	0.00E+00	0.78 U	0.00E+00	0.78 U	0.00E+00	3.1 U	0.00E+00	0.78 U	0.00E+00	0.78 U	0.00E+00
1/19/2012		17923	5974	170	5	1.73E-05	0.79 U	0.00E+00	1.9	4.25E-06	0.79 U	0.00E+00	0.79 U	0.00E+00	3.2 U	0.00E+00	0.79 U	0.00E+00	0.79 U	0.00E+00
2/15/2012		18566	6189	170	4.3	1.49E-05	0.89	1.47E-06	0.78 U	0.00E+00	0.78 U	0.00E+00	0.78 U	0.00E+00	3.1 U	0.00E+00	1.2	2.47E-06	0.78 U	0.00E+00
3/15/2012		19262	6421	170	3.9	1.35E-05	0.71 U	0.00E+00	0.71 U	0.00E+00	0.71 U	0.00E+00	0.71 U	0.00E+00	2.8 U	0.00E+00	0.71 U	0.00E+00	1.8	4.37E-06
4/19/2012		20102	6701	160	5.7	1.86E-05	0.76 U	0.00E+00	0.76 U	0.00E+00	0.76 U	0.00E+00	0.76 U	0.00E+00	3.0 U	0.00E+00	0.76 U	0.00E+00	0.76 U	0.00E+00
5/16/2012		20748	6916	160	6.1	1.99E-05	0.76 U	0.00E+00	0.76 U	0.00E+00	0.76 U	0.00E+00	0.76 U	0.00E+00	3.0 U	0.00E+00	0.76 U	0.00E+00	0.76 U	0.00E+00
Pulse -off period June 1, 2012 to August 14, 2012																				
8/14/2012		21282	7094	160	15	4.89E-05	1.3 U	0.00E+00	13 U	0.00E+00	1.3 U	0.00E+00	1.3 U	0.00E+00	5.2 U	0.00E+00	1.3 U	0.00E+00	1.3 U	0.00E+00
9/17/2012		21952	7317	160	25	8.15E-05	1.1 U	0.00E+00	11 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	4.3 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00
Pulse -off period September 17, 2012 to November 15, 2012																				
11/15/2012		21959	7320	160	18	5.87E-05	1.0 U	0.00E+00	10 U	0.00E+00	1.0 U	0.00E+00	1.0 U	0.00E+00	4.1 U	0.00E+00	1.0 U	0.00E+00	1.0 U	0.00E+00
12/14/2012		22554	7518	170	13	4.50E-05	1.2 U	0.00E+00	12 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.8 U	0.00E+00	2.1	4.32E-06	7	1.70E-05
Pulse -off period December 14, 2012 to February 26, 2013																				
2/26/2013		22556	7518	160	6.7	2.18E-05	0.99 U	0.00E+00	9.9 U	0.00E+00	0.99 U	0.00E+00	0.99 U	0.00E+00	4.0 U	0.00E+00	0.99 U	0.00E+00	0.99 U	0.00E+00
4/11/2013		23581	7723	160	8.2	2.67E-05	1.2 U	0.00E+00	12 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.6 U	0.00E+00	1.2 U	0.00E+00	1.4	3.20E-06
Pulse -off period April 11, 2013 to May 10, 2013																				
5/10/2013		23583	7724	160	6.1	1.99E-05	1.1 U	0.00E+00	11 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	4.5 U	0.00E+00	1.1 U	0.00E+00	1.7	3.89E-06
7/15/2013		25160	8039	160	23	7.50E-05	1.2 U	0.00E+00	12 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.7 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00
Pulse -off period July 15, 2013 to September 9, 2013																				
9/9/2013		25162	8040	160	21	6.84E-05	1.3 U	0.00E+00	13 U	0.00E+00	1.3 U	0.00E+00	1.3 U	0.00E+00	5.1 U	0.00E+00	1.3 U	0.00E+00	1.3 U	0.00E+00
11/18/2013		26825	8372	160	12	3.91E-05	1.1 U	0.00E+00	11 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	4.5 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00
Pulse -off period November 18, 2013 to January 15, 2014																				
1/15/2014		28218	8651	160	9.1	2.97E-05	1.1 U	0.00E+00	11 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	4.5 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00
3/14/2014		29432	8894	160	7	2.28E-05	1.1 U	0.00E+00	11 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	4.4 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00

Notes:

Mass removal rate = (flow rate in scfm)(concentration in ppmv)(60)(MW) / (387*1000000)

"U" indicates non-detection at the specified reporting limit; for ND compounds, zero is used in mass removal calculations.

MW molecular weight (values from the U.S. National Library of Medicine)
SCFM standard cubic feet per minute
J Indicates estimated value.
B The analyte was detected in the method, field and/or trip blank.

When a duplicate sample was collected, the original sample results are used in the mass calculations.

Table 4.1
Cell 1 - Phase 1 SVE System Data
December 2009 - March 2014
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

CELL 1 SVE EFFLUENT

Date	Sample Type	SVE Run Time (hr)	Cell 1 Run Time (hr)	SVE Flow Rate (scfm)	Ethylbenzene		m&p-Xylenes		o-Xylenes		Acetone		Methyl Ethyl Ketone (MEK)		Mass Removal Rate (lb/hr)	Cumulative Mass Removal (lb)
					Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)		
12/10/2009		159	53	140	250	5.76E-04	1800	4.15E-03	470	1.08E-03	3800	4.79E-03	140 U	0.00E+00	2.25E-01	11.91
12/22/2009		372	124	140	26 U	0.00E+00	26 U	0.00E+00	26 U	0.00E+00	100 U	0.00E+00	26 U	0.00E+00	4.67E-02	15.23
2/24/2010		1893	631	150	6.0 U	0.00E+00	6.0 U	0.00E+00	6.0 U	0.00E+00	98	1.32E-04	370	6.20E-04	9.52E-03	20.06
3/15/2010		2345	782	140	8.4 U	0.00E+00	8.4 U	0.00E+00	8.4 U	0.00E+00	34 U	0.00E+00	8.4 U	0.00E+00	1.30E-02	22.02
4/14/2010		2804	935	150	12 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00	50 U	0.00E+00	12 U	0.00E+00	2.10E-02	25.22
5/13/2010		3495	1165	140	7.0 U	0.00E+00	7.0 U	0.00E+00	7.0 U	0.00E+00	28 U	0.00E+00	7.0 U	0.00E+00	1.10E-02	27.75
6/21/2010		4430	1477	108	8.6 U	0.00E+00	8.6 U	0.00E+00	8.6 U	0.00E+00	34 J	3.31E-05	8.6 U	0.00E+00	7.86E-03	30.20
7/21/2010		5058	1686	140	7.0 U	0.00E+00	7.0 U	0.00E+00	7.0 U	0.00E+00	28 U	0.00E+00	7.0 U	0.00E+00	1.11E-02	32.52
8/23/2010		5784	1928	0	8.2 U	0.00E+00	8.2 U	0.00E+00	8.2 U	0.00E+00	53	0.00E+00	8.2 U	0.00E+00	0.00E+00	32.52
9/23/2010		6523	2174	145	7.2 U	0.00E+00	7.2 U	0.00E+00	7.2 U	0.00E+00	29 U	0.00E+00	7.2 U	0.00E+00	7.99E-03	34.49
10/22/2010		7219	2406	140	5.0 U	0.00E+00	5.0 U	0.00E+00	5.0 U	0.00E+00	45	5.67E-05	5.0 U	0.00E+00	5.91E-03	35.86
10/22/2010	Dup	7219	2406	140	10 U	0.00E+00	10 U	0.00E+00	10 U	0.00E+00	41 U	0.00E+00	10 U	0.00E+00	1.15E-02	37.16
11/15/2010		7794	2598	140	4.3 U	0.00E+00	4.3 U	0.00E+00	4.3 U	0.00E+00	17 U	0.00E+00	4.3 U	0.00E+00	5.73E-03	36.96
12/22/2010		8508	2777	150	4.2 U	0.00E+00	4.2 U	0.00E+00	4.2 U	0.00E+00	16 NJ	2.16E-05	4.2 U	0.00E+00	7.08E-03	38.22
1/24/2011		9302	2975	170	5.2 U	0.00E+00	5.2 U	0.00E+00	5.2 U	0.00E+00	21 U	0.00E+00	5.2 U	0.00E+00	6.28E-03	39.47
2/25/2011		10071	3167	165	4.0 U	0.00E+00	4.0 U	0.00E+00	4.0 U	0.00E+00	16 U	0.00E+00	16 U	0.00E+00	5.48E-03	40.53
3/18/2011		10573	3293	165	6.3 U	0.00E+00	6.3 U	0.00E+00	6.3 U	0.00E+00	25 U	0.00E+00	25 U	0.00E+00	5.97E-03	41.27
4/15/2011		11241	3460	160	4.5 U	0.00E+00	4.5 U	0.00E+00	4.5 U	0.00E+00	18 U	0.00E+00	18 U	0.00E+00	5.24E-03	42.15
5/19/2011		12061	3665	160	4.3 U	0.00E+00	4.3 U	0.00E+00	4.3 U	0.00E+00	17 U	0.00E+00	17 U	0.00E+00	3.52E-03	42.87
6/16/2011		12722	3830	170	2.3 U	0.00E+00	2.3 U	0.00E+00	2.3 U	0.00E+00	9.2 U	0.00E+00	9.2 U	0.00E+00	3.12E-03	43.39
7/15/2011		13417	4472	170	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	7.4	1.13E-05	4.6 U	0.00E+00	2.44E-03	44.96
8/22/2011		14324	4775	170	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	44 J,B	6.74E-05	4.5 U	0.00E+00	2.10E-03	45.59
9/15/2011		14905	4968	170	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	5.6	8.57E-06	4.5 U	0.00E+00	1.75E-03	45.93
10/14/2011		15598	5199	160	0.74 U	0.00E+00	0.74 U	0.00E+00	0.74 U	0.00E+00	18	2.59E-05	3.0 U	0.00E+00	1.17E-03	46.20
11/21/2011		16510	5503	170	0.74 U	0.00E+00	0.74 U	0.00E+00	0.74 U	0.00E+00	14	2.14E-05	3.0 U	0.00E+00	5.69E-04	46.37
12/14/2011		17010	5670	170	0.78 U	0.00E+00	0.78 U	0.00E+00	0.78 U	0.00E+00	7.8 UJ	0.00E+00	3.1 U	0.00E+00	6.26E-04	46.48
1/19/2012		17923	5974	170	0.79 U	0.00E+00	0.79 U	0.00E+00	0.79 U	0.00E+00	3.2	4.90E-06	3.2 U	0.00E+00	5.16E-04	46.63
2/15/2012		18566	6189	170	0.78 U	0.00E+00	0.78 U	0.00E+00	0.78 U	0.00E+00	20	3.06E-05	3.1 U	0.00E+00	5.01E-04	46.74
3/15/2012		19262	6421	170	0.71 U	0.00E+00	0.71 U	0.00E+00	0.71 U	0.00E+00	2.8 U	0.00E+00	2.8 U	0.00E+00	4.02E-04	46.84
4/19/2012		20102	6701	160	0.76 U	0.00E+00	0.76 U	0.00E+00	0.76 U	0.00E+00	3.0 U	0.00E+00	3.0 U	0.00E+00	5.50E-04	46.99
5/16/2012		20748	6916	160	0.76 U	0.00E+00	0.76 U	0.00E+00	0.76 U	0.00E+00	3.0 U	0.00E+00	3.0 U	0.00E+00	6.11E-04	47.12
Pulse -off period June 1, 2012 to August 14, 2012																
8/14/2012		21282	7094	160	1.3 U	0.00E+00	1.3 U	0.00E+00	1.3 U	0.00E+00	13 U	0.00E+00	5.2 U	0.00E+00	2.03E-03	47.48
9/17/2012		21952	7317	160	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	11 U	0.00E+00	4.3 U	0.00E+00	2.04E-03	47.94
Pulse -off period September 17, 2012 to November 15, 2012																
11/15/2012		21959	7320	160	1.0 U	0.00E+00	1.0 U	0.00E+00	1.0 U	0.00E+00	10 U	0.00E+00	4.1 U	0.00E+00	1.67E-03	47.94
12/14/2012		22554	7518	170	1.2 U	0.00E+00	1.5	4.20E-06	1.2 U	0.00E+00	12 U	0.00E+00	4.8 U	0.00E+00	1.23E-03	48.19
Pulse -off period December 14, 2012 to February 26, 2013																
2/26/2013		22556	7518	160	0.99 U	0.00E+00	0.99 U	0.00E+00	0.99 U	0.00E+00	9.9 U	0.00E+00	4.0 U	0.00E+00	8.75E-04	48.19
4/11/2013		23581	7723	160	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	12 U	0.00E+00	4.6 U	0.00E+00	6.30E-04	48.32
Pulse -off period April 11, 2013 to May 10, 2013																
5/10/2013		23583	7724	160	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	11 U	0.00E+00	4.5 U	0.00E+00	5.66E-04	48.32
7/15/2013		25160	8039	160	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	12 U	0.00E+00	4.7 U	0.00E+00	1.72E-03	48.86
Pulse -off period July 15, 2013 to September 9, 2013																
9/9/2013		25162	8040	160	1.3 U	0.00E+00	1.3 U	0.00E+00	1.3 U	0.00E+00	13 U	0.00E+00	5.1 U	0.00E+00	1.97E-03	48.86
11/18/2013		26825	8372	160	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	11 U	0.00E+00	4.5 U	0.00E+00	8.81E-04	49.15
Pulse -off period November 18, 2013 to January 15, 2014																
1/15/2014		28218	8651	160	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	11 U	0.00E+00	4.5 U	0.00E+00	7.32E-04	49.36
3/14/2014		29432	8894	160	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	11 U	0.00E+00	4.4 U	0.00E+00	5.12E-04	49.48

Notes:

Mass removal rate = (flow rate in scfm)(concentration in ppmv)(60)(MW) / (387*1000000)

"U" indicates non-detection at the specified reporting limit; for ND compounds, zero is used in mass removal calculations.

MW molecular weight (values from the U.S. National Library of Medicine)

SCFM standard cubic feet per minute

J Indicates estimated value.

B The analyte was detected in the method, field and/or trip blank.

When a duplicate sample was collected, the original sample results are used in the mass calculations.

Table 4.2
Cell 2 - Phase 1 SVE System Data
December 2009 - March 2014
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

CELL 2 SVE EFFLUENT

Date	Sample Type	SVE Run Time (hr)	Cell 2 Run Time (hr)	SVE Flow Rate (scfm)	1,1,1-Trichloroethane		1,1,2-Trichloroethane		1,1-Dichloroethane		1,2-Dichloroethane		1,1-Dichloroethene		cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Tetrachloroethene	
					Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)
12/11/2009		178	59	150	40000	1.24E-01	86 U	0.00E+00	21000	4.83E-02	86 U	0.00E+00	4500	1.01E-02	25000	5.64E-02	86 U	0.00E+00	1500	5.78E-03
12/15/2009		205	68	140	27000	7.82E-02	110 U	0.00E+00	14000	3.01E-02	110 U	0.00E+00	3100	6.52E-03	16000	3.37E-02	110 U	0.00E+00	950	3.42E-03
12/29/2009		539	180	140	24000	6.95E-02	100 U	0.00E+00	9100	1.95E-02	100 U	0.00E+00	2100	4.42E-03	9200	1.94E-02	100 U	0.00E+00	1000	3.60E-03
1/13/2010		903	301	150	9100	2.82E-02	35 U	0.00E+00	3700	8.52E-03	35 U	0.00E+00	880	1.98E-03	3200	7.21E-03	35 U	0.00E+00	610	2.35E-03
1/27/2010		1224	408	150	13000	4.03E-02	40 U	0.00E+00	4300	9.90E-03	40 U	0.00E+00	1100	2.48E-03	3900	8.79E-03	40 U	0.00E+00	600	2.31E-03
1/27/2010	Dup	1224	408	150	14000	4.34E-02	40 U	0.00E+00	4800	1.10E-02	40 U	0.00E+00	1200	2.71E-03	4400	9.92E-03	40 U	0.00E+00	630	2.43E-03
2/24/2010		1893	631	150	8000	2.48E-02	22 U	0.00E+00	3000	6.90E-03	22 U	0.00E+00	520	1.17E-03	2300	5.19E-03	22 U	0.00E+00	200	7.71E-04
3/15/2010		2345	782	140	17000	4.92E-02	48 U	0.00E+00	8000	1.72E-02	48 U	0.00E+00	1100	2.31E-03	6300	1.33E-02	48 U	0.00E+00	860	3.10E-03
4/14/2010		2804	935	150	8400	2.61E-02	23 U	0.00E+00	2200	5.06E-03	23 U	0.00E+00	480	1.08E-03	2000	4.51E-03	23 U	0.00E+00	1300	5.01E-03
5/13/2010		3495	1165	140	8000	2.32E-02	11 U	0.00E+00	3100	6.66E-03	11 U	0.00E+00	480	1.01E-03	2800	5.89E-03	11 U	0.00E+00	380	1.37E-03
6/21/2010		4430	1477	108	5800	1.30E-02	23 U	0.00E+00	3000 J	4.97E-03	23 U	0.00E+00	360 J	5.84E-04	2100	3.41E-03	23 U	0.00E+00	300	8.33E-04
7/21/2010		5058	1686	140	4500	1.30E-02	14 U	0.00E+00	1600	3.44E-03	14 U	0.00E+00	280	5.89E-04	1200	2.53E-03	14 U	0.00E+00	260	9.36E-04
8/23/2010		5784	1928	0	7100	0.00E+00	20 U	0.00E+00	2700	0.00E+00	20 U	0.00E+00	290	0.00E+00	1400	0.00E+00	20 U	0.00E+00	620	0.00E+00
9/23/2010		6523	2174	145	4300	1.29E-02	12 U	0.00E+00	1600	3.56E-03	12 U	0.00E+00	270	5.88E-04	940	2.05E-03	12 U	0.00E+00	290	1.08E-03
10/22/2010		7219	2406	140	2500	7.24E-03	10 U	0.00E+00	890	1.91E-03	10 U	0.00E+00	110	2.31E-04	470	9.89E-04	10 U	0.00E+00	180	6.48E-04
11/15/2010		7794	2598	140	3200	9.27E-03	11 U	0.00E+00	1100	2.36E-03	11 U	0.00E+00	130	2.74E-04	440	9.26E-04	11 U	0.00E+00	120	4.32E-04
12/22/2010		8508	2955	150	4000	1.24E-02	14 U	0.00E+00	1500	3.45E-03	14 U	0.00E+00	240	5.41E-04	730	1.65E-03	14 U	0.00E+00	72	2.78E-04
1/24/2011		9302	3352	170	780	2.74E-03	2.7 U	0.00E+00	800	2.09E-03	2.7 U	0.00E+00	22	5.62E-05	390	9.96E-04	2.7 U	0.00E+00	26	1.14E-04
2/25/2011		10071	3737	165	1500	5.12E-03	4.0 U	0.00E+00	1100	2.78E-03	4.0 U	0.00E+00	44	1.09E-04	560	1.39E-03	4.0 U	0.00E+00	32	1.36E-04
3/18/2011		10573	3988	165	370	1.26E-03	1.0 U	0.00E+00	160	4.05E-04	1.0 U	0.00E+00	11	2.73E-05	62	1.54E-04	1.0 U	0.00E+00	19	8.06E-05
4/15/2011		11241	4322	160	300 J,B	9.93E-04	1.0 U	0.00E+00	95	2.33E-04	1.0 U	0.00E+00	12	2.89E-05	41	9.86E-05	1.0 U	0.00E+00	20	8.23E-05
5/19/2011		12061	4732	160	93	3.08E-04	1.1 U	0.00E+00	39	9.57E-05	1.1 U	0.00E+00	3.5	8.42E-06	21	5.05E-05	1.1 U	0.00E+00	14	5.76E-05
6/16/2011		12722	5062	170	99	3.48E-04	1.2 U	0.00E+00	48	1.25E-04	1.2 U	0.00E+00	2.4	6.13E-06	21	5.37E-05	1.2 U	0.00E+00	30	1.31E-04
7/15/2011		13417	4472	170	77	2.71E-04	1.2 U	0.00E+00	25	6.52E-05	1.2 U	0.00E+00	1.7	4.34E-06	18	4.60E-05	1.2 U	0.00E+00	30	1.31E-04
8/22/2011		14324	4775	170	78	2.74E-04	1.2 U	0.00E+00	31	8.09E-05	1.2 U	0.00E+00	1.2	3.07E-06	17	4.34E-05	1.2 U	0.00E+00	54	2.36E-04
9/15/2011		14905	4968	170	69	2.43E-04	1.1 U	0.00E+00	20	5.22E-05	1.1 U	0.00E+00	1.1 U	0.00E+00	12	3.07E-05	1.1 U	0.00E+00	32	1.40E-04
10/14/2011		15598	5199	160	43	1.42E-04	0.82 U	0.00E+00	12	2.95E-05	0.82 U	0.00E+00	0.82 U	0.00E+00	6.3	1.52E-05	0.82 U	0.00E+00	8.4	3.46E-05
11/21/2011		16510	5503	170	28 J,B	9.85E-05	1.6 U	0.00E+00	7.7	2.01E-05	1.6 U	0.00E+00	1.6 U	0.00E+00	4.1	1.05E-05	1.6 U	0.00E+00	7	3.06E-05
12/14/2011		17010	5670	170	26	9.14E-05	0.76 U	0.00E+00	5.2	1.36E-05	0.76 U	0.00E+00	2.4	6.13E-06	4.2	1.07E-05	0.76 U	0.00E+00	6.9	3.02E-05
1/19/2012		17923	5974	170	25	8.79E-05	0.74 U	0.00E+00	6.9	1.80E-05	0.74 U	0.00E+00	0.74 U	0.00E+00	3	7.67E-06	0.74 U	0.00E+00	4.4	1.92E-05
2/15/2012		18566	6189	170	31	1.09E-04	0.73 U	0.00E+00	7.6	1.98E-05	0.73 U	0.00E+00	1.9	4.85E-06	3.5	8.94E-06	0.73 U	0.00E+00	4.8	2.10E-05
3/15/2012		19262	6421	170	29 J,B	1.02E-04	0.71 U	0.00E+00	8.1	2.11E-05	0.71 U	0.00E+00	0.71 U	0.00E+00	3.7	9.45E-06	0.71 U	0.00E+00	3.9	1.70E-05
4/19/2012		20102	6701	160	31	1.03E-04	0.76 U	0.00E+00	11	2.70E-05	0.76 U	0.00E+00	0.76 U	0.00E+00	4.6	1.11E-05	0.76 U	0.00E+00	8.2	3.37E-05
5/16/2012		20748	6916	160	28	9.27E-05	0.78 U	0.00E+00	11	2.70E-05	0.78 U	0.00E+00	0.78 U	0.00E+00	5	1.20E-05	0.78 U	0.00E+00	11	4.53E-05
Pulse -off period June 1, 2012 to August 14, 2012																				
8/14/2012		21282	7094	160	370	1.22E-03	1.3 U	0.00E+00	160	3.93E-04	1.3 U	0.00E+00	4.5	1.08E-05	11	2.65E-05	1.3 U	0.00E+00	16	6.58E-05
9/17/2012		21952	7317	160	180	5.96E-04	1.1 U	0.00E+00	36	8.84E-05	1.1 U	0.00E+00	1.1 U	0.00E+00	10	2.40E-05	1.1 U	0.00E+00	20	8.23E-05
Pulse -off period September 17, 2012 to November 15, 2012																				
11/15/2012		21959	7320	160	430	1.42E-03	1.1 U	0.00E+00	140	3.44E-04	1.1 U	0.00E+00	12	2.89E-05	13	3.13E-05	1.1 U	0.00E+00	41	1.69E-04
12/14/2012		22554	7518	170	610	2.14E-03	1.9 U	0.00E+00	11	2.87E-05	1.9 U	0.00E+00	12	3.07E-05	4	1.02E-05	1.9 U	0.00E+00	5.3	2.32E-05
Pulse -off period December 14, 2012 to February 26, 2013																				
2/26/2013		22556	7518	160	1.9	6.29E-06	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00
4/11/2013		23581	7723	160	140	4.63E-04	1.2 U	0.00E+00	10	2.45E-05	1.2 U	0.00E+00	4	9.62E-06	3.3	7.94E-06	1.2 U	0.00E+00	5.4	2.22E-05
Pulse -off period April 11, 2013 to May 10, 2013																				
5/10/2013		23583	7724	160	210	6.95E-04	1.1 U	0.00E+00	62	1.52E-04	1.2 U	0.00E+00	3.9	9.38E-06	5.4	1.30E-05	1.1 U	0.00E+00	6.4	2.63E-05
7/15/2013		25160	8039	160	160	5.29E-04	1.1 U	0.00E+00	20	4.91E-05	1.1 U	0.00E+00	3.7	8.90E-06	3.7	8.90E-06	1.1 U	0.00E+00	21	8.64E-05
7/15/2013	Dup	25160	8039	160	160	5.29E-04	1.2 U	0.00E+00	20	4.91E-05	1.2 U	0.00E+00	3.2	7.70E-06	3.5	8.42E-06	1.2 U	0.00E+00	17	6.99E-05
Pulse -off period July 15, 2013 to September 9, 2013																				
9/9/2013		25162	8040	160	380	1.26E-03	2.0 U	0.00E+00	110	2.70E-04	2.0 U	0.00E+00	3.4	8.18E-06	7	1.68E-05	2.0 U	0.00E+00	49	2.02E-04
11/18/2013		26825	8372	160	44	1.46E-04	1.1 U	0.00E+00	11	2.70E-05	1.1 U	0.00E+00	1.3	3.13E-06	2.3	5.53E-06	1.1 U	0.00E+00	14	5.76E-05
Pulse -off period November 18, 2013 to January 15, 2014																				
1/15/2014		28218	8651	160	160	5.29E-04	1.2 U	0.00E+00	55	1.35E-04	1.2 U	0.00E+00	3.3	7.94E-06	2.9	6.97E-06	1.2 U	0.00E+00	7.2	2.96E-05
3/14/2014		29432	8894	160	16	5.29E-05	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	1.9	4.57E-06	1.2 U	0.00E+00	1.2 U	0.00E+00
3/14/2014	Dup	29432	8894	160	19	6.29E-05	1.2 U	0.00E+00	1.6	3.93E-06	1.2 U	0.00E+00	1.2 U	0.00E+00	1.8	4.33E-06	1.2 U	0.00E+00	1.7	6.99E-06

Notes:

Mass removal rate = (flow rate in scfm)(concentration in ppmv)(60)(MW) / (387*1000000)

"U" indicates non-detection at the specified reporting limit; for ND compounds, zero is used in mass removal calculations

MW	molecular weight (values from the U.S. National Library
SCFM	*standard cubic feet per minute*
J	Indicates estimated value.
B	The analyte was detected in the method, field and/or trip blank

When a duplicate sample was collected, the original sample results are used in the mass calculations

Table 4.2
Cell 2 - Phase 1 SVE System Data
December 2009 - March 2014
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

CELL 2 SVE EFFLUENT

Date	Sample Type	SVE Run Time (hr)	Cell 2 Run Time (hr)	SVE Flow Rate (scfm)	Trichloroethene		Vinyl chloride		Methylene Chloride		Carbon Tetrachloride		Chloroform		Chloroethane		Benzene		Toluene	
					Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)
12/11/2009		178	59	150	330	1.01E-03	4400	6.40E-03	86 U	0.00E+00	86 U	0.00E+00	86 U	0.00E+00	210	3.15E-04	86 U	0.00E+00	200	4.29E-04
12/15/2009		205	68	140	240	6.84E-04	3500	4.75E-03	110 U	0.00E+00	110 U	0.00E+00	110 U	0.00E+00	370	5.18E-04	110 U	0.00E+00	140	2.80E-04
12/29/2009		539	180	140	240	6.84E-04	1500	2.03E-03	100 U	0.00E+00	100 U	0.00E+00	100 U	0.00E+00	120	1.68E-04	100 U	0.00E+00	100 U	0.00E+00
1/13/2010		903	301	150	130	3.97E-04	250	3.63E-04	35 U	0.00E+00	35 U	0.00E+00	35 U	0.00E+00	170	2.55E-04	35 U	0.00E+00	35 U	0.00E+00
1/27/2010		1224	408	150	150	4.58E-04	200	2.91E-04	40 U	0.00E+00	40 U	0.00E+00	40 U	0.00E+00	120	1.80E-04	40 U	0.00E+00	40 U	0.00E+00
1/27/2010	Dup	1224	408	150	180	5.50E-04	240	3.49E-04	40 U	0.00E+00	40 U	0.00E+00	40 U	0.00E+00	130	1.95E-04	40 U	0.00E+00	40 U	0.00E+00
2/24/2010		1893	631	150	98	2.99E-04	73	1.06E-04	22 U	0.00E+00	22 U	0.00E+00	22 U	0.00E+00	38	5.70E-05	22 U	0.00E+00	22 U	0.00E+00
3/15/2010		2345	782	140	210	5.99E-04	62	8.41E-05	48 U	0.00E+00	48 U	0.00E+00	48 U	0.00E+00	180	2.52E-04	48 U	0.00E+00	48 U	0.00E+00
4/14/2010		2804	935	150	190	5.81E-04	69	1.00E-04	23 U	0.00E+00	23 U	0.00E+00	23 U	0.00E+00	23 U	0.00E+00	23 U	0.00E+00	23 U	0.00E+00
5/13/2010		3495	1165	140	78	2.22E-04	42	5.70E-05	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00	20	2.80E-05	11 U	0.00E+00	11 U	0.00E+00
6/21/2010		4430	1477	108	88	1.94E-04	23 U	0.00E+00	23 UJ	0.00E+00	23 U	0.00E+00	23 U	0.00E+00	33 J	3.56E-05	23 U	0.00E+00	23 U	0.00E+00
7/21/2010		5058	1686	140	80	2.28E-04	14 U	0.00E+00	14 U	0.00E+00	14 U	0.00E+00	14 U	0.00E+00	14 U	0.00E+00	14 U	0.00E+00	14 U	0.00E+00
8/23/2010		5784	1928	0	150	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	21	0.00E+00	20 U	0.00E+00	20 U	0.00E+00
9/23/2010		6523	2174	145	74	2.19E-04	12	1.69E-05	12 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00
10/22/2010		7219	2406	140	42	1.20E-04	10 U	0.00E+00	10 U	0.00E+00	10 U	0.00E+00	10 U	0.00E+00	10 U	0.00E+00	10 U	0.00E+00	10 U	0.00E+00
11/15/2010		7794	2598	140	35	9.98E-05	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00
12/22/2010		8508	2955	150	27	8.25E-05	14 U	0.00E+00	14 U	0.00E+00	14 U	0.00E+00	14 U	0.00E+00	14 U	0.00E+00	14 U	0.00E+00	14 U	0.00E+00
1/24/2011		9302	3352	170	9	3.12E-05	2.7 U	0.00E+00	2.7 U	0.00E+00	2.7 U	0.00E+00	2.7 U	0.00E+00	2.7 U	0.00E+00	2.7 U	0.00E+00	3.1	7.53E-06
2/25/2011		10071	3737	165	15	5.04E-05	4.0 U	0.00E+00	4.0 U	0.00E+00	4.0 U	0.00E+00	4.0 U	0.00E+00	16 U	0.00E+00	4.0 U	0.00E+00	4.0 U	0.00E+00
3/18/2011		10573	3988	165	7.3	2.45E-05	1.0 U	0.00E+00	1.0 U	0.00E+00	1.0 U	0.00E+00	1.0 U	0.00E+00	4.0 U	0.00E+00	1.0 U	0.00E+00	1.0 U	0.00E+00
4/15/2011		11241	4322	160	8.5	2.77E-05	1.0 U	0.00E+00	1.0 U	0.00E+00	1.0 U	0.00E+00	1.0 U	0.00E+00	4.1 U	0.00E+00	1.0 U	0.00E+00	1.0 U	0.00E+00
5/19/2011		12061	4732	160	11	3.59E-05	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	4.5 U	0.00E+00	8.1	1.57E-05	1.1 U	0.00E+00
6/16/2011		12722	5062	170	15	5.19E-05	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.7 U	0.00E+00	1.9	3.91E-06	1.2 U	0.00E+00
7/15/2011		13417	4472	170	21	7.27E-05	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.6 U	0.00E+00	5.3	1.09E-05	1.2 U	0.00E+00
8/22/2011		14324	4775	170	22	7.62E-05	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.7 U	0.00E+00	1.6	3.29E-06	1.2 U	0.00E+00
9/15/2011		14905	4968	170	18	6.23E-05	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	4.5 U	0.00E+00	4.6	9.47E-06	1.1 U	0.00E+00
10/14/2011		15598	5199	160	9.1	2.97E-05	0.82 U	0.00E+00	0.82 U	0.00E+00	0.82 U	0.00E+00	0.82 U	0.00E+00	3.3 U	0.00E+00	0.82 U	0.00E+00	0.82 U	0.00E+00
11/21/2011		16510	5503	170	5.1	1.77E-05	1.6 U	0.00E+00	1.6 UJ	0.00E+00	1.6 U	0.00E+00	1.6 U	0.00E+00	6.4 U	0.00E+00	1.6 U	0.00E+00	1.6 U	0.00E+00
12/14/2011		17010	5670	170	3.4	1.18E-05	0.76 U	0.00E+00	7.6 U	0.00E+00	0.76 U	0.00E+00	0.76 U	0.00E+00	3.0 U	0.00E+00	0.78	1.61E-06	0.76 U	0.00E+00
1/19/2012		17923	5974	170	2.9	1.00E-05	0.74 U	0.00E+00	1.9	4.25E-06	0.74 U	0.00E+00	0.74 U	0.00E+00	3.0 U	0.00E+00	0.74 U	0.00E+00	1	2.43E-06
2/15/2012		18566	6189	170	2.2	7.62E-06	0.73 U	0.00E+00	0.73 U	0.00E+00	0.73 U	0.00E+00	0.73 U	0.00E+00	2.9 U	0.00E+00	0.73 U	0.00E+00	0.73 U	0.00E+00
3/15/2012		19262	6421	170	2.4	8.31E-06	0.71 U	0.00E+00	0.71 U	0.00E+00	0.71 U	0.00E+00	0.71 U	0.00E+00	2.8 U	0.00E+00	0.71 U	0.00E+00	1.6	3.89E-06
4/19/2012		20102	6701	160	4.3	1.40E-05	0.76 U	0.00E+00	0.76 U	0.00E+00	0.76 U	0.00E+00	0.76 U	0.00E+00	3.0 U	0.00E+00	0.76 U	0.00E+00	0.76 U	0.00E+00
5/16/2012		20748	6916	160	5.3	1.73E-05	0.78 U	0.00E+00	0.78 U	0.00E+00	0.78 U	0.00E+00	0.78 U	0.00E+00	3.1 U	0.00E+00	0.78 U	0.00E+00	0.78 U	0.00E+00
Pulse -off period June 1, 2012 to August 14, 2012																				
8/14/2012		21282	7094	160	12	3.91E-05	1.3 U	0.00E+00	13 U	0.00E+00	1.3 U	0.00E+00	1.3 U	0.00E+00	5.3 U	0.00E+00	1.3 U	0.00E+00	1.3 U	0.00E+00
9/17/2012		21952	7317	160	29	9.45E-05	1.1 U	0.00E+00	11 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	4.3 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00
Pulse -off period September 17, 2012 to November 15, 2012																				
11/15/2012		21959	7320	160	26	8.47E-05	1.1 U	0.00E+00	11 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	4.5 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00
12/14/2012		22554	7518	170	17	5.89E-05	1.9 U	0.00E+00	19 U	0.00E+00	1.9 U	0.00E+00	1.9 U	0.00E+00	7.4 U	0.00E+00	1.9 U	0.00E+00	1.9 U	0.00E+00
Pulse -off period December 14, 2012 to February 26, 2013																				
2/26/2013		22556	7518	160	1.2 U	0.00E+00	1.2 U	0.00E+00	12 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	5 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00
4/11/2013		23581	7723	160	8	2.61E-05	1.2 U	0.00E+00	12 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.7 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00
Pulse -off period April 11, 2013 to May 10, 2013																				
5/10/2013		23583	7724	160	9.5	3.10E-05	1.1 U	0.00E+00	11 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	18	2.88E-05	1.1 U	0.00E+00	1.1 U	0.00E+00
7/15/2013		25160	8039	160	24	7.82E-05	1.1 U	0.00E+00	11 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	4.6 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00
7/15/2013	Dup	25160	8039	160	24	7.82E-05	1.2 U	0.00E+00	12 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.7 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00
Pulse -off period July 15, 2013 to September 9, 2013																				
9/9/2013		25162	8040	160	31	1.01E-04	2.0 U	0.00E+00	20 U	0.00E+00	2.0 U	0.00E+00	2.0 U	0.00E+00	8.0 U	0.00E+00	2.0 U	0.00E+00	2.0 U	0.00E+00
11/18/2013		26825	8372	160	8.4	2.74E-05	1.1 U	0.00E+00	11 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	4.6 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00
Pulse -off period November 18, 2013 to January 15, 2014																				
1/15/2014		28218	8651	160	7.2	2.35E-05	1.2 U	0.00E+00	12 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.7 U	0.00E+00	1.2 U	0.00E+00	4.9	1.12E-05
3/14/2014		29432	8894	160	1.2 U	0.00E+00	1.2 U	0.00E+00	12 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.9 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00
3/14/2014	Dup	29432	8894	160	1.5	4.89E-06	1.2 U	0.00E+00	12 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	5.0 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00

Notes:

Mass removal rate = (flow rate in scfm)(concentration in ppmv)(60)(MW) / (387*1000000)

"U" indicates non-detection at the specified reporting limit, for ND compounds, zero is used in mass removal calculations.

MW	molecular weight (values from the U.S. National Library
SCFM	standard cubic feet per minute
J	Indicates estimated value.
B	The analyte was detected in the method, field and/or trip blank

When a duplicate sample was collected, the original sample results are used in the mass calculations.

Table 4.2
Cell 2 - Phase 1 SVE System Data
December 2009 - March 2014
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

CELL 2 SVE EFFLUENT

Date	Sample Type	SVE Run Time (hr)	Cell 2 Run Time (hr)	SVE Flow Rate (scfm)	Ethylbenzene		m&p-Xylenes		o-Xylenes		Acetone		Methyl Ethyl Ketone (MEK)		Mass Removal Rate (lb/hr)	Cumulative Mass Removal (lb)
					Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)		
12/11/2009		178	59	150	86 U	0.00E+00	240	5.93E-04	110	2.72E-04	340 U	0.00E+00	86 U	0.00E+00	2.54E-01	15.05
12/15/2009		205	68	140	110 U	0.00E+00	230	5.30E-04	110 U	0.00E+00	430 U	0.00E+00	110 U	0.00E+00	1.59E-01	16.48
12/29/2009		539	180	140	100 U	0.00E+00	100 U	0.00E+00	100 U	0.00E+00	420 U	0.00E+00	100 U	0.00E+00	1.19E-01	29.76
1/13/2010		903	301	150	35 U	0.00E+00	35 U	0.00E+00	35 U	0.00E+00	140 U	0.00E+00	35 U	0.00E+00	4.93E-02	35.75
1/27/2010		1224	408	150	40 U	0.00E+00	40 U	0.00E+00	40 U	0.00E+00	160 U	0.00E+00	40 U	0.00E+00	6.47E-02	42.68
1/27/2010	Dup	1224	408	150	40 U	0.00E+00	40 U	0.00E+00	40 U	0.00E+00	160 U	0.00E+00	40 U	0.00E+00	7.06E-02	43.31
2/24/2010		1893	631	150	22 U	0.00E+00	22 U	0.00E+00	22 U	0.00E+00	87 U	0.00E+00	22 U	0.00E+00	3.93E-02	51.44
3/15/2010		2345	782	140	48 U	0.00E+00	48 U	0.00E+00	48 U	0.00E+00	190 U	0.00E+00	48 U	0.00E+00	8.60E-02	64.40
4/14/2010		2804	935	150	23 U	0.00E+00	23 U	0.00E+00	23 U	0.00E+00	92 U	0.00E+00	23 U	0.00E+00	4.24E-02	70.89
5/13/2010		3495	1165	140	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00	43 U	0.00E+00	11 U	0.00E+00	3.84E-02	79.74
6/21/2010		4430	1477	108	23 U	0.00E+00	23 U	0.00E+00	23 U	0.00E+00	92 U	0.00E+00	23 U	0.00E+00	2.30E-02	86.90
7/21/2010		5058	1686	140	14 U	0.00E+00	14 U	0.00E+00	14 U	0.00E+00	58 U	0.00E+00	14 U	0.00E+00	2.07E-02	91.24
8/23/2010		5784	1928	0	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	81 U	0.00E+00	20 U	0.00E+00	0.00E+00	91.24
9/23/2010		6523	2174	145	12 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00	47 U	0.00E+00	12 U	0.00E+00	2.04E-02	96.27
10/22/2010		7219	2406	140	10 U	0.00E+00	10 U	0.00E+00	10 U	0.00E+00	42 U	0.00E+00	10 U	0.00E+00	1.11E-02	98.85
11/15/2010		7794	2598	140	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00	44 U	0.00E+00	11 U	0.00E+00	1.34E-02	101.41
12/22/2010		8508	2955	150	14 U	0.00E+00	14 U	0.00E+00	14 U	0.00E+00	56 U	0.00E+00	14 U	0.00E+00	1.84E-02	107.99
1/24/2011		9302	3352	170	2.7 U	0.00E+00	2.7 U	0.00E+00	2.7 U	0.00E+00	11 U	0.00E+00	11	2.09E-05	6.06E-03	110.39
2/25/2011		10071	3737	165	4.0 U	0.00E+00	4.0 U	0.00E+00	4.0 U	0.00E+00	16 U	0.00E+00	16 U	0.00E+00	9.59E-03	114.08
3/18/2011		10573	3988	165	1.0 U	0.00E+00	1.0 U	0.00E+00	1.0 U	0.00E+00	15	2.23E-05	4.0 U	0.00E+00	1.98E-03	114.57
4/15/2011		11241	4322	160	1.0 U	0.00E+00	1.0 U	0.00E+00	1.0 U	0.00E+00	8.2 J,B	1.18E-05	4.1 U	0.00E+00	1.48E-03	115.07
5/19/2011		12061	4732	160	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	11	1.58E-05	4.5 U	0.00E+00	5.87E-04	115.31
6/16/2011		12722	5062	170	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	19	2.91E-05	4.7 U	0.00E+00	7.49E-04	115.55
7/15/2011		13417	4472	170	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	19	2.91E-05	4.6 U	0.00E+00	6.30E-04	115.18
8/22/2011		14324	4775	170	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	6.8 J,B	1.04E-05	4.7 U	0.00E+00	7.28E-04	115.40
9/15/2011		14905	4968	170	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	11	1.68E-05	4.5 U	0.00E+00	5.54E-04	115.51
10/14/2011		15598	5199	160	0.82 U	0.00E+00	0.82 U	0.00E+00	0.82 U	0.00E+00	5	7.20E-06	3.3 U	0.00E+00	2.58E-04	115.57
11/21/2011		16510	5503	170	1.6 U	0.00E+00	1.6 U	0.00E+00	1.6 U	0.00E+00	6.4 UJ	0.00E+00	6.4 U	0.00E+00	1.77E-04	115.62
12/14/2011		17010	5670	170	0.76 U	0.00E+00	0.76 U	0.00E+00	0.76 U	0.00E+00	7.6 UJ	0.00E+00	3.0 U	0.00E+00	1.65E-04	115.65
1/19/2012		17923	5974	170	0.79	2.21E-06	1.5	4.20E-06	1.1	3.08E-06	14	2.14E-05	3.0 U	0.00E+00	1.80E-04	115.71
2/15/2012		18566	6189	170	0.73 U	0.00E+00	0.73 U	0.00E+00	0.73 U	0.00E+00	7.9	1.21E-05	2.9 U	0.00E+00	1.83E-04	115.74
3/15/2012		19262	6421	170	0.71 U	0.00E+00	0.71 U	0.00E+00	0.71 U	0.00E+00	8.9	1.36E-05	2.8 U	0.00E+00	1.75E-04	115.79
4/19/2012		20102	6701	160	0.76 U	0.00E+00	0.76 U	0.00E+00	0.76 U	0.00E+00	3.0 U	0.00E+00	3.0 U	0.00E+00	1.88E-04	115.84
5/16/2012		20748	6916	160	0.78 U	0.00E+00	0.78 U	0.00E+00	0.78 U	0.00E+00	3.1 U	0.00E+00	3.1 U	0.00E+00	1.94E-04	115.88
Pulse -off period June 1, 2012 to August 14, 2012																
8/14/2012		21282	7094	160	1.3 U	0.00E+00	1.3 U	0.00E+00	1.3 U	0.00E+00	21	3.03E-05	5.3 U	0.00E+00	1.79E-03	116.20
9/17/2012		21952	7317	160	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	11 U	0.00E+00	4.3 U	0.00E+00	8.85E-04	116.40
Pulse -off period September 17, 2012 to November 15, 2012																
11/15/2012		21959	7320	160	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	11 U	0.00E+00	4.5 U	0.00E+00	2.08E-03	116.40
12/14/2012		22554	7518	170	1.9 U	0.00E+00	1.9 U	0.00E+00	1.9 U	0.00E+00	19 U	0.00E+00	7.4 U	0.00E+00	2.30E-03	116.86
Pulse -off period December 14, 2012 to February 26, 2013																
2/26/2013		22556	7518	160	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	12 U	0.00E+00	5 U	0.00E+00	6.29E-06	116.86
4/11/2013		23581	7723	160	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	12 U	0.00E+00	4.7 U	0.00E+00	5.54E-04	116.97
Pulse -off period April 11, 2013 to May 10, 2013																
5/10/2013		23583	7724	160	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	11 U	0.00E+00	4.5 U	0.00E+00	9.56E-04	116.97
7/15/2013		25160	8039	160	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	11 U	0.00E+00	4.6 U	0.00E+00	7.61E-04	117.21
7/15/2013	Dup	25160	8039	160	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	12 U	0.00E+00	4.7 U	0.00E+00	7.43E-04	-
Pulse -off period July 15, 2013 to September 9, 2013																
9/9/2013		25162	8040	160	2.0 U	0.00E+00	2.0 U	0.00E+00	2.0 U	0.00E+00	20 U	0.00E+00	8.0 U	0.00E+00	1.86E-03	117.21
11/18/2013		26825	8372	160	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	11 U	0.00E+00	4.6 U	0.00E+00	2.66E-04	117.30
Pulse -off period November 18, 2013 to January 15, 2014																
1/15/2014		28218	8651	160	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00	7.44E-04	117.51
3/14/2014		29432	8894	160	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00	5.75E-05	117.52
3/14/2014	Dup	29432	8894	160	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	12 U	0.00E+00	5.0 U	0.00E+00	8.30E-05	-

Notes:

Mass removal rate = (flow rate in scfm)(concentration in ppmv)(60)(MW) / (387*1000000)

"U" indicates non-detection at the specified reporting limit; for ND compounds, zero is used in mass removal calculations.

MW	molecular weight (values from the U.S National Library
SCFM	standard cubic feet per minute
J	Indicates estimated value
B	The analyte was detected in the method, field and/or trip blank.

When a duplicate sample was collected, the original sample results are used in the mass calculations.

Table 4.3
Cell 3 - Phase 1 SVE System Data
December 2009 - March 2014
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

CELL 3 SVE EFFLUENT

Date	Sample Type	SVE Run Time (hr)	Cell 3 Run Time (hr)	SVE Flow Rate (scfm)	1,1,1-Trichloroethane		1,1,2-Trichloroethane		1,1-Dichloroethane		1,2-Dichloroethane		1,1-Dichloroethene		cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Tetrachloroethene	
					Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)
12/14/2009		181	60	140	94000	2.72E-01	270 U	0.00E+00	1100	2.36E-03	270 U	0.00E+00	2300	4.84E-03	8100	1.70E-02	270 U	0.00E+00	750	2.70E-03
12/16/2009		229	76	150	46000	1.43E-01	110 U	0.00E+00	710	1.63E-03	110 U	0.00E+00	1100	2.48E-03	5500	1.24E-02	110 U	0.00E+00	400	1.54E-03
1/5/2010		707	236	140	42000	1.22E-01	150 U	0.00E+00	290	6.23E-04	150 U	0.00E+00	980	2.06E-03	1500	3.16E-03	150 U	0.00E+00	240	8.64E-04
1/21/2010		1084	361	150	15000	4.65E-02	42 U	0.00E+00	260	5.98E-04	42 U	0.00E+00	280	6.31E-04	1600	3.61E-03	42 U	0.00E+00	170	6.56E-04
1/21/2010	Dup	1084	361	150	16000	4.96E-02	43 U	0.00E+00	280	6.44E-04	43 U	0.00E+00	290	6.54E-04	1700	3.83E-03	43 U	0.00E+00	170	6.56E-04
2/24/2010		1893	631	150	11000	3.41E-02	28 U	0.00E+00	240	5.52E-04	28 U	0.00E+00	280	6.31E-04	1100	2.48E-03	28 U	0.00E+00	140	5.40E-04
3/15/2010		2345	782	140	20000	5.79E-02	21 U	0.00E+00	400	8.59E-04	21 U	0.00E+00	510	1.07E-03	1900	4.00E-03	21 U	0.00E+00	280	1.01E-03
4/14/2010		2804	935	150	31000	9.62E-02	100 U	0.00E+00	380	8.75E-04	100 U	0.00E+00	1100	2.48E-03	1200	2.71E-03	100 U	0.00E+00	820	3.16E-03
5/13/2010		3495	1165	140	8300	2.40E-02	12 U	0.00E+00	220	4.73E-04	12 U	0.00E+00	190	4.00E-04	960	2.02E-03	12 U	0.00E+00	200	7.20E-04
6/21/2010		4430	1477	108	7200	1.61E-02	21 U	0.00E+00	220	3.65E-04	21 U	0.00E+00	150	2.43E-04	660	1.07E-03	21 U	0.00E+00	160	4.44E-04
7/21/2010		5058	1686	140	6100	1.77E-02	20 U	0.00E+00	120	2.58E-04	20 U	0.00E+00	130	2.74E-04	460	9.68E-04	20 U	0.00E+00	120	4.32E-04
8/23/2010		5784	1928	0	8000	0.00E+00	20 U	0.00E+00	200	0.00E+00	20 U	0.00E+00	120	0.00E+00	490	0.00E+00	20 U	0.00E+00	220	0.00E+00
9/23/2010		6523	2174	145	6600	1.98E-02	11 U	0.00E+00	140	3.11E-04	11 U	0.00E+00	140	3.05E-04	440	9.59E-04	11 U	0.00E+00	160	5.96E-04
10/22/2010		7219	2406	140	3700	1.07E-02	14 U	0.00E+00	91	1.95E-04	14 U	0.00E+00	66	1.39E-04	210	4.42E-04	14 U	0.00E+00	110	3.96E-04
11/15/2010		7794	2598	140	4600	1.33E-02	15 U	0.00E+00	120	2.58E-04	15 U	0.00E+00	64	1.35E-04	170	3.58E-04	15 U	0.00E+00	88	3.17E-04
12/22/2010		8508	2777	150	5600	1.74E-02	20 U	0.00E+00	150	3.45E-04	20 U	0.00E+00	120	2.71E-04	330	7.44E-04	20 U	0.00E+00	56	2.16E-04
1/24/2011		9302	2975	170	2200	7.74E-03	8.3 U	0.00E+00	130	3.39E-04	8.3 U	0.00E+00	27	6.90E-05	200	5.11E-04	8.3 U	0.00E+00	35	1.53E-04
2/25/2011		10071	3167	165	1300	4.44E-03	4.0 U	0.00E+00	45	1.14E-04	4.0 U	0.00E+00	25	6.20E-05	72	1.79E-04	4.0 U	0.00E+00	28	1.19E-04
3/18/2011		10573	3293	165	360	1.23E-03	1.3 U	0.00E+00	24	6.08E-05	1.3 U	0.00E+00	5.4	1.34E-05	35	8.68E-05	1.3 U	0.00E+00	13	5.51E-05
4/15/2011		11241	3460	160	160 J,B	5.29E-04	1.0 U	0.00E+00	17	4.17E-05	1.0 U	0.00E+00	2.8	6.73E-06	28	6.73E-05	1.0 U	0.00E+00	15	6.17E-05
5/19/2011		12061	3665	160	64	2.12E-04	1.2 U	0.00E+00	10	2.45E-05	1.2 U	0.00E+00	1.4	3.37E-06	12	2.89E-05	1.2 U	0.00E+00	9.6	3.95E-05
6/16/2011		12722	3830	170	160	5.63E-04	1.2 U	0.00E+00	280	7.30E-04	1.2 U	0.00E+00	2.5	6.39E-06	34	8.69E-05	1.2 U	0.00E+00	61	2.67E-04
7/15/2011		13417	4472	170	190	6.68E-04	1.2 U	0.00E+00	8.3	2.16E-05	1.2 U	0.00E+00	2.8	7.15E-06	23	5.88E-05	1.2 U	0.00E+00	22	9.62E-05
8/22/2011		14324	4775	170	1600	5.63E-03	4.3 U	0.00E+00	19	4.96E-05	4.3 U	0.00E+00	21	5.37E-05	130	3.32E-04	4.3 U	0.00E+00	39	1.70E-04
9/15/2011		14905	4968	170	800	2.81E-03	3.7 U	0.00E+00	9.5	2.48E-05	3.7 U	0.00E+00	12	3.07E-05	62	1.58E-04	3.7 U	0.00E+00	24	1.05E-04
10/14/2011		15598	5199	160	750	2.48E-03	3.0 U	0.00E+00	10	2.45E-05	3.0 U	0.00E+00	13	3.13E-05	37	8.90E-05	3.0 U	0.00E+00	15	6.17E-05
11/21/2011		16510	5503	170	380	1.34E-03	1.4 U	0.00E+00	6.6	1.72E-05	1.4 U	0.00E+00	5.6	1.43E-05	24	6.13E-05	1.4 U	0.00E+00	7.9	3.45E-05
12/14/2011		17010	5670	170	830	2.92E-03	3.5 U	0.00E+00	8.7	2.27E-05	3.5 U	0.00E+00	70	1.79E-04	33	8.43E-05	3.5 U	0.00E+00	6.9	3.02E-05
1/19/2012		17923	5974	170	800	2.81E-03	3.0 U	0.00E+00	12	3.13E-05	3.0 U	0.00E+00	13	3.32E-05	33	8.43E-05	3.0 U	0.00E+00	6.4	2.80E-05
2/15/2012		18566	6189	170	1600	5.63E-03	4.5 U	0.00E+00	22	5.74E-05	4.5 U	0.00E+00	260	6.64E-04	95	2.43E-04	4.5 U	0.00E+00	6.7	2.93E-05
3/15/2012		19262	6421	170	1600	5.63E-03	5.1 U	0.00E+00	28	7.30E-05	5.1 U	0.00E+00	22	5.62E-05	59	1.51E-04	5.1 U	0.00E+00	7.3	3.19E-05
4/19/2012		20102	6701	160	580	1.92E-03	1.8 U	0.00E+00	14	3.44E-05	1.8 U	0.00E+00	5.8	1.39E-05	23	5.53E-05	1.8 U	0.00E+00	11	4.53E-05
5/16/2012		20748	6916	160	300	9.93E-04	0.80 U	0.00E+00	9.3	2.28E-05	0.80 U	0.00E+00	3.7	8.90E-06	21	5.05E-05	0.80 U	0.00E+00	7.5	3.09E-05
Pulse -off period June 1, 2012 to August 14, 2012																				
8/14/2012		21282	7094	160	1200	3.97E-03	4.7 U	0.00E+00	20	4.91E-05	4.7 U	0.00E+00	17	4.09E-05	8.4	2.02E-05	4.7 U	0.00E+00	26	1.07E-04
9/17/2012		21952	7317	160	5000	1.65E-02	16 U	0.00E+00	38	9.33E-05	16 U	0.00E+00	16 U	0.00E+00	130	3.13E-04	16 U	0.00E+00	100	4.11E-04
Pulse -off period September 17, 2012 to November 15, 2012																				
11/15/2012		21959	7320	160	640	2.12E-03	2.1 U	0.00E+00	130	3.19E-04	2.1 U	0.00E+00	22	5.29E-05	18	4.33E-05	2.1 U	0.00E+00	18	7.40E-05
12/14/2012		22554	7518	170	1100	3.87E-03	4.6 U	0.00E+00	17 J	4.43E-05	4.6 U	0.00E+00	15	3.83E-05	70 J	1.79E-04	4.6 U	0.00E+00	7.1 J	3.10E-05
12/14/2012	Dup	22554	7518	170	1100 J	3.87E-03	4.5 U	0.00E+00	25 J	6.52E-05	4.5 U	0.00E+00	17 J	4.34E-05	36 J	9.20E-05	4.5 U	0.00E+00	49 J	2.14E-04
Pulse -off period December 14, 2012 to February 26, 2013																				
2/26/2013		22556	7519	160	640	2.12E-03	2.4 U	0.00E+00	12	2.95E-05	2.4 U	0.00E+00	8	1.92E-05	23	5.53E-05	2.4 U	0.00E+00	15	6.17E-05
4/11/2013		23581	8134	160	180	5.96E-04	1.2 U	0.00E+00	7	1.72E-05	1.2 U	0.00E+00	2.8	6.73E-06	28	6.73E-05	1.2 U	0.00E+00	4.6	1.89E-05
Pulse -off period April 11, 2013 to May 10, 2013																				
5/10/2013		23583	8135	160	200	6.62E-04	1.1 U	0.00E+00	5.5	1.35E-05	1.1 U	0.00E+00	3.3	7.94E-06	22	5.29E-05	1.1 U	0.00E+00	4.4	1.81E-05
7/15/2013		25160	9082	160	64	2.12E-04	1.2 U	0.00E+00	3.6	8.84E-06	1.2 U	0.00E+00	1.2 U	0.00E+00	1.9	4.57E-06	1.2 U	0.00E+00	14	5.76E-05
Pulse -off period July 15, 2013 to September 9, 2013																				
9/9/2013		25162	9083	160	390	1.29E-03	1.7 U	0.00E+00	5.6	1.37E-05	1.7 U	0.00E+00	3	9.93E-06	2	4.81E-06	1.7 U	0.00E+00	21	8.64E-05
11/18/2013		26825	10081	160	350	1.16E-03	1.2 U	0.00E+00	8.2	2.01E-05	1.2 U	0.00E+00	6.6	2.18E-05	45	1.08E-04	1.2 U	0.00E+00	5.7	2.34E-05
Pulse -off period November 18, 2013 to January 15, 2014																				
1/15/2014		28218	10916	160	240	7.94E-04	1.2 U	0.00E+00	5	1.23E-05	1.2 U	0.00E+00	4.1	1.36E-05	16	3.85E-05	1.2 U	0.00E+00	18	7.40E-05
3/14/2014		29432	11645	160	72	2.38E-04	1.2 U	0.00E+00	8.7	2.14E-05	1.2 U	0.00E+00	2.4	7.94E-06	6.4	1.54E-05	1.2 U	0.00E+00	9.5	3.91E-05

Notes:

Mass removal rate = (flow rate in scfm)(concentration in ppmv)(60)(MW) / (387*1000000)

"U" indicates non-detection at the specified reporting limit; for ND compounds, zero is used in mass removal calculations.

MW	molecular weight (values from the U.S. National Library
SCFM	standard cubic feet per minute
J	Indicates estimated value.
B	The analyte was detected in the method, field and/or trip blank.

When a duplicate sample was collected, the original sample results are used in the mass calculations.

Table 4.3
Cell 3 - Phase 1 SVE System Data
December 2009 - March 2014
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

CELL 3 SVE EFFLUENT

Date	Sample Type	SVE Run Time (hr)	Cell 3 Run Time (hr)	SVE Flow Rate (scfm)	Trichloroethene		Vinyl chloride		Methylene Chloride		Carbon Tetrachloride		Chloroform		Chloroethane		Benzene		Toluene	
					Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)
12/14/2009		181	60	140	1000	2.85E-03	270 U	0.00E+00	270 U	0.00E+00	270 U	0.00E+00	270 U	0.00E+00	270 U	0.00E+00	270 U	0.00E+00	270 U	0.00E+00
12/16/2009		229	76	150	550	1.68E-03	110 U	0.00E+00	110 U	0.00E+00	110 U	0.00E+00	110 U	0.00E+00	110 U	0.00E+00	110 U	0.00E+00	110 U	0.00E+00
1/5/2010		707	236	140	250	7.13E-04	150 U	0.00E+00	220	4.06E-04	150 U	0.00E+00	150 U	0.00E+00	150 U	0.00E+00	150 U	0.00E+00	150 U	0.00E+00
1/21/2010		1084	361	150	140	4.28E-04	42 U	0.00E+00	42 U	0.00E+00	42 U	0.00E+00	42 U	0.00E+00	42 U	0.00E+00	42 U	0.00E+00	42 U	0.00E+00
1/21/2010	Dup	1084	361	150	140	4.28E-04	43 U	0.00E+00	43 U	0.00E+00	43 U	0.00E+00	43 U	0.00E+00	43 U	0.00E+00	43 U	0.00E+00	43 U	0.00E+00
2/24/2010		1893	631	150	66	2.02E-04	28 U	0.00E+00	28 U	0.00E+00	28 U	0.00E+00	28 U	0.00E+00	28 U	0.00E+00	28 U	0.00E+00	28 U	0.00E+00
3/15/2010		2345	782	140	120	3.42E-04	51	6.92E-05	21 U	0.00E+00	21 U	0.00E+00	21 U	0.00E+00	21 U	0.00E+00	21 U	0.00E+00	21 U	0.00E+00
4/14/2010		2804	935	150	190	5.81E-04	100 U	0.00E+00	100 U	0.00E+00	100 U	0.00E+00	100 U	0.00E+00	100 U	0.00E+00	100 U	0.00E+00	100 U	0.00E+00
5/13/2010		3495	1165	140	43	1.23E-04	12 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00
6/21/2010		4430	1477	108	55	1.21E-04	21 U	0.00E+00	21 U	0.00E+00	21 U	0.00E+00	21 U	0.00E+00	21 U	0.00E+00	21 U	0.00E+00	21 U	0.00E+00
7/21/2010		5058	1686	140	44	1.25E-04	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00
8/23/2010		5784	1928	0	66	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00
9/23/2010		6523	2174	145	50	1.48E-04	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00
10/22/2010		7219	2406	140	31	8.84E-05	14 U	0.00E+00	14 U	0.00E+00	14 U	0.00E+00	14 U	0.00E+00	14 U	0.00E+00	14 U	0.00E+00	14 U	0.00E+00
11/15/2010		7794	2598	140	29	8.27E-05	15 U	0.00E+00	15 U	0.00E+00	15 U	0.00E+00	15 U	0.00E+00	15 U	0.00E+00	15 U	0.00E+00	15 U	0.00E+00
12/22/2010		8508	2777	150	21	6.42E-05	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00
1/24/2011		9302	2975	170	17	5.89E-05	8.3 U	0.00E+00	8.3 U	0.00E+00	8.3 U	0.00E+00	8.3 U	0.00E+00	8.3 U	0.00E+00	8.3 U	0.00E+00	8.3 U	0.00E+00
2/25/2011		10071	3167	165	16	5.38E-05	4.0 U	0.00E+00	4.0 U	0.00E+00	4.0 U	0.00E+00	4.0 U	0.00E+00	16 U	0.00E+00	4.0 U	0.00E+00	4.0 U	0.00E+00
3/18/2011		10573	3293	165	5.9	1.98E-05	1.3 U	0.00E+00	1.3 U	0.00E+00	1.3 U	0.00E+00	1.3 U	0.00E+00	5.4 U	0.00E+00	1.9	3.80E-06	1.3 U	0.00E+00
4/15/2011		11241	3460	160	7.7	2.51E-05	1.0 U	0.00E+00	1.0 U	0.00E+00	1.0 U	0.00E+00	1.0 U	0.00E+00	4.1 U	0.00E+00	2.6	5.04E-06	1.0 U	0.00E+00
5/19/2011		12061	3665	160	6.9	2.25E-05	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.8 U	0.00E+00	1.9	3.68E-06	1.2 U	0.00E+00
6/16/2011		12722	3830	170	9.8	3.39E-05	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.7 U	0.00E+00	1.6	3.29E-06	1.2 U	0.00E+00
7/15/2011		13417	4472	170	9.3	3.22E-05	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.8 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00
8/22/2011		14324	4775	170	21	7.27E-05	4.3 U	0.00E+00	4.3 U	0.00E+00	4.3 U	0.00E+00	4.3 U	0.00E+00	17 U	0.00E+00	4.3 U	0.00E+00	4.3 U	0.00E+00
9/15/2011		14905	4968	170	14	4.85E-05	3.7 U	0.00E+00	3.7 U	0.00E+00	3.7 U	0.00E+00	3.7 U	0.00E+00	15 U	0.00E+00	4.1	8.44E-06	3.7 U	0.00E+00
10/14/2011		15598	5199	160	13	4.24E-05	3.0 U	0.00E+00	3.0 U	0.00E+00	3.0 U	0.00E+00	3.0 U	0.00E+00	12 U	0.00E+00	3.0 U	0.00E+00	3.0 U	0.00E+00
11/21/2011		16510	5503	170	9.2	3.19E-05	1.4 U	0.00E+00	1.4 UJ	0.00E+00	1.4 U	0.00E+00	1.4 U	0.00E+00	5.5 U	0.00E+00	1.4 U	0.00E+00	1.4 U	0.00E+00
12/14/2011		17010	5670	170	22	7.62E-05	3.5 U	0.00E+00	35 U	0.00E+00	3.5 U	0.00E+00	3.5 U	0.00E+00	14 U	0.00E+00	3.5 U	0.00E+00	3.5 U	0.00E+00
1/19/2012		17923	5974	170	12	4.16E-05	3.0 U	0.00E+00	3.0 U	0.00E+00	3.0 U	0.00E+00	3.0 U	0.00E+00	12 U	0.00E+00	3.0 U	0.00E+00	3.0 U	0.00E+00
2/15/2012		18566	6189	170	24	8.31E-05	4.5 U	0.00E+00	4.5 U	0.00E+00	4.5 U	0.00E+00	4.5 U	0.00E+00	18 U	0.00E+00	4.5 U	0.00E+00	4.5 U	0.00E+00
3/15/2012		19262	6421	170	30	1.04E-04	5.1 U	0.00E+00	5.1 U	0.00E+00	5.1 U	0.00E+00	5.1 U	0.00E+00	20 U	0.00E+00	5.1 U	0.00E+00	5.1 U	0.00E+00
4/19/2012		20102	6701	160	19	6.19E-05	1.8 U	0.00E+00	1.8 U	0.00E+00	1.8 U	0.00E+00	1.8 U	0.00E+00	7.3 U	0.00E+00	1.8 U	0.00E+00	1.8 U	0.00E+00
5/16/2012		20748	6916	160	18	5.87E-05	0.80 U	0.00E+00	0.80 U	0.00E+00	0.80 U	0.00E+00	0.80 U	0.00E+00	3.2 U	0.00E+00	0.80 U	0.00E+00	0.80 U	0.00E+00
Pulse -off period June 1, 2012 to August 14, 2012																				
8/14/2012		21282	7094	160	25	8.15E-05	4.7 U	0.00E+00	47 U	0.00E+00	4.7 U	0.00E+00	4.7 U	0.00E+00	19 U	0.00E+00	4.7 U	0.00E+00	4.7 U	0.00E+00
9/17/2012		21952	7317	160	180	5.87E-04	16 U	0.00E+00	160 U	0.00E+00	16 U	0.00E+00	16 U	0.00E+00	65 U	0.00E+00	16 U	0.00E+00	16 U	0.00E+00
Pulse -off period September 17, 2012 to November 15, 2012																				
11/15/2012		21959	7320	160	39	1.27E-04	2.1 U	0.00E+00	21 U	0.00E+00	2.1 U	0.00E+00	2.1 U	0.00E+00	8.5 U	0.00E+00	2.1 U	0.00E+00	2.1 U	0.00E+00
12/14/2012		22554	7518	170	90 J	3.12E-04	4.6 U	0.00E+00	46 U	0.00E+00	4.6 U	0.00E+00	4.6 U	0.00E+00	18 U	0.00E+00	4.6 U	0.00E+00	4.6 U	0.00E+00
12/14/2012	Dup	22554	7518	170	52 J	1.80E-04	4.5 U	0.00E+00	45 U	0.00E+00	4.5 U	0.00E+00	4.5 U	0.00E+00	18 U	0.00E+00	4.5 U	0.00E+00	4.5 U	0.00E+00
Pulse -off period December 14, 2012 to February 26, 2013																				
2/26/2013		22556	7519	160	36	1.17E-04	2.4 U	0.00E+00	24 U	0.00E+00	2.4 U	0.00E+00	2.4 U	0.00E+00	9.5 U	0.00E+00	2.4 U	0.00E+00	2.4 U	0.00E+00
4/11/2013		23581	8134	160	15	4.89E-05	1.2 U	0.00E+00	12 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.7 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00
Pulse -off period April 11, 2013 to May 10, 2013																				
5/10/2013		23583	8135	160	13	4.24E-05	1.1 U	0.00E+00	11 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	4.3 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00
7/15/2013		25160	9082	160	10	3.26E-05	1.2 U	0.00E+00	12 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.7 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00
Pulse -off period July 15, 2013 to September 9, 2013																				
9/9/2013		25162	9083	160	12	3.91E-05	1.7 U	0.00E+00	17 U	0.00E+00	1.7 U	0.00E+00	1.7 U	0.00E+00	6.8 U	0.00E+00	1.7 U	0.00E+00	1.7 U	0.00E+00
11/18/2013		26825	10081	160	14	4.56E-05	1.2 U	0.00E+00	12 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.7 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00
Pulse -off period November 18, 2013 to January 15, 2014																				
1/15/2014		28218	10916	160	7.6	2.48E-05	1.2 U	0.00E+00	12 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.6 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00
3/14/2014		29432	11645	160	8.1	2.64E-05	1.2 U	0.00E+00	12 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.9 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00

Notes:

Mass removal rate = (flow rate in scfm)(concentration in ppmv)(60)(MW) / (387*1000000)

"U" indicates non-detection at the specified reporting limit; for ND compounds, zero is used in mass removal calculations.

MW	molecular weight (values from the U.S. National Library
SCFM	standard cubic feet per minute
J	Indicates estimated value.
B	The analyte was detected in the method, field and/or trip blank.

When a duplicate sample was collected, the original sample results are used in the mass calculations.

Table 4.3
Cell 3 - Phase 1 SVE System Data
December 2009 - March 2014
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

CELL 3 SVE EFFLUENT

Date	Sample Type	SVE Run Time (hr)	Cell 3 Run Time (hr)	SVE Flow Rate (scfm)	Ethylbenzene		m&p-Xylenes		o-Xylenes		Acetone		Methyl Ethyl Ketone (MEK)		Mass Removal Rate (lb/hr)	Cumulative Mass Removal (lb)
					Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)		
12/14/2009		181	60	140	270 U	0.00E+00	1600	3.69E-03	510	1.18E-03	1100 U	0.00E+00	270 U	0.00E+00	3.07E-01	18.51
12/16/2009		229	76	150	110 U	0.00E+00	540	1 33E-03	240	5.93E-04	590	7.97E-04	110 U	0.00E+00	1.65E-01	21.16
1/5/2010		707	236	140	150 U	0.00E+00	150 U	0.00E+00	150 U	0.00E+00	590 U	0.00E+00	150 U	0.00E+00	1.29E-01	41.78
1/21/2010		1084	361	150	42 U	0.00E+00	42 U	0.00E+00	42 U	0.00E+00	170 U	0.00E+00	42 U	0.00E+00	5.25E-02	48.37
1/21/2010	Dup	1084	361	150	43 U	0.00E+00	43 U	0.00E+00	43 U	0.00E+00	170 U	0.00E+00	43 U	0.00E+00	5.59E-02	48.80
2/24/2010		1893	631	150	28 U	0.00E+00	28 U	0.00E+00	28 U	0.00E+00	110 U	0.00E+00	28 U	0.00E+00	3.85E-02	58.76
3/15/2010		2345	782	140	21 U	0.00E+00	21 U	0.00E+00	21 U	0.00E+00	83 U	0.00E+00	21 U	0.00E+00	6.53E-02	68.60
4/14/2010		2804	935	150	100 U	0.00E+00	100 U	0.00E+00	100 U	0.00E+00	420 U	0.00E+00	100 U	0.00E+00	1.06E-01	84.81
5/13/2010		3495	1165	140	12 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00	48 U	0.00E+00	12 U	0.00E+00	2.78E-02	91.21
6/21/2010		4430	1477	108	21 U	0.00E+00	21 U	0.00E+00	21 U	0.00E+00	83 U	0.00E+00	21 U	0.00E+00	1.83E-02	96.92
7/21/2010		5058	1686	140	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	79 U	0.00E+00	20 U	0.00E+00	1.97E-02	101 05
8/23/2010		5784	1928	0	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	81 U	0.00E+00	20 U	0.00E+00	0.00E+00	101.05
9/23/2010		6523	2174	145	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00	43 U	0.00E+00	11 U	0.00E+00	2.21E-02	106.49
10/22/2010		7219	2406	140	14 U	0.00E+00	14 U	0.00E+00	14 U	0.00E+00	55 U	0.00E+00	14 U	0.00E+00	1.20E-02	109 27
11/15/2010		7794	2598	140	15 U	0.00E+00	15 U	0.00E+00	15 U	0.00E+00	59 U	0.00E+00	15 U	0.00E+00	1.45E-02	112.05
12/22/2010		8508	2777	150	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	82 U	0.00E+00	20 U	0.00E+00	1.90E-02	115.44
1/24/2011		9302	2975	170	8.3 U	0.00E+00	8.3 U	0.00E+00	8.3 U	0.00E+00	33 U	0.00E+00	8.3 U	0.00E+00	8.87E-03	117.20
2/25/2011		10071	3167	165	4.0 U	0.00E+00	4.0 U	0.00E+00	4.0 U	0.00E+00	16 U	0.00E+00	16 U	0.00E+00	4.96E-03	118.15
3/18/2011		10573	3293	165	1.3 U	0.00E+00	1.3 U	0.00E+00	1.3 U	0.00E+00	10	1.49E-05	5.4 U	0.00E+00	1.48E-03	118.34
4/15/2011		11241	3460	160	1.0 U	0.00E+00	1.0 U	0.00E+00	1.0 U	0.00E+00	7.3 J,B	1.05E-05	4.1 U	0.00E+00	7.48E-04	118.47
5/19/2011		12061	3665	160	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.8 U	0.00E+00	4.8 U	0.00E+00	3.34E-04	118.53
6/16/2011		12722	3830	170	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	6.8	1.04E-05	4.7 U	0.00E+00	1.70E-03	118.81
7/15/2011		13417	4472	170	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	7.7	1.18E-05	4.8 U	0.00E+00	8.96E-04	119.39
8/22/2011		14324	4775	170	4.3 U	0.00E+00	4.3 U	0.00E+00	4.3 U	0.00E+00	17 U	0.00E+00	17 U	0.00E+00	6.30E-03	121.30
9/15/2011		14905	4968	170	3.7 U	0.00E+00	3.7 U	0.00E+00	3.7 U	0.00E+00	15 U	0.00E+00	15 U	0.00E+00	3.19E-03	121.91
10/14/2011		15598	5199	160	3.0 U	0.00E+00	3.0 U	0.00E+00	3.0 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00	2.73E-03	122.54
11/21/2011		16510	5503	170	1.4 U	0.00E+00	1.4 U	0.00E+00	1 4 U	0.00E+00	5.5 UJ	0.00E+00	5.5 U	0.00E+00	1.50E-03	123.00
12/14/2011		17010	5670	170	3.5 U	0.00E+00	3.5 U	0.00E+00	3.5 U	0.00E+00	380 J	5.82E-04	58	1.10E-04	4.00E-03	123.67
1/19/2012		17923	5974	170	3.0 U	0.00E+00	3.0 U	0.00E+00	3.0 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00	3.03E-03	124.59
2/15/2012		18566	6189	170	4.5 U	0.00E+00	4.5 U	0.00E+00	4.5 U	0.00E+00	18 U	0.00E+00	18 U	0.00E+00	6.70E-03	126.03
3/15/2012		19262	6421	170	5.1 U	0.00E+00	5.1 U	0.00E+00	5.1 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	6.04E-03	127.43
4/19/2012		20102	6701	160	1.8 U	0.00E+00	1.8 U	0.00E+00	1.8 U	0.00E+00	7.3 U	0.00E+00	7.3 U	0.00E+00	2.13E-03	128.02
5/16/2012		20748	6916	160	0.80 U	0.00E+00	0.80 U	0.00E+00	0.80 U	0.00E+00	3.2 U	0.00E+00	3.2 U	0.00E+00	1.16E-03	128.27
Pulse -off period June 1, 2012 to August 14, 2012																
8/14/2012		21282	7094	160	4.7 U	0.00E+00	4.7 U	0.00E+00	4.7 U	0.00E+00	47 U	0.00E+00	19 U	0.00E+00	4.27E-03	129.03
9/17/2012		21952	7317	160	16 U	0.00E+00	16 U	0.00E+00	16 U	0.00E+00	160 U	0.00E+00	65 U	0.00E+00	1.80E-02	133.04
Pulse -off period September 17, 2012 to November 15, 2012																
11/15/2012		21959	7320	160	2.1 U	0.00E+00	2.1 U	0.00E+00	2 1 U	0.00E+00	21 U	0.00E+00	8.5 U	0.00E+00	2.73E-03	133.05
12/14/2012		22554	7518	170	4.6 U	0.00E+00	4.6 U	0.00E+00	4.6 U	0.00E+00	46 U	0.00E+00	18 U	0.00E+00	4.47E-03	133.94
12/14/2012	Dup	22554	7518	170	4.5 U	0.00E+00	4.5 U	0.00E+00	4.5 U	0.00E+00	45 U	0.00E+00	18 U	0.00E+00	4.46E-03	-
Pulse -off period December 14, 2012 to February 26, 2013																
2/26/2013		22556	7519	160	2.4 U	0.00E+00	2.4 U	0.00E+00	2 4 U	0.00E+00	24 U	0.00E+00	9.5 U	0.00E+00	2.40E-03	133.94
4/11/2013		23581	8134	160	1.2 U	0.00E+00	1.2 U	0.00E+00	1 2 U	0.00E+00	12 U	0.00E+00	4.7 U	0.00E+00	7.55E-04	134.40
Pulse -off period April 11, 2013 to May 10, 2013																
5/10/2013		23583	8135	160	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	11 U	0.00E+00	4.3 U	0.00E+00	7.97E-04	134.40
7/15/2013		25160	9082	160	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	12 U	0.00E+00	4.7 U	0.00E+00	3.15E-04	134.70
Pulse -off period July 15, 2013 to September 9, 2013																
9/9/2013		25162	9083	160	1.7 U	0.00E+00	1.7 U	0.00E+00	1.7 U	0.00E+00	17 U	0.00E+00	6.8 U	0.00E+00	1.44E-03	134.70
11/18/2013		26825	10081	160	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	12 U	0.00E+00	4.7 U	0.00E+00	1.38E-03	136.08
Pulse -off period November 18, 2013 to January 15, 2014																
1/15/2014		28218	10916	160	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	12 U	0.00E+00	4.6 U	0.00E+00	9.57E-04	136.88
3/14/2014		29432	11645	160	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	12 U	0.00E+00	4.9 U	0.00E+00	3.48E-04	137.13

Notes:

Mass removal rate = (flow rate in scfm)(concentration in ppmv)(60)(MW) / (387*1000000)

"U" indicates non-detection at the specified reporting limit; for ND compounds, zero is used in mass removal calculations.

MW	molecular weight (values from the U.S. National Library
SCFM	standard cubic feet per minute
J	Indicates estimated value.
B	The analyte was detected in the method, field and/or trip blank.

When a duplicate sample was collected, the original sample results are used in the mass calculations.

Table 4.4
Cell 4 - Phase 2 SVE System Data
March 2011 - March 2014
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

CELL 4 SVE EFFLUENT

Date	Sample Type	SVE Run Time (hr)	Cell 4 Run Time (hr)	SVE Flow Rate (scfm)	1,1,1-Trichloroethane		1,1,2-Trichloroethane		1,1-Dichloroethane		1,2-Dichloroethane		1,1-Dichloroethene		cis-1,2-Dichloroethene		trans-1,2-Dichloroethene	
					Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)
3/11/2011		222	222	500	150000	1.55E+00	600 U	0.00E+00	1800	1.38E-02	600 U	0.00E+00	860	6.46E-03	1400	1.05E-02	600 U	0.00E+00
3/18/2011		366	366	500	41000	4.24E-01	150 U	0.00E+00	1000	7.67E-03	150 U	0.00E+00	250	1.88E-03	460	3.46E-03	150 U	0.00E+00
3/18/2011	Dup	366	366	500	40000	4.14E-01	130 U	0.00E+00	1000	7.67E-03	130 U	0.00E+00	300	2.25E-03	480	3.61E-03	130 U	0.00E+00
3/25/2011		463	463	500	22000	2.28E-01	62 U	0.00E+00	980	7.52E-03	62 U	0.00E+00	87	6.54E-04	290	2.18E-03	62 U	0.00E+00
3/30/2011		558	558	500	25000	2.59E-01	68 U	0.00E+00	820	6.29E-03	68 U	0.00E+00	190	1.43E-03	290	2.18E-03	68 U	0.00E+00
4/8/2011		764	764	500	22000	2.28E-01	80 U	0.00E+00	1000	7.67E-03	80 U	0.00E+00	170	1.28E-03	340	2.56E-03	80 U	0.00E+00
4/15/2011		924	924	500	18000	1.86E-01	84 U	0.00E+00	930	7.13E-03	84 U	0.00E+00	110	8.27E-04	280	2.10E-03	84 U	0.00E+00
4/15/2011	Dup	924	924	500	16000 J	1.65E-01	60 U	0.00E+00	820 J	6.29E-03	60 U	0.00E+00	60 UJ	0.00E+00	260 J	1.95E-03	60 U	0.00E+00
5/19/2011		1685	1685	500	11000	1.14E-01	11 U	0.00E+00	640	4.91E-03	11 U	0.00E+00	100	7.52E-04	190	1.43E-03	11 U	0.00E+00
6/16/2011		2191	2191	420	10000	8.69E-02	11 U	0.00E+00	530	3.42E-03	11 U	0.00E+00	110 J	6.94E-04	160	1.01E-03	11 U	0.00E+00
6/16/2011	Dup	2191	2191	420	9600	8.34E-02	11 U	0.00E+00	510	3.29E-03	11 U	0.00E+00	110 J	6.94E-04	160	1.01E-03	11 U	0.00E+00
7/15/2011		2750	2750	420	7600	6.60E-02	24 U	0.00E+00	290	1.87E-03	24 U	0.00E+00	58	3.66E-04	79	4.99E-04	24 U	0.00E+00
8/22/2011		3133	3133	420	9000	7.82E-02	27 U	0.00E+00	410	2.64E-03	27 U	0.00E+00	92	5.81E-04	160	1.01E-03	27 U	0.00E+00
8/22/2011	Dup	3133	3133	420	9000	7.82E-02	22 U	0.00E+00	400	2.58E-03	22 U	0.00E+00	80	5.05E-04	150	9.47E-04	22 U	0.00E+00
9/15/2011		3630	3630	420	7000	6.08E-02	22 U	0.00E+00	250	1.61E-03	22 U	0.00E+00	55	3.47E-04	97	6.12E-04	22 U	0.00E+00
10/14/2011		4226	4226	420	4400	3.82E-02	19 U	0.00E+00	180	1.16E-03	19 U	0.00E+00	59	3.72E-04	60	3.79E-04	19 U	0.00E+00
11/21/2011		5019	5019	380	3700	2.91E-02	16 U	0.00E+00	170	9.91E-04	16 U	0.00E+00	320	1.83E-03	63	3.60E-04	16 U	0.00E+00
12/14/2011		5343	5343	260	4000	2.15E-02	19 U	0.00E+00	140	5.58E-04	19 U	0.00E+00	300	1.17E-03	55	2.15E-04	19 U	0.00E+00
1/19/2012		5993	5993	0	5200	0.00E+00	24 U	0.00E+00	160	0.00E+00	24 U	0.00E+00	58	0.00E+00	38	0.00E+00	24 U	0.00E+00
2/15/2012		6368	6368	260	4200	2.26E-02	19 U	0.00E+00	100	3.99E-04	19 U	0.00E+00	700	2.74E-03	53	2.07E-04	19 U	0.00E+00
3/15/2012		6946	6946	350	4000	2.90E-02	15 U	0.00E+00	120	6.44E-04	15 U	0.00E+00	38	2.00E-04	38	2.00E-04	15 U	0.00E+00
4/19/2012		7629	7629	380	5200	4.09E-02	16 U	0.00E+00	160	9.33E-04	16 U	0.00E+00	42	2.40E-04	43	2.46E-04	16 U	0.00E+00
5/16/2012		8143	8143	420	4100	3.56E-02	15 U	0.00E+00	110	7.09E-04	15 U	0.00E+00	43	2.71E-04	40	2.53E-04	15 U	0.00E+00
Pulse -off period June 1, 2012 to August 14, 2012																		
8/14/2012		8546	8546	420	5000	4.34E-02	16 U	0.00E+00	98	6.32E-04	16 U	0.00E+00	66	4.17E-04	27	1.70E-04	16 U	0.00E+00
9/17/2012		9033	9033	470	3700	3.60E-02	15 U	0.00E+00	140	1.01E-03	15 U	0.00E+00	15 U	0.00E+00	26	1.84E-04	15 U	0.00E+00
Pulse -off period September 17, 2012 to November 15, 2012																		
11/15/2012		9037	9037	420	4900 J	4.26E-02	28 U	0.00E+00	74 J	4.77E-04	28 U	0.00E+00	110 J	6.94E-04	29 J	1.83E-04	28 U	0.00E+00
11/15/2012	Dup	9037	9037	420	8700	7.56E-02	24 U	0.00E+00	200 J	1.29E-03	24 U	0.00E+00	220	1.39E-03	360 J	2.27E-03	24 U	0.00E+00
12/14/2012		9439	9439	150	500	1.55E-03	1.9 U	0.00E+00	14	3.22E-05	1.9 U	0.00E+00	6.8	1.53E-05	18	4.06E-05	1.9 U	0.00E+00
Pulse -off period December 14, 2012 to February 26, 2013																		
2/26/2013		9439	9439	0	520	0.00E+00	2.2 U	0.00E+00	23	0.00E+00	2.2 U	0.00E+00	5.7	0.00E+00	28	0.00E+00	2.2 U	0.00E+00
4/11/2013		9876	9876	340	430	3.02E-03	1.8 U	0.00E+00	26	1.36E-04	1.8 U	0.00E+00	7.1	3.63E-05	28	1.43E-04	1.8 U	0.00E+00
Pulse -off period April 11, 2013 to May 10, 2013																		
5/10/2013		9882	9882	340	270	1.90E-03	1.1 U	0.00E+00	23	1.20E-04	1.1 U	0.00E+00	3.4	1.74E-05	30	1.53E-04	1.1 U	0.00E+00
7/15/2013		10907	10907	340	100	7.03E-04	1.1 U	0.00E+00	13	6.78E-05	1.1 U	0.00E+00	1.7	8.69E-06	14	7.15E-05	1.1 U	0.00E+00
Pulse -off period July 15, 2013 to September 9, 2013																		
9/9/2013		10914	10914	340	170	1.20E-03	1.2 U	0.00E+00	17	8.87E-05	1.2 U	0.00E+00	2.2	1.12E-05	27	1.38E-04	1.2	6.13E-06
11/18/2013		11992	11992	260	330	1.77E-03	1.1 U	0.00E+00	7.9	3 15E-05	1.1 U	0.00E+00	5.2	2.03E-05	14	5.47E-05	1.1 U	0.00E+00
Pulse -off period November 18, 2013 to March 14, 2014																		
1/15/2014		11997	11997	320	200	1.32E-03	1.2 U	0.00E+00	5.5	2.70E-05	1.2 U	0.00E+00	3.3	1.59E-05	9.6	4.62E-05	1.2 U	0.00E+00
3/14/2014		12980	12980	180	430	1.60E-03	2.6 U	0.00E+00	6.2	1.71E-05	2.6 U	0.00E+00	8.2	2.22E-05	18	4.87E-05	2.6 U	0.00E+00

Notes:

Mass removal rate = (flow rate in scfm)(concentration in ppmv)(60)(MW) / (387*1000000)

"U" indicates non-detection at the specified reporting limit; for ND compounds, zero is used in mass removal calculations.

MW	molecular weight (values from the U.S. National Library
SCFM	standard cubic feet per minute
J	Indicates estimated value.
B	The analyte was detected in the method, field and/or trip blank.

When a duplicate sample was collected, the original sample results are used in the mass calculations.

Table 4.4
Cell 4 - Phase 2 SVE System Data
March 2011 - March 2014
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

CELL 4 SVE EFFLUENT

Date	Sample Type	SVE Run Time (hr)	Cell 4 Run Time (hr)	SVE Flow Rate (scfm)	Tetrachloroethene		Trichloroethene		Vinyl chloride		Methylene Chloride		Carbon Tetrachloride		Chloroform		Chloroethane		Benzene	
					Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)
3/11/2011		222	222	500	7200	9.26E-02	3900	3.97E-02	600 U	0.00E+00	600 U	0.00E+00	600 U	0.00E+00	600 U	0.00E+00	2400 U	0.00E+00	600 U	0.00E+00
3/18/2011		366	366	500	2900	3.73E-02	1600	1.63E-02	150 U	0.00E+00	150 U	0.00E+00	150 U	0.00E+00	150 U	0.00E+00	750 J	3.75E-03	150 U	0.00E+00
3/18/2011	Dup	366	366	500	3000	3.86E-02	1600	1.63E-02	130 UJ	0.00E+00	130 U	0.00E+00	130 U	0.00E+00	130 U	0.00E+00	1100 J	5.50E-03	130 U	0.00E+00
3/25/2011		463	463	500	3200	4.11E-02	970	9.88E-03	62 U	0.00E+00	61 NJ	4.02E-04	62 U	0.00E+00	62 U	0.00E+00	610	3.05E-03	62 U	0.00E+00
3/30/2011		558	558	500	2500	3.21E-02	1000	1.02E-02	68 U	0.00E+00	68 U	0.00E+00	68 U	0.00E+00	68 U	0.00E+00	470	2.35E-03	68 U	0.00E+00
4/8/2011		764	764	500	2400	3 09E-02	1000	1.02E-02	80 U	0.00E+00	80 U	0.00E+00	80 U	0.00E+00	80 U	0.00E+00	430	2.15E-03	80 U	0.00E+00
4/15/2011		924	924	500	1700	2.19E-02	920	9.37E-03	84 U	0.00E+00	84 U	0.00E+00	84 U	0.00E+00	84 U	0.00E+00	340 U	0.00E+00	84 U	0.00E+00
4/15/2011	Dup	924	924	500	1500 J	1.93E-02	830 J	8.45E-03	60 U	0.00E+00	60 U	0.00E+00	60 U	0.00E+00	60 U	0.00E+00	260 J	1.30E-03	60 U	0.00E+00
5/19/2011		1685	1685	500	1400	1.80E-02	530	5.40E-03	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00	67	3.35E-04	26	1.57E-04
6/16/2011		2191	2191	420	1000	1.08E-02	410	3.51E-03	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00	46 U	0.00E+00	14	7.12E-05
6/16/2011	Dup	2191	2191	420	960	1.04E-02	400	3.42E-03	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00	45 U	0.00E+00	12	6 10E-05
7/15/2011		2750	2750	420	570	6.16E-03	250	2.14E-03	24 U	0.00E+00	28	1.55E-04	24 U	0.00E+00	24 U	0.00E+00	95 U	0.00E+00	24 U	0.00E+00
8/22/2011		3133	3133	420	920	9.93E-03	380	3.25E-03	27 U	0.00E+00	27 U	0.00E+00	27 U	0.00E+00	27 U	0.00E+00	110 U	0.00E+00	27 U	0.00E+00
8/22/2011	Dup	3133	3133	420	940	1.02E-02	360	3.08E-03	22 U	0.00E+00	22 U	0.00E+00	22 U	0.00E+00	22 U	0.00E+00	90 U	0.00E+00	22 U	0.00E+00
9/15/2011		3630	3630	420	660	7.13E-03	270	2.31E-03	22 U	0.00E+00	22 U	0.00E+00	22 U	0.00E+00	22 U	0.00E+00	90 U	0.00E+00	22 U	0.00E+00
10/14/2011		4226	4226	420	390	4.21E-03	180	1.54E-03	19 U	0.00E+00	19 U	0.00E+00	19 U	0.00E+00	19 U	0.00E+00	77 U	0.00E+00	19 U	0.00E+00
11/21/2011		5019	5019	380	360	3.52E-03	180	1.39E-03	16 U	0.00E+00	160 U	0.00E+00	16 U	0.00E+00	16 U	0.00E+00	63 U	0.00E+00	16 U	0.00E+00
12/14/2011		5343	5343	260	360	2.41E-03	160	8.47E-04	19 U	0.00E+00	190 U	0.00E+00	19 U	0.00E+00	19 U	0.00E+00	74 U	0.00E+00	19 U	0.00E+00
1/19/2012		5993	5993	0	320	0.00E+00	180	0.00E+00	24 U	0.00E+00	24 U	0.00E+00	24 U	0.00E+00	24 U	0.00E+00	97 U	0.00E+00	24 U	0.00E+00
2/15/2012		6368	6368	260	280	1.87E-03	150	7.94E-04	19 U	0.00E+00	19 U	0.00E+00	19 U	0.00E+00	19 U	0.00E+00	78 U	0.00E+00	19 U	0.00E+00
3/15/2012		6946	6946	350	240	2.16E-03	140	9.98E-04	15 U	0.00E+00	15 U	0.00E+00	15 U	0.00E+00	15 U	0.00E+00	58 U	0.00E+00	15 U	0.00E+00
4/19/2012		7629	7629	380	400	3.91E-03	180	1.39E-03	16 U	0.00E+00	16 U	0.00E+00	16 U	0.00E+00	16 U	0.00E+00	62 U	0.00E+00	16 U	0.00E+00
5/16/2012		8143	8143	420	320	3.46E-03	150	1.28E-03	15 U	0.00E+00	15 U	0.00E+00	15 U	0.00E+00	15 U	0.00E+00	61 U	0.00E+00	15 U	0.00E+00
Pulse -off period June 1, 2012 to August 14, 2012																				
8/14/2012		8546	8546	420	490	5.29E-03	180	1.54E-03	16 U	0.00E+00	160 U	0.00E+00	16 U	0.00E+00	16 U	0.00E+00	63 U	0.00E+00	16 U	0.00E+00
9/17/2012		9033	9033	470	410	4.95E-03	220	2.11E-03	15 U	0.00E+00	150 U	0.00E+00	15 U	0.00E+00	15 U	0.00E+00	61 U	0.00E+00	15 U	0.00E+00
Pulse -off period September 17, 2012 to November 15, 2012																				
11/15/2012		9037	9037	420	260 J	2.81E-03	150 J	1.28E-03	28 U	0.00E+00	280 U	0.00E+00	28 U	0.00E+00	28 U	0.00E+00	110 U	0.00E+00	28 U	0.00E+00
11/15/2012	Dup	9037	9037	420	1200 J	1.30E-02	390 J	3.34E-03	24 U	0.00E+00	240 U	0.00E+00	24 U	0.00E+00	24 U	0.00E+00	94 U	0.00E+00	24 U	0.00E+00
12/14/2012		9439	9439	150	62	2.39E-04	28	8.56E-05	1.9 U	0.00E+00	19 U	0.00E+00	1.9 U	0.00E+00	1.9 U	0.00E+00	7.5 U	0.00E+00	1.9 U	0.00E+00
Pulse -off period December 14, 2012 to February 26, 2013																				
2/26/2013		9439	9439	0	130	0.00E+00	27	0.00E+00	2.2 U	0.00E+00	22 U	0.00E+00	2.2 U	0.00E+00	2.2 U	0.00E+00	8.7 U	0.00E+00	2.2 U	0.00E+00
4/11/2013		9876	9876	340	98	8.57E-04	25	1.73E-04	1.8 U	0.00E+00	18 U	0.00E+00	1.8 U	0.00E+00	1.8 U	0.00E+00	7.1 U	0.00E+00	1.8 U	0.00E+00
Pulse -off period April 11, 2013 to May 10, 2013																				
5/10/2013		9882	9882	340	120	1.05E-03	23	1.59E-04	1.1 U	0.00E+00	11 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	4.5 U	0.00E+00	1.1 U	0.00E+00
7/15/2013		10907	10907	340	180	1.57E-03	30	2.08E-04	1.1 U	0.00E+00	11 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	4.6 U	0.00E+00	1.1 U	0.00E+00
Pulse -off period July 15, 2013 to September 9, 2013																				
9/9/2013		10914	10914	340	350	3.06E-03	50	3.46E-04	1.2 U	0.00E+00	12 U	0.00E+00	1 2 U	0.00E+00	1.2 U	0.00E+00	4.6 U	0.00E+00	1.2 U	0.00E+00
11/18/2013		11992	11992	260	50	3.34E-04	13	6.89E-05	1.1 U	0.00E+00	11 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	4.4 U	0.00E+00	1.1 U	0.00E+00
Pulse -off period November 18, 2013 to March 14, 2014																				
1/15/2014		11997	11997	320	51	4.20E-04	11	7.17E-05	1.2 U	0.00E+00	12 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	4.8 U	0.00E+00	1.2 U	0.00E+00
3/14/2014		12980	12980	180	7.8	3.61E-05	14	5.13E-05	2.6 U	0.00E+00	26 U	0.00E+00	2.6 U	0.00E+00	2.6 U	0.00E+00	10 U	0.00E+00	2.6 U	0.00E+00

Notes:

Mass removal rate = (flow rate in scfm)(concentration in ppmv)(60)(MW) / (387*1000000)

"U" indicates non-detection at the specified reporting limit; for ND compounds, zero is used in mass removal calculations.

MW	molecular weight (values from the U.S. National Library
SCFM	standard cubic feet per minute
J	Indicates estimated value.
B	The analyte was detected in the method, field and/or trip blank.

When a duplicate sample was collected, the original sample results are used in the mass calculations.

Table 4.4
Cell 4 - Phase 2 SVE System Data
March 2011 - March 2014
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

CELL 4 SVE EFFLUENT

Date	Sample Type	SVE Run Time (hr)	Cell 4 Run Time (hr)	SVE Flow Rate (scfm)	Toluene		Ethylbenzene		m&p-Xylenes		o-Xylenes		Acetone		Methyl Ethyl Ketone (MEK)		Mass Removal Rate (lb/hr)	Cumulative Mass Removal (lb)
					Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)		
3/11/2011		222	222	500	600 U	0.00E+00	600 U	0.00E+00	710	5.84E-03	600 U	0.00E+00	2400 U	0.00E+00	2400 U	0.00E+00	1.72E+00	381.87
3/18/2011		366	366	500	620 J	4.43E-03	150 U	0.00E+00	240	1.98E-03	200	1.65E-03	1500 J	6.75E-03	590 U	0.00E+00	5.09E-01	453.50
3/18/2011	Dup	366	366	500	380 J	2.71E-03	130 U	0.00E+00	250	2.06E-03	240	1.98E-03	690 J	3.11E-03	540 U	0.00E+00	4.97E-01	453.50
3/25/2011		463	463	500	140	1.00E-03	62 U	0.00E+00	78	6.42E-04	67	5.51E-04	250 U	0.00E+00	250 U	0.00E+00	2.95E-01	482.07
3/30/2011		558	558	500	190	1.36E-03	68 U	0.00E+00	250	2.06E-03	140	1.15E-03	270 U	0.00E+00	270 U	0.00E+00	3.18E-01	512.25
4/8/2011		764	764	500	200	1.43E-03	120	9.88E-04	560	4.61E-03	260	2.14E-03	320 U	0.00E+00	320 U	0.00E+00	2.91E-01	572.27
4/15/2011		924	924	500	170	1.21E-03	110	9.05E-04	540	4.44E-03	260	2.14E-03	340 U	0.00E+00	340 U	0.00E+00	2.36E-01	610.05
4/15/2011	Dup	924	924	500	140 J	1.00E-03	99 J	8.15E-04	540 J	4.44E-03	230 J	1.89E-03	240 J,B	1.08E-03	240 U	0.00E+00	2.12E-01	610.05
5/19/2011		1685	1685	500	100	7.14E-04	140	1.15E-03	920	7.57E-03	420	3.46E-03	81	3.65E-04	43 U	0.00E+00	1.58E-01	730.28
6/16/2011		2191	2191	420	51	3.06E-04	83	5.74E-04	600	4.15E-03	280	1.94E-03	46 J,B	1.74E-04	46 U	0.00E+00	1.14E-01	753.86
6/16/2011	Dup	2191	2191	420	53	3.18E-04	78	5.39E-04	580	4.01E-03	270	1.87E-03	69 J,B	2.61E-04	45 U	0.00E+00	1.09E-01	785.55
7/15/2011		2750	2750	420	28	1.68E-04	41	2.83E-04	270	1.87E-03	120	8.30E-04	180	6.81E-04	95 U	0.00E+00	8.10E-02	830.85
8/22/2011		3133	3133	420	35 J	2.10E-04	59 J	4.08E-04	340	2.35E-03	140	9.68E-04	110 U	0.00E+00	110 U	0.00E+00	9.95E-02	868.97
8/22/2011	Dup	3133	3133	420	22 UJ	0.00E+00	30 J	2.07E-04	310	2.14E-03	130	8.99E-04	90 U	0.00E+00	90 U	0.00E+00	9.87E-02	868.65
9/15/2011		3630	3630	420	22 U	0.00E+00	31	2.14E-04	340	2.35E-03	130	8.99E-04	90 U	0.00E+00	90 U	0.00E+00	7.63E-02	906.88
10/14/2011		4226	4226	420	38	2.28E-04	19 U	0.00E+00	170	1.18E-03	70	4.84E-04	77 U	0.00E+00	77 U	0.00E+00	4.78E-02	935.35
11/21/2011		5019	5019	380	16 U	0.00E+00	17	1.06E-04	220	1.38E-03	100	6.25E-04	160 U	0.00E+00	63 U	0.00E+00	3.93E-02	966.50
12/14/2011		5343	5343	260	19 U	0.00E+00	19 U	0.00E+00	76	3.25E-04	55	2.35E-04	190 UJ	0.00E+00	74 U	0.00E+00	2.73E-02	975.34
1/19/2012		5993	5993	0	36	0.00E+00	24 U	0.00E+00	78	0.00E+00	50	0.00E+00	97 U	0.00E+00	97 U	0.00E+00	0.00E+00	975.34
2/15/2012		6368	6368	260	19 U	0.00E+00	19 U	0.00E+00	58	2.48E-04	40	1.71E-04	300	7.02E-04	78 U	0.00E+00	2.97E-02	986.48
3/15/2012		6946	6946	350	15 U	0.00E+00	15 U	0.00E+00	44	2.53E-04	31	1.79E-04	58 U	0.00E+00	58 U	0.00E+00	3.36E-02	1005.89
4/19/2012		7629	7629	380	16 U	0.00E+00	16 U	0.00E+00	48	3.00E-04	33	2.06E-04	62 U	0.00E+00	62 U	0.00E+00	4.81E-02	1038.74
5/16/2012		8143	8143	420	15 U	0.00E+00	15 U	0.00E+00	28	1.94E-04	23	1.59E-04	61 U	0.00E+00	61 U	0.00E+00	4.19E-02	1060.30
Pulse -off period June 1, 2012 to August 14, 2012																		
8/14/2012		8546	8546	420	16 U	0.00E+00	16 U	0.00E+00	16 U	0.00E+00	16 U	0.00E+00	160 U	0.00E+00	63 U	0.00E+00	5.15E-02	1081.05
9/17/2012		9033	9033	470	15 U	0.00E+00	15 U	0.00E+00	15 U	0.00E+00	15 U	0.00E+00	150 U	0.00E+00	61 U	0.00E+00	4.42E-02	1102.58
Pulse -off period September 17, 2012 to November 15, 2012																		
11/15/2012		9037	9037	420	28 U	0.00E+00	28 U	0.00E+00	28 U	0.00E+00	28 U	0.00E+00	280 U	0.00E+00	110 U	0.00E+00	4.80E-02	1102.78
11/15/2012	Dup	9037	9037	420	24 U	0.00E+00	24 U	0.00E+00	24 U	0.00E+00	24 U	0.00E+00	240 U	0.00E+00	94 U	0.00E+00	9.68E-02	1102.97
12/14/2012		9439	9439	150	1.9 U	0.00E+00	1.9 U	0.00E+00	1.9 U	0.00E+00	1.9 U	0.00E+00	19 U	0.00E+00	7.5 U	0.00E+00	1.96E-03	1103.57
Pulse -off period December 14, 2012 to February 26, 2013																		
2/26/2013		9439	9439	0	2.2 U	0.00E+00	2.2 U	0.00E+00	2.2 U	0.00E+00	2.2 U	0.00E+00	22 U	0.00E+00	8.7 U	0.00E+00	0.00E+00	1103.57
4/11/2013		9876	9876	340	1.8 U	0.00E+00	1.8 U	0.00E+00	1.8 U	0.00E+00	1.8 U	0.00E+00	18 U	0.00E+00	7.1 U	0.00E+00	4.37E-03	1105.48
Pulse -off period April 11, 2013 to May 10, 2013																		
5/10/2013		9882	9882	340	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	11 U	0.00E+00	4.5 U	0.00E+00	3.40E-03	1105.50
7/15/2013		10907	10907	340	19	9.23E-05	1.2	6.72E-06	2.2	1.23E-05	1.1 U	0.00E+00	24	7.35E-05	4.9	1.86E-05	2.84E-03	1108.40
Pulse -off period July 15, 2013 to September 9, 2013																		
9/9/2013		10914	10914	340	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	14	4.29E-05	4.6 U	0.00E+00	4.89E-03	1108.44
11/18/2013		11992	11992	260	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	1.1 U	0.00E+00	11 U	0.00E+00	4.4 U	0.00E+00	2.28E-03	1110.90
Pulse -off period November 18, 2013 to March 14, 2014																		
1/15/2014		11997	11997	320	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	1.2 U	0.00E+00	12 U	0.00E+00	4.8 U	0.00E+00	1.90E-03	1110.91
3/14/2014		12980	12980	180	2.6 U	0.00E+00	2.6 U	0.00E+00	2.6 U	0.00E+00	2.6 U	0.00E+00	26 U	0.00E+00	10 U	0.00E+00	1.78E-03	1112.65

Notes:

Mass removal rate = (flow rate in scfm)(concentration in ppmv)(60)(MW) / (387*1000000)

"U" indicates non-detection at the specified reporting limit; for ND compounds, zero is used in mass removal calculations.

MW	molecular weight (values from the U.S. National Library
SCFM	standard cubic feet per minute
J	Indicates estimated value.
B	The analyte was detected in the method, field and/or trip blank.

When a duplicate sample was collected, the original sample results are used in the mass calculations.

Table 4.5
Cell 5 - Phase 2 SVE System Data
March 2011 - March 2014
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

CELL 5 SVE EFFLUENT

Date	Sample Type	SVE Run Time (hr)	Cell 5 Run Time (hr)	SVE Flow Rate (scfm)	1,1,1-Trichloroethane		1,1,2-Trichloroethane		1,1-Dichloroethane		1,2-Dichloroethane		1,1-Dichloroethene		cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		Tetrachloroethene	
					Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)
3/11/2011		218	218	360	28000	2.08E-01	100 U	0.00E+00	2400	1.33E-02	100 U	0.00E+00	740	4.00E-03	10000	5.41E-02	100 U	0.00E+00	5900	5.46E-02
3/18/2011		362	362	360	13000	9.68E-02	52 U	0.00E+00	1100	6.08E-03	52 U	0.00E+00	280	1.52E-03	4800	2.60E-02	52 U	0.00E+00	6800	6.29E-02
3/25/2011		459	459	360	8900	6.63E-02	30 U	0.00E+00	650	3.59E-03	30 U	0.00E+00	200	1.08E-03	2600	1.41E-02	30 U	0.00E+00	5400	5.00E-02
3/30/2011		553	553	360	4600	3.43E-02	13 U	0.00E+00	310	1.71E-03	13 U	0.00E+00	100	5.41E-04	1300	7.03E-03	13 U	0.00E+00	4000	3.70E-02
4/8/2011		759	759	360	4600	3.43E-02	20 U	0.00E+00	330	1.82E-03	20 U	0.00E+00	95	5.14E-04	1100	5.95E-03	20 U	0.00E+00	5700	5.28E-02
4/15/2011		920	920	360	4600	3.43E-02	20 U	0.00E+00	370	2.04E-03	20 U	0.00E+00	69	3.73E-04	980	5.30E-03	20 U	0.00E+00	4600	4.26E-02
5/19/2011		1681	1681	330	2800	1.91E-02	12 U	0.00E+00	250	1.27E-03	12 U	0.00E+00	34	1.69E-04	730	3.62E-03	12 U	0.00E+00	7800	6.62E-02
6/16/2011		2187	2187	300	1800	1.12E-02	7.8 U	0.00E+00	170	7.82E-04	7.8 U	0.00E+00	23 J	1.04E-04	520	2.34E-03	7.8 U	0.00E+00	2400	1.85E-02
7/15/2011		2745	2745	220	2400	1.09E-02	7.6 U	0.00E+00	180	6.08E-04	7.6 U	0.00E+00	27	8.93E-05	840	2.78E-03	7.6 U	0.00E+00	2700	1.53E-02
8/22/2011		3129	3129	260	1700	9.14E-03	5.0 U	0.00E+00	150	5.98E-04	5.0 U	0.00E+00	21	8.21E-05	690	2.70E-03	5.0 U	0.00E+00	2000	1.34E-02
9/15/2011		3626	3626	220	1400	6.37E-03	4.5 U	0.00E+00	69	2.33E-04	4.5 U	0.00E+00	22	7.27E-05	380	1.26E-03	4.5 U	0.00E+00	1100	6.22E-03
10/14/2011		4222	4222	220	980	4.46E-03	3.9 U	0.00E+00	57	1.92E-04	3.9 U	0.00E+00	19	6.28E-05	310	1.03E-03	3.9 U	0.00E+00	760	4.30E-03
11/21/2011		5015	5015	200	690	2.85E-03	3.2 U	0.00E+00	55	1.69E-04	3.2 U	0.00E+00	45	1.35E-04	290	8.72E-04	3.2 U	0.00E+00	380	1.95E-03
11/21/2011	Dup	5015	5015	200	700	2.90E-03	3.1 U	0.00E+00	57	1.75E-04	3.1 U	0.00E+00	59	1.77E-04	300	9.02E-04	3.1 U	0.00E+00	390	2.01E-03
12/14/2011		5339	5339	200	890	3.68E-03	3.2 U	0.00E+00	62	1.90E-04	3.2 U	0.00E+00	64	1.92E-04	270	8.12E-04	3.2 U	0.00E+00	350	1.80E-03
1/19/2012		5958	5958	0	540	0.00E+00	2.8 U	0.00E+00	17	0.00E+00	2.8 U	0.00E+00	9.9	0.00E+00	69	0.00E+00	2.8 U	0.00E+00	78	0.00E+00
2/15/2012		6364	6364	0	990	0.00E+00	4.1 U	0.00E+00	24	0.00E+00	4.1 U	0.00E+00	100	0.00E+00	230	0.00E+00	4.1 U	0.00E+00	150	0.00E+00
3/15/2012		6942	6942	0	1100	0.00E+00	3.8 U	0.00E+00	43	0.00E+00	3.8 U	0.00E+00	20	0.00E+00	220	0.00E+00	3.8 U	0.00E+00	140	0.00E+00
4/19/2012		7625	7625	80	650	1.08E-03	2.4 U	0.00E+00	28	3.44E-05	2.4 U	0.00E+00	8.1	9.74E-06	130	1.56E-04	2.4 U	0.00E+00	100	2.06E-04
5/16/2012		8138	8138	200	650	2.69E-03	2.0 U	0.00E+00	28	8.59E-05	2.0 U	0.00E+00	8.9	2.68E-05	110	3.31E-04	2.0 U	0.00E+00	130	6.68E-04
Pulse -off period June 1, 2012 to August 14, 2012																				
8/14/2012		8541	8541	360	710	3.23E-03	2.5 U	0.00E+00	44	1.49E-04	2.5 U	0.00E+00	11	3.64E-05	110	3.64E-04	2.5 U	0.00E+00	540	3.05E-03
9/17/2012		9029	9029	360	2000	8.27E-03	8.0 U	0.00E+00	29	8.90E-05	8.0 U	0.00E+00	19	5.71E-05	42	1.26E-04	8.0 U	0.00E+00	190	9.77E-04
Pulse -off period September 17, 2012 to November 15, 2012																				
11/15/2012		9033	9033	220	1200	5.46E-03	4.4 U	0.00E+00	19	6.41E-05	4.4 U	0.00E+00	33	1.09E-04	8	2.65E-05	4.4 U	0.00E+00	55	3.11E-04
12/14/2012		9436	9436	200	1200	4.96E-03	4.8 U	0.00E+00	35	1.07E-04	4.8 U	0.00E+00	16	4.81E-05	37	1.11E-04	4.8 U	0.00E+00	61	3.14E-04
Pulse -off period December 14, 2012 to February 26, 2013																				
2/26/2013		9511	9511	440	70	6.37E-04	6.8 U	0.00E+00	6.8 U	0.00E+00	6.8 U	0.00E+00	6.8 U	0.00E+00	6.8 U	0.00E+00	6.8 U	0.00E+00	6.8 U	0.00E+00
4/11/2013		9952	9952	420	1600	1.39E-02	8	6.95E-05	160	1.03E-03	5.1 U	0.00E+00	20	1.26E-04	88	5.56E-04	5.1 U	0.00E+00	320	3.46E-03
Pulse -off period April 11, 2013 to May 10, 2013																				
5/10/2013		9958	9958	420	1200	1.04E-02	5.4 U	0.00E+00	86	5.54E-04	5.4 U	0.00E+00	12	7.57E-05	45	2.84E-04	5.4 U	0.00E+00	220	2.38E-03
7/15/2013		10984	10984	360	1600	1.19E-02	12	8.93E-05	100	5.52E-04	4.7 U	0.00E+00	25	1.35E-04	38	2.06E-04	4.7 U	0.00E+00	310	2.87E-03
Pulse -off period July 15, 2013 to September 9, 2013																				
9/9/2013		10991	10991	380	810	6.37E-03	4 U	0.00E+00	30	1.75E-04	4 U	0.00E+00	6.3	3.60E-05	16	9.14E-05	4 U	0.00E+00	170	1.66E-03
11/18/2013		12069	12069	380	1600	1.26E-02	7.6 U	0.00E+00	87	5.07E-04	7.6 U	0.00E+00	23	1.31E-04	50	2.86E-04	7.6 U	0.00E+00	180	1.76E-03
Pulse -off period November 18, 2013 to January 15, 2014																				
1/15/2014		12074	12074	380	950	7.47E-03	3.5 U	0.00E+00	24	1.40E-04	3.5 U	0.00E+00	10	5.71E-05	23	1.31E-04	3.5 U	0.00E+00	82	8.01E-04
3/14/2014		13057	13057	380	1400	1.10E-02	7.8 U	0.00E+00	32	1.87E-04	7.8 U	0.00E+00	24	1.37E-04	88	5.03E-04	7.8 U	0.00E+00	30	2.93E-04

Notes:

Mass removal rate = (flow rate in scfm)(concentration in ppmv)(60)(MW) / (387*1000000)

"U" indicates non-detection at the specified reporting limit; for ND compounds, zero is used in mass removal calculations.

MW	molecular weight (values from the U.S. National Library
SCFM	standard cubic feet per minute
J	Indicates estimated value.
B	The analyte was detected in the method, field and/or trip blank.

When a duplicate sample was collected, the original sample results are used in the mass calculations.

Table 4.5
Cell 5 - Phase 2 SVE System Data
March 2011 - March 2014
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

CELL 5 SVE EFFLUENT

Date	Sample Type	SVE Run Time (hr)	Cell 5 Run Time (hr)	SVE Flow Rate (scfm)	Trichloroethene		Vinyl chloride		Methylene Chloride		Carbon Tetrachloride		Chloroform		Chloroethane		Benzene		Toluene	
					Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)
3/11/2011		218	218	360	1400	1.03E-02	100 U	0.00E+00	100 U	0.00E+00	100 U	0.00E+00	100 U	0.00E+00	420 U	0.00E+00	100 U	0.00E+00	350	1.80E-03
3/18/2011		362	362	360	1100	8.07E-03	52 U	0.00E+00	52 U	0.00E+00	52 U	0.00E+00	52 U	0.00E+00	210 U	0.00E+00	52 U	0.00E+00	120 JB	6.17E-04
3/25/2011		459	459	360	760	5.57E-03	30 U	0.00E+00	33	1.56E-04	30 U	0.00E+00	30 U	0.00E+00	120 U	0.00E+00	30 U	0.00E+00	73	3.75E-04
3/30/2011		553	553	360	420	3.08E-03	13 U	0.00E+00	13 U	0.00E+00	13 U	0.00E+00	13 U	0.00E+00	51 U	0.00E+00	13 U	0.00E+00	37	1.90E-04
4/8/2011		759	759	360	560	4.11E-03	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	81 U	0.00E+00	20 U	0.00E+00	57	2.93E-04
4/15/2011		920	920	360	560	4.11E-03	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	20 U	0.00E+00	81 U	0.00E+00	20 U	0.00E+00	85	4.37E-04
5/19/2011		1681	1681	330	360	2.42E-03	12 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00	47 U	0.00E+00	12 U	0.00E+00	120	5.66E-04
6/16/2011		2187	2187	300	180	1.10E-03	7.8 U	0.00E+00	7.8 U	0.00E+00	7.8 U	0.00E+00	7.8 U	0.00E+00	31 U	0.00E+00	12	4.36E-05	7.8 U	0.00E+00
7/15/2011		2745	2745	220	280	1.25E-03	7.6 U	0.00E+00	20	5.79E-05	7.6 U	0.00E+00	7.6 U	0.00E+00	30 U	0.00E+00	7.6 U	0.00E+00	49	1.54E-04
8/22/2011		3129	3129	260	160	8.47E-04	5.0 U	0.00E+00	5.0 U	0.00E+00	5.0 U	0.00E+00	5.0 U	0.00E+00	20 U	0.00E+00	7.6	2.39E-05	5.0 U	0.00E+00
9/15/2011		3626	3626	220	83	3.72E-04	4.5 U	0.00E+00	4.5 U	0.00E+00	4.5 U	0.00E+00	4.5 U	0.00E+00	18 U	0.00E+00	5	1.33E-05	4.5 U	0.00E+00
10/14/2011		4222	4222	220	50	2.24E-04	3.9 U	0.00E+00	3.9 U	0.00E+00	3.9 U	0.00E+00	3.9 U	0.00E+00	16 U	0.00E+00	3.9 U	0.00E+00	3.9 U	0.00E+00
11/21/2011		5015	5015	200	27	1.10E-04	3.2 U	0.00E+00	32 U	0.00E+00	3.2 U	0.00E+00	3.2 U	0.00E+00	13 U	0.00E+00	3.2 U	0.00E+00	3.2 U	0.00E+00
11/21/2011	Dup	5015	5015	200	28	1.14E-04	3.1 U	0.00E+00	31 U	0.00E+00	3.1 U	0.00E+00	3.1 U	0.00E+00	12 U	0.00E+00	3.1 U	0.00E+00	3.1 U	0.00E+00
12/14/2011		5339	5339	200	24	9.78E-05	3.2 U	0.00E+00	32 U	0.00E+00	3.2 U	0.00E+00	3.2 U	0.00E+00	13 U	0.00E+00	3.2 U	0.00E+00	3.2 U	0.00E+00
1/19/2012		5958	5958	0	10	0.00E+00	2.8 U	0.00E+00	2.8 U	0.00E+00	2.8 U	0.00E+00	2.8 U	0.00E+00	11 U	0.00E+00	2.8 U	0.00E+00	2.8 U	0.00E+00
2/15/2012		6364	6364	0	19	0.00E+00	4.1 U	0.00E+00	4.1 U	0.00E+00	4.1 U	0.00E+00	4.1 U	0.00E+00	16 U	0.00E+00	4.1 U	0.00E+00	4.1 U	0.00E+00
3/15/2012		6942	6942	0	25	0.00E+00	3.8 U	0.00E+00	3.8 U	0.00E+00	3.8 U	0.00E+00	3.8 U	0.00E+00	15 U	0.00E+00	3.8 U	0.00E+00	3.8 U	0.00E+00
4/19/2012		7625	7625	80	19	3.10E-05	2.4 U	0.00E+00	2.4 U	0.00E+00	2.4 U	0.00E+00	2.4 U	0.00E+00	9.4 U	0.00E+00	2.4 U	0.00E+00	2.4 U	0.00E+00
5/16/2012		8138	8138	200	24	9.78E-05	2.0 U	0.00E+00	2.0 U	0.00E+00	2.0 U	0.00E+00	2.0 U	0.00E+00	7.9 U	0.00E+00	2.0 U	0.00E+00	2.0 U	0.00E+00
Pulse -off period June 1, 2012 to August 14, 2012																				
8/14/2012		8541	8541	360	64	2.87E-04	2.5 U	0.00E+00	25 U	0.00E+00	2.5 U	0.00E+00	2.5 U	0.00E+00	9.9 U	0.00E+00	2.5 U	0.00E+00	2.5 U	0.00E+00
9/17/2012		9029	9029	360	71	2.89E-04	8.0 U	0.00E+00	80 U	0.00E+00	8.0 U	0.00E+00	8.0 U	0.00E+00	32 U	0.00E+00	8.0 U	0.00E+00	8.0 U	0.00E+00
Pulse -off period September 17, 2012 to November 15, 2012																				
11/15/2012		9033	9033	220	39	1.75E-04	4.4 U	0.00E+00	44 U	0.00E+00	4.4 U	0.00E+00	4.4 U	0.00E+00	18 U	0.00E+00	4.4 U	0.00E+00	4.4 U	0.00E+00
12/14/2012		9436	9436	200	60	2.44E-04	4.8 U	0.00E+00	48 U	0.00E+00	4.8 U	0.00E+00	4.8 U	0.00E+00	19 U	0.00E+00	4.8 U	0.00E+00	4.8 U	0.00E+00
Pulse -off period December 14, 2012 to February 26, 2013																				
2/26/2013		9511	9511	440	6.8 U	0.00E+00	6.8 U	0.00E+00	68 U	0.00E+00	6.8 U	0.00E+00	6.8 U	0.00E+00	27 U	0.00E+00	12	6.39E-05	6.8 U	0.00E+00
4/11/2013		9952	9952	420	110	9.41E-04	5.1 U	0.00E+00	51 U	0.00E+00	5.1 U	0.00E+00	5.1 U	0.00E+00	20 U	0.00E+00	5.1 U	0.00E+00	5.1 U	0.00E+00
Pulse -off period April 11, 2013 to May 10, 2013																				
5/10/2013		9958	9958	420	79	6.76E-04	5.4 U	0.00E+00	54 U	0.00E+00	5.4 U	0.00E+00	5.4 U	0.00E+00	22 U	0.00E+00	5.4 U	0.00E+00	5.4 U	0.00E+00
7/15/2013		10984	10984	360	100	7.33E-04	4.7 U	0.00E+00	47 U	0.00E+00	4.7 U	0.00E+00	4.7 U	0.00E+00	19 U	0.00E+00	4.7 U	0.00E+00	4.7 U	0.00E+00
Pulse -off period July 15, 2013 to September 9, 2013																				
9/9/2013		10991	10991	380	62	4.80E-04	4 U	0.00E+00	40 U	0.00E+00	4 U	0.00E+00	4 U	0.00E+00	16 U	0.00E+00	4 U	0.00E+00	4 U	0.00E+00
11/18/2013		12069	12069	380	71	5.50E-04	7.6 U	0.00E+00	76 U	0.00E+00	7.6 U	0.00E+00	7.6 U	0.00E+00	31 U	0.00E+00	7.6 U	0.00E+00	7.6 U	0.00E+00
Pulse -off period November 18, 2013 to January 15, 2014																				
1/15/2014		12074	12074	380	37	2.86E-04	3.5 U	0.00E+00	35 U	0.00E+00	3.5 U	0.00E+00	3.5 U	0.00E+00	14 U	0.00E+00	3.5 U	0.00E+00	3.5 U	0.00E+00
3/14/2014		13057	13057	380	41	3.17E-04	7.8 U	0.00E+00	78 U	0.00E+00	7.8 U	0.00E+00	7.8 U	0.00E+00	31 U	0.00E+00	7.8 U	0.00E+00	7.8 U	0.00E+00

Notes:

Mass removal rate = (flow rate in scfm)(concentration in ppmv)(60)(MW) / (387*1000000)

"U" indicates non-detection at the specified reporting limit; for ND compounds, zero is used in mass removal calculations.

MW	molecular weight (values from the U.S. National Library
SCFM	standard cubic feet per minute
J	Indicates estimated value.
B	The analyte was detected in the method, field and/or trip blank.

When a duplicate sample was collected, the original sample results are used in the mass calculations.

Table 4.5
Cell 5 - Phase 2 SVE System Data
March 2011 - March 2014
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

CELL 5 SVE EFFLUENT

Date	Sample Type	SVE Run Time (hr)	Cell 5 Run Time (hr)	SVE Flow Rate (scfm)	Ethylbenzene		m&p-Xylenes		o-Xylenes		Acetone		Methyl Ethyl Ketone (MEK)		Mass Removal Rate (lb/hr)	Cumulative Mass Removal (lb)
					Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)	Conc (ppbv)	Mass Removal Rate (lb/hr)		
3/11/2011		218	218	360	100 U	0.00E+00	100 U	0.00E+00	100 U	0.00E+00	420 U	0.00E+00	420 U	0.00E+00	3.47E-01	75.54
3/18/2011		362	362	360	52 U	0.00E+00	59	3.50E-04	110	6.52E-04	210 U	0.00E+00	210 U	0.00E+00	2.03E-01	104.77
3/25/2011		459	459	360	30 U	0.00E+00	30 U	0.00E+00	47	2.79E-04	130	4.21E-04	120 U	0.00E+00	1.42E-01	118.53
3/30/2011		553	553	360	16	9.48E-05	23	1.36E-04	46	2.73E-04	99	3.21E-04	51 U	0.00E+00	8.47E-02	126.48
4/8/2011		759	759	360	38	2.25E-04	84	4.98E-04	120	7.11E-04	81 U	0.00E+00	81 U	0.00E+00	1.01E-01	147.32
4/15/2011		920	920	360	45	2.67E-04	160	9.48E-04	140	8.30E-04	180 J,B	5.83E-04	81 U	0.00E+00	9.17E-02	162.08
5/19/2011		1681	1681	330	12 U	0.00E+00	12 U	0.00E+00	12 U	0.00E+00	360	1.07E-03	47 U	0.00E+00	9.44E-02	233.92
6/16/2011		2187	2187	300	15	7.41E-05	54	2.67E-04	64	3.16E-04	69 J,B	1.86E-04	31 U	0.00E+00	3.49E-02	251.58
7/15/2011		2745	2745	220	13	4.71E-05	120	4.35E-04	140	5.07E-04	94	1.86E-04	30 U	0.00E+00	3.23E-02	269.61
8/22/2011		3129	3129	260	5.9	2.52E-05	19	8.13E-05	29	1.24E-04	62 J,B	1.45E-04	20 U	0.00E+00	2.71E-02	280.03
9/15/2011		3626	3626	220	4.5 U	0.00E+00	14	5.07E-05	17	6.16E-05	49	9.71E-05	18 U	0.00E+00	1.47E-02	287.36
10/14/2011		4222	4222	220	3.9 U	0.00E+00	7.1	2.57E-05	10	3.62E-05	16 U	0.00E+00	16 U	0.00E+00	1.03E-02	293.51
11/21/2011		5015	5015	200	3.2 U	0.00E+00	4.5	1.48E-05	6.1	2.01E-05	36	6.48E-05	13 U	0.00E+00	6.19E-03	298.43
11/21/2011	Dup	5015	5015	200	3.1 U	0.00E+00	4.2	1.38E-05	6.2	2.04E-05	31 U	0.00E+00	12 U	0.00E+00	6.30E-03	298.51
12/14/2011		5339	5339	200	3.2 U	0.00E+00	3.2 U	0.00E+00	3.2 U	0.00E+00	32 UJ	0.00E+00	13 U	0.00E+00	6.77E-03	300.62
1/19/2012		5958	5958	0	2.8 U	0.00E+00	2.8 U	0.00E+00	2.8 U	0.00E+00	11 U	0.00E+00	11 U	0.00E+00	0.00E+00	300.62
2/15/2012		6364	6364	0	4.1 U	0.00E+00	4.1 U	0.00E+00	4.1 U	0.00E+00	16 U	0.00E+00	16 U	0.00E+00	0.00E+00	300.62
3/15/2012		6942	6942	0	3.8 U	0.00E+00	3.8 U	0.00E+00	3.8 U	0.00E+00	15 U	0.00E+00	15 U	0.00E+00	0.00E+00	300.62
4/19/2012		7625	7625	80	2.4 U	0.00E+00	2.4 U	0.00E+00	2.4 U	0.00E+00	9.4 U	0.00E+00	9.4 U	0.00E+00	1.51E-03	301.65
5/16/2012		8138	8138	200	2.0 U	0.00E+00	2.0 U	0.00E+00	2.0 U	0.00E+00	7.9 U	0.00E+00	7.9 U	0.00E+00	3.90E-03	303.65
Pulse -off period June 1, 2012 to August 14, 2012																
8/14/2012		8541	8541	360	2.5 U	0.00E+00	2.5 U	0.00E+00	2.5 U	0.00E+00	25 U	0.00E+00	9.9 U	0.00E+00	7.12E-03	306.52
9/17/2012		9029	9029	360	8.0 U	0.00E+00	8.0 U	0.00E+00	8.0 U	0.00E+00	80 U	0.00E+00	32 U	0.00E+00	9.81E-03	311.31
Pulse -off period September 17, 2012 to November 15, 2012																
11/15/2012		9033	9033	220	4.4 U	0.00E+00	4.4 U	0.00E+00	4.4 U	0.00E+00	44 U	0.00E+00	18 U	0.00E+00	6.15E-03	311.34
12/14/2012		9436	9436	200	4.8 U	0.00E+00	4.8 U	0.00E+00	4.8 U	0.00E+00	48 U	0.00E+00	19 U	0.00E+00	5.79E-03	313.67
Pulse -off period December 14, 2012 to February 26, 2013																
2/26/2013		9511	9511	440	6.8 U	0.00E+00	6.8 U	0.00E+00	6.8 U	0.00E+00	68 U	0.00E+00	27 U	0.00E+00	7.01E-04	313.72
4/11/2013		9952	9952	420	5.1 U	0.00E+00	5.1 U	0.00E+00	5.1 U	0.00E+00	51 U	0.00E+00	20 U	0.00E+00	2.01E-02	322.58
Pulse -off period April 11, 2013 to May 10, 2013																
5/10/2013		9958	9958	420	5.4 U	0.00E+00	5.4 U	0.00E+00	5.4 U	0.00E+00	54 U	0.00E+00	22 U	0.00E+00	1.44E-02	322.66
7/15/2013		10984	10984	360	4.7 U	0.00E+00	4.7 U	0.00E+00	4.7 U	0.00E+00	47 U	0.00E+00	19 U	0.00E+00	1.65E-02	339.59
Pulse -off period July 15, 2013 to September 9, 2013																
9/9/2013		10991	10991	380	4 U	0.00E+00	4 U	0.00E+00	4 U	0.00E+00	40 U	0.00E+00	40 U	0.00E+00	8.81E-03	339.65
11/18/2013		12069	12069	380	7.6 U	0.00E+00	7.6 U	0.00E+00	7.6 U	0.00E+00	76 U	0.00E+00	31 U	0.00E+00	1.58E-02	356.69
Pulse -off period November 18, 2013 to January 15, 2014																
1/15/2014		12074	12074	380	3.5 U	0.00E+00	3.5 U	0.00E+00	3.5 U	0.00E+00	35 U	0.00E+00	14 U	0.00E+00	8.88E-03	356.73
3/14/2014		13057	13057	380	7.8 U	0.00E+00	7.8 U	0.00E+00	7.8 U	0.00E+00	78 U	0.00E+00	31 U	0.00E+00	1.24E-02	368.96

Notes:

Mass removal rate = (flow rate in scfm)(concentration in ppmv)(60)(MW) / (387*1000000)

"U" indicates non-detection at the specified reporting limit; for ND compounds, zero is used in mass removal calculations.

MW	molecular weight (values from the U.S. National Library
SCFM	standard cubic feet per minute
J	Indicates estimated value.
B	The analyte was detected in the method, field and/or trip blank.

When a duplicate sample was collected, the original sample results are used in the mass calculations.

Table 4.6
VOC Mass Removal - Phase 1 and Phase 2 AS/SVE Systems
December 2009 - March 2014
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

Date	Cell 1			Cell 2			Cell 3			Cell 4			Cell 5			Total Cumulative Mass Removal (lb)
	Total Run Time (hr)	Mass Removal Rate (lb/hr)	Cumulative Mass Removal (lb)	Run Time (hr)	Mass Removal Rate (lb/hr)	Cumulative Mass Removal (lb)	Run Time (hr)	Mass Removal Rate (lb/hr)	Cumulative Mass Removal (lb)	Run Time (hr)	Mass Removal Rate (lb/hr)	Cumulative Mass Removal (lb)	Run Time (hr)	Mass Removal Rate (lb/hr)	Cumulative Mass Removal (lb)	
12/3/2009	0						SYSTEM STARTUP									0.00
12/10/2009	53	0.22	11.91													11.91
12/11/2009				59	0.25	15.05										26.97
12/14/2009							60	0.31	18.51							45.48
12/15/2009				68	0.16	16.48										46.91
12/16/2009							76	0.17	21.16							49.55
12/22/2009	124	0.05	15.23													52.86
12/29/2009				180	0.12	29.76										66.15
1/5/2010							236	0.13	41.78							86.77
1/13/2010				301	0.05	35.75										92.75
1/21/2010							361	0.05	48.37							99.35
1/27/2010				408	0.06	42.68										106.27
2/24/2010	631	0.01	20.06	631	0.04	51.44	631	0.04	58.76							130.26
3/15/2010	782	0.01	22.02	782	0.09	64.40	782	0.07	68.60							155.02
4/14/2010	935	0.02	25.22	935	0.04	70.89	935	0.11	84.81							180.92
5/13/2010	1165	0.01	27.75	1165	0.04	79.74	1165	0.03	91.21							198.69
6/21/2010	1477	0.01	30.20	1477	0.02	86.90	1477	0.02	96.92							214.02
7/21/2010	1686	0.01	32.52	1686	0.02	91.24	1686	0.02	101.05							224.81
8/23/2010	1928	0.00	32.52	1928	0.00	91.24	1928	0.00	101.05							224.81
9/23/2010	2174	0.01	34.49	2174	0.02	96.27	2174	0.02	106.49							237.25
10/22/2010	2406	0.01	35.86	2406	0.01	98.85	2406	0.01	109.27							243.98
11/15/2010	2598	0.01	36.96	2598	0.01	101.41	2598	0.01	112.05							250.42
12/22/2010	2777	0.01	38.22	2955	0.02	107.99	2777	0.02	115.44							261.65
1/24/2011	2975	0.01	39.47	3352	0.01	110.39	2975	0.01	117.20							267.06
2/25/2011	3167	0.01	40.53	3737	0.01	114.08	3167	0.00	118.15							272.76
3/11/2011										222	1.72	381.87	218	0.35	75.54	730.17
3/18/2011	3293	0.01	41.27	3988	0.00	114.57	3293	0.00	118.34	366	0.51	453.50	362	0.20	104.77	832.46
3/25/2011										463	0.29	482.07	459	0.14	118.53	874.78
3/30/2011										558	0.32	512.25	553	0.08	126.48	912.92
4/8/2011										764	0.29	572.27	759	0.10	147.32	993.77
4/15/2011	3460	0.01	42.15	4322	0.00	115.07	3460	0.00	118.47	924	0.24	610.05	920	0.09	162.08	1047.81
5/19/2011	3665	0.00	42.87	4732	0.00	115.31	3665	0.00	118.53	1685	0.16	730.28	1681	0.09	233.92	1240.92
6/16/2011	3830	0.00	43.39	5062	0.00	115.55	3830	0.00	118.81	2191	0.11	753.86	2187	0.03	251.58	1283.20
7/15/2011	4472	0.00	44.96	4472	0.00	115.18	4472	0.00	119.39	2750	0.08	830.85	2745	0.03	269.61	1380.36
8/22/2011	4775	0.00	45.59	4775	0.00	115.40	4775	0.01	121.30	3133	0.10	868.97	3129	0.03	280.03	1431.44
9/15/2011	4968	0.00	45.93	4968	0.00	115.51	4968	0.00	121.91	3630	0.08	906.88	3626	0.01	287.36	1477.64
10/14/2011	5199	0.00	46.20	5199	0.00	115.57	5199	0.00	122.54	4226	0.05	935.35	4222	0.01	293.51	1513.18
11/21/2011	5503	0.00	46.43	5503	0.00	115.62	5503	0.00	123.00	5019	0.04	966.50	5015	0.01	298.43	1549.98
12/14/2011	5670	0.00	46.53	5670	0.00	115.65	5670	0.00	123.67	5343	0.03	975.34	5339	0.01	300.62	1561.80
1/19/2012	5974	0.00	46.69	5974	0.00	115.71	5974	0.00	124.59	5993	0.00	975.34	5958	0.00	300.62	1562.94
2/15/2012	6189	0.00	46.80	6189	0.00	115.74	6189	0.01	126.03	6368	0.03	986.48	6364	0.00	300.62	1575.67
3/15/2012	6421	0.00	46.89	6421	0.00	115.79	6421	0.01	127.43	6946	0.03	1005.89	6942	0.00	300.62	1596.62
4/19/2012	6701	0.00	47.04	6701	0.00	115.84	6701	0.00	128.02	7629	0.05	1038.74	7625	0.00	301.65	1631.30
5/16/2012	6916	0.00	47.18	6916	0.00	115.88	6916	0.00	128.27	8143	0.04	1060.30	8138	0.00	303.65	1655.28
Pulse -off period June 1, 2012 to August 14, 2012																
8/14/2012	7094	0.00	47.54	7094	0.00	116.20	7094	0.00	129.03	8546	0.05	1081.05	8541	0.01	306.52	1680.34
9/17/2012	7317	0.00	47.99	7317	0.00	116.40	7317	0.02	133.04	9033	0.04	1102.58	9029	0.01	311.31	1711.33
Pulse -off period September 17, 2012 to November 14, 2012																
11/15/2012	7320	0.00	48.00	7320	0.00	116.40	7320	0.00	133.05	9037	0.05	1102.78	9033	0.01	311.34	1711.56
12/14/2012	7518	0.00	48.24	7518	0.00	116.86	7518	0.00	133.94	9439	0.00	1103.57	9436	0.01	313.67	1716.27
Pulse -off period December 14, 2012 to February 26, 2013																
2/26/2013	7518	0.00	48.19	7518	0.00	116.86	7519	0.00	133.94	9439	0.00	1103.57	9511	0.00	313.72	1716.32
4/11/2013	7723	0.00	48.32	7723	0.00	116.97	8134	0.00	134.40	9876	0.00	1105.48	9952	0.02	322.58	1727.74
Pulse -off period April 11, 2013 to May 10, 2013																
5/10/2013	7724	0.00	48.32	7724	0.00	116.97	8135	0.00	134.40	9882	0.00	1105.50	9958	0.01	322.66	1727.85
7/15/2013	8039	0.00	48.86	8039	0.00	117.21	9082	0.00	134.70	10907	0.00	1108.40	10984	0.02	339.59	1748.76
Pulse -off period July 15, 2013 to September 9, 2013																
9/9/2013	8040	0.00	48.86	8040	0.00	117.21	9083	0.00	134.70	10914	0.00	1108.44	10991	0.01	339.65	1748.86
11/18/2013	8372	0.00	49.15	8372	0.00	117.30	10081	0.00	136.08	11992	0.00	1110.90	12069	0.02	356.69	1770.12
Pulse -off period November 18, 2013 to January 15, 2014																
1/15/2014	8651	0.00	49.36	8651	0.00	117.51	10916	0.00	136.88	11997	0.00	1110.91	12074	0.01	356.73	1771.39
3/14/2014	8894	0.00	49.48	8894	0.00	117.52	11645	0.00	137.13	12980	0.00	1112.65	13057	0.01	368.96	1785.75

5

Systems Moisture Separator Tank Effluent VOC Results
UTC Aerospace Systems
Plants 1/2 Facility
Rockford, Illinois

				Trichloroethene (TCE)	Methylene Chloride (Dichloromethane)	1,1-Dichloroethene	1,1-Dichloroethane	1,2-Dichloroethane	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Ethylbenzene	Tetrachloroethene (PCE)	Toluene	Vinyl chloride
		Preliminary Remediation Goals (PRG)[A]		0.005[c,A]	0.005[c,A]	0.007[b,c,A]	0.7[A]	0.005[c,A]	0.07[c,A]	0.1[c,A]	0.2[b,c,A]	0.005[c,A]	0.7[c,A]	0.005[c,A]	1.0[c,A]	0.002[c,A]
Cell	Sample ID	Sample Date	Sample Type	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Phase 1	HS SER-MSPHASE1-031414	14-Mar-14		0.0028 J	0.0010 U	0.0010 U	0.00040 J	0.0010 U	**0.0012**	0.0010 U	**0.0029**	0.0010 U	0.0010 U	0.00030 J	0.0010 U	0.0010 U

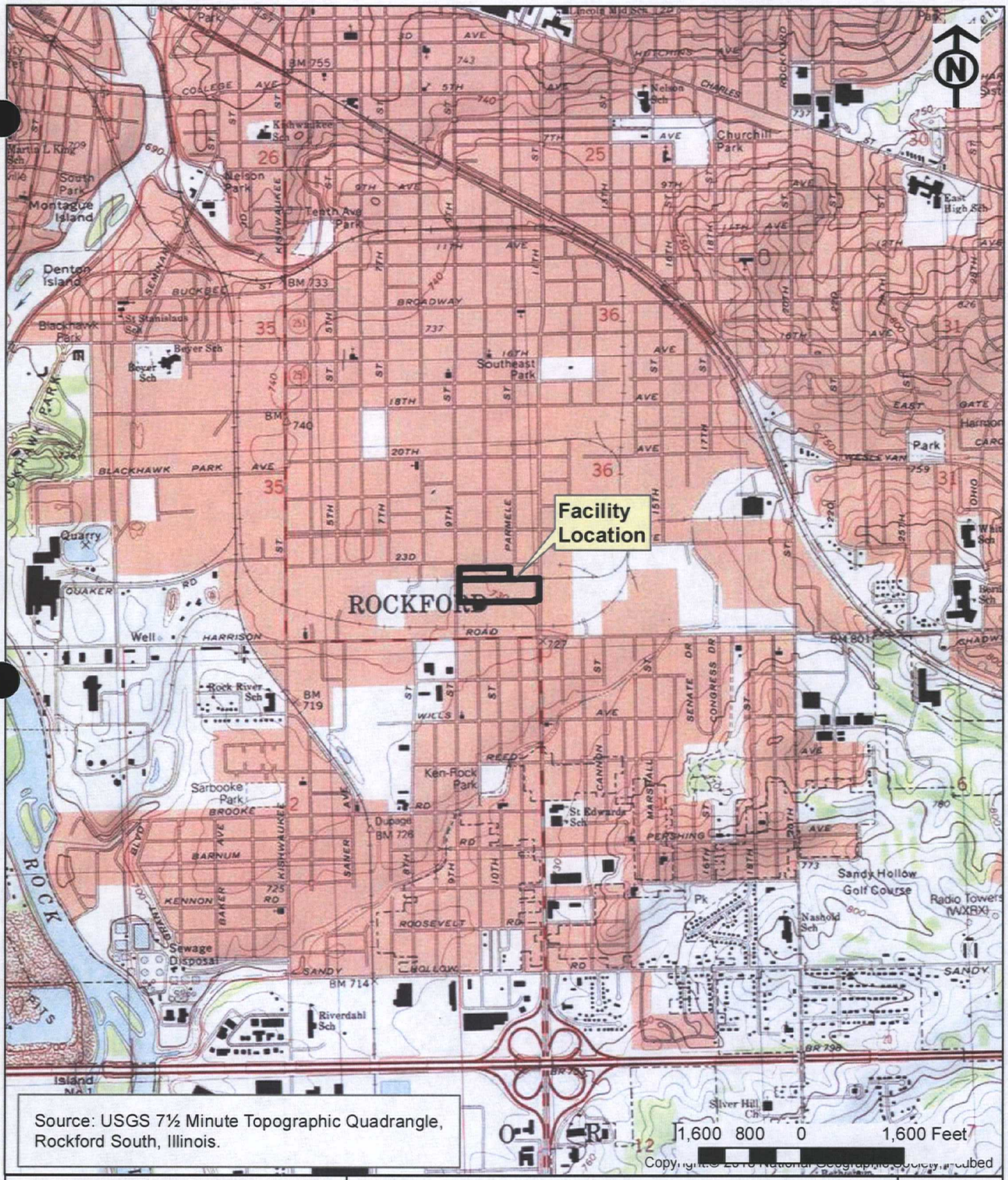
Notes:

PRG	Preliminary Remediation Goals (PRGs) from ROD
A	Class 1 - Groundwater Remediation Objectives
6.5[A]	Concentration exceeds the indicated standard.
15.2	Concentration was detected but did not exceed applicable standards
0.50 U	Laboratory estimated quantitation limit exceeded standard.
0.03 U	The analyte was not detected above the laboratory estimated quantitation limit.
n/v	No standard/guideline value.
-	Parameter not analyzed / not available
b,c	Oral Reference Dose and/or Reference Concentration under review by USEPA. Listed values subject to change. Value listed is also the Groundwater Quality Standard for this chemical pursuant to 35 Ill.Adm.Code 620.410 for Class I Groundwater or 35 Ill.Adm.Code 620.420 for Class II Groundwater.
c	Value listed is also the Groundwater Quality Standard for this chemical pursuant to 35 Ill.Adm.Code 620.410 for Class I Groundwater or 35 Ill.Adm.Code 620.420 for Class II Groundwater.
B	The analyte was detected in the method, field and/or trip blank.
J	Indicates estimated value.
NJ	The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

FIGURES

FIGURES

Figures



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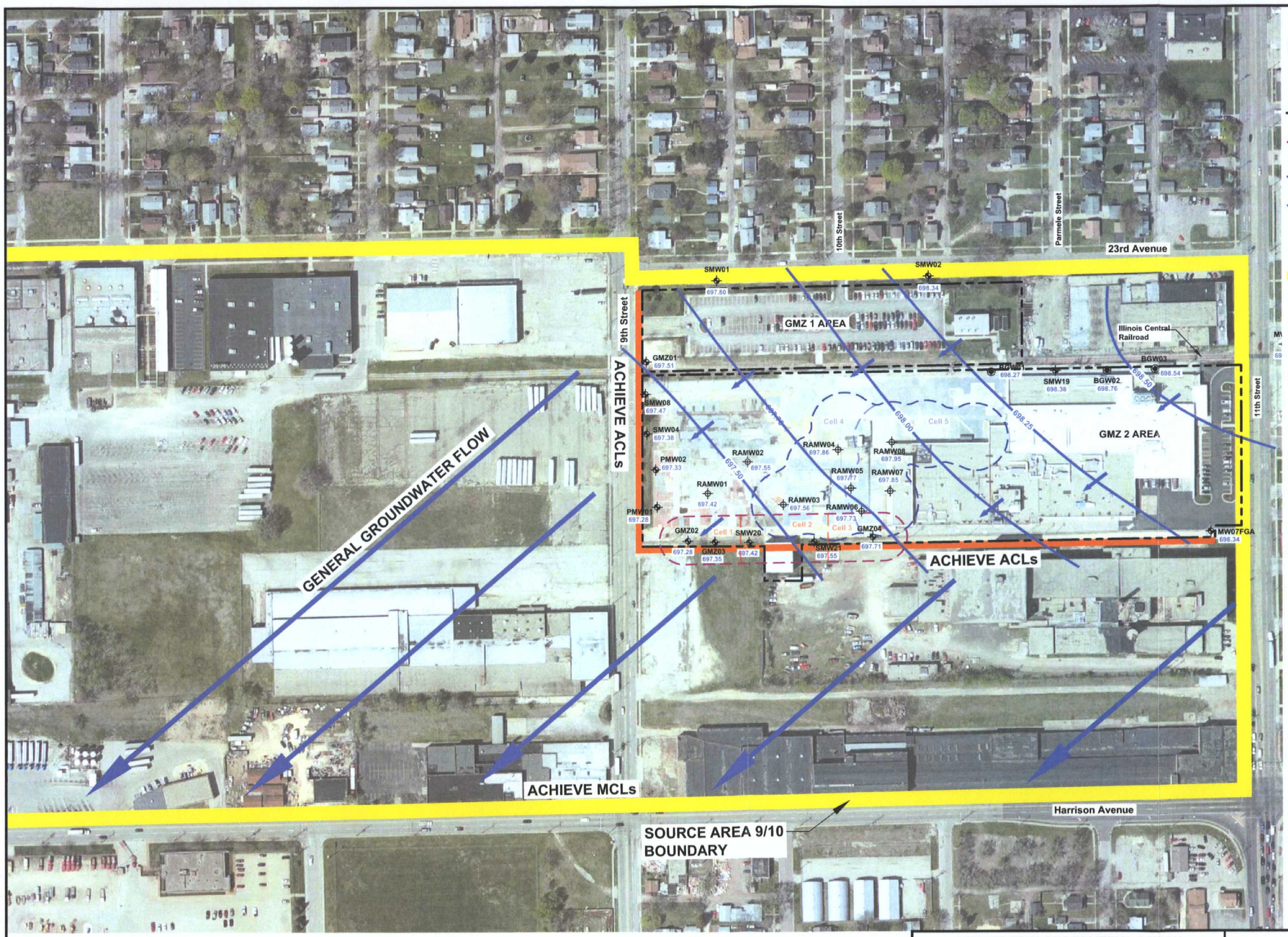
Facility Location Map
Area 9/10 Remedial Action
Southeast Rockford Groundwater
Contamination Superfund Site
Rockford, IL

FIGURE NUMBER	
1	

DRAWN BY:	DATE:	PROJECT NUMBER:	SHEET NUMBER:
JG	04/21/14	60312350.4212	1 of 1

Path: U:\Cad_Drive_New\UTC\60288803 UTC Rockford SER 9-10\Q1 2014\GIS\Site Location Map.mxd



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SOURCE AREA 9/10 REMEDIAL ACTION
ROCKFORD, ILLINOIS

PROJECT NO. 60312350.4212

DATE: 04/16/2014 | DRWN: JG

PERFORMANCE STANDARD CONCEPT

FIGURE 1

AECOM

AREA 9/10 REMEDIAL ACTION
ROCKFORD, ILLINOIS
PROJECT NO. 60312350.4212

DATE: 04/21/14 | DRWN: JG

GMZ / PERFORMANCE WELL NETWORK

FIGURE 2

LEGEND:

- GMZ Monitoring Well
- Performance Monitoring Well
- Site and GMZ Boundary
- Approximate Extent of Phase 1 AS/SVE System Influence
- Approximate Extent of Phase 2 AS/SVE System Influence
- Potentiometric Surface Contour
- 698.54 Groundwater Elevation (Feet)
- Groundwater Flow Direction

NOTES:

BGW02 omitted from contouring due to anomalous reading recorded in the field.

N

60 0 120

1"=120'

AECOM

AREA 9/10 REMEDIAL ACTION
ROCKFORD, ILLINOIS

PROJECT NO. 60312350.4212

DATE: 04/16/2014 | DRWN: JG

FIRST QUARTER 2014
POTENTIOMETRIC SURFACE MAP

FIGURE 3

GMZ01		
Date	TCE	PCE
7-May-13	<PRG	0.0210
6-Aug-13	0.0063	0.0330
2-Dec-13	<PRG	0.0230
25-Feb-14	0.0052	0.0360

SMW08			
Date	TCE	cis-1,2-DCE	PCE
8-May-13	<PRG	<PRG	0.0380
6-Aug-13	<PRG	<PRG	0.0420
2-Dec-13	0.0054 J	0.3000	0.0690
25-Feb-14	<PRG	<PRG	0.0450

SMW04			
Date	TCE	PCE	Vinyl chloride
8-May-13	<PRG	0.0084	0.0210
7-Aug-13	<PRG	0.0110	0.0068
5-Dec-13	<PRG	0.0260	0.0051
28-Feb-14	0.0070	0.0160	0.0190

PMW02		
Date	PCE	Vinyl chloride
8-May-13	0.0200	0.0024
7-Aug-13	0.0200	<PRG
5-Dec-13	0.0280	<PRG
28-Feb-14	0.0350	<PRG

PMW01	
Date	PCE
8-May-13	0.0220
7-Aug-13	0.0260
4-Dec-13	0.0210
28-Feb-14	0.0170

SMW19	
Date	TCE
8-May-13	0.0089
7-Aug-13	<PRG
5-Dec-13	0.0170
28-Feb-14	0.0230

MW203	
Date	PCE
7-May-13	0.0160
6-Aug-13	0.0130
3-Dec-13	0.0064
25-Feb-14	0.0060

LEGEND:

GMZ Monitoring Well

Site and GMZ Boundary

NOTES:

1. Values are listed only for those wells in which a Volatile Organic Compound (VOC) was identified above the Preliminary Remediation Goal (PRG) for the previous four events.

2. U - Laboratory estimated quantitation limit exceeded PRG

3. NJ - Estimated concentration

4. J - Indicates estimated value

5. B - The analyte was detected in the method, field and/or trip blank.

Preliminary Remediation Goals (PRG)	
Trichloroethene (TCE)	0.005 mg/L
cis-1,2-Dichloroethene (DCE)	0.07 mg/L
Tetrachloroethene (PCE)	0.005 mg/L
Vinyl chloride	0.002 mg/L

N

65 0 130

1"=130'

AECOM

AREA 9/10 REMEDIAL ACTION
ROCKFORD, ILLINOIS

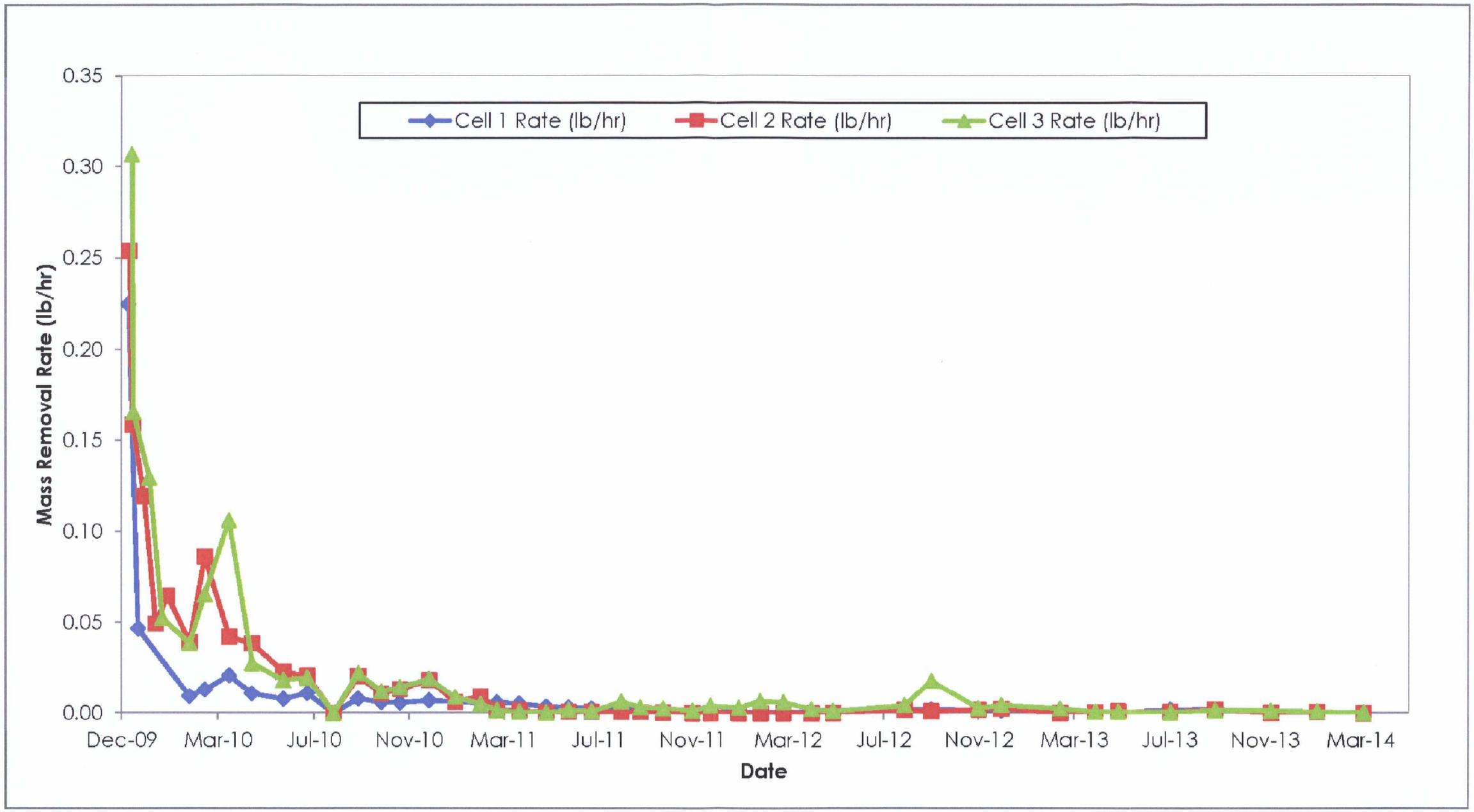
PROJECT NO. 60312350.4212

DATE: 04/21/14 DRWN: JG

VOC ANALYTICAL RESULTS EXCEEDING THE PRG FIRST QUARTER 2014

FIGURE 4

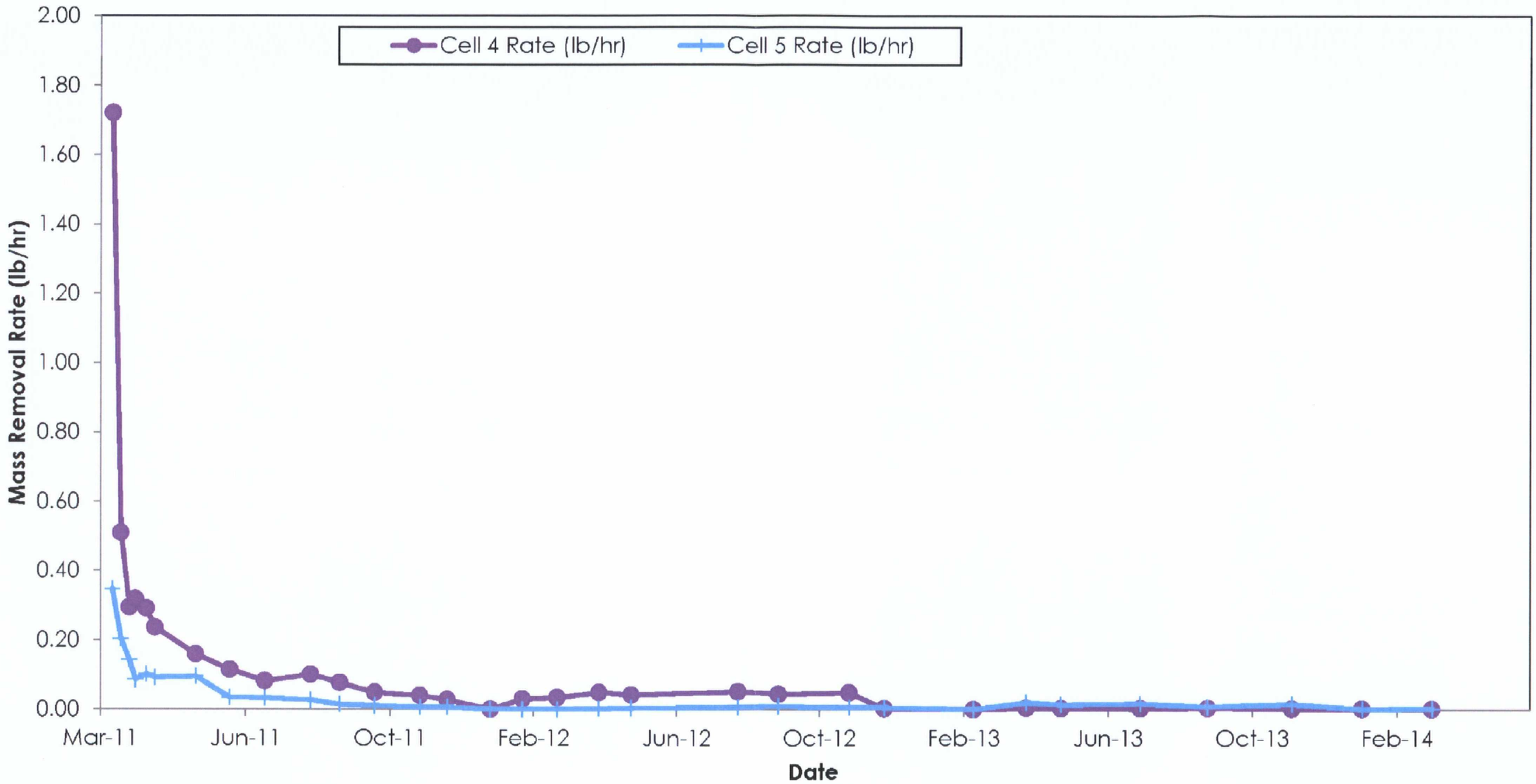
File: U:\Cad Drive Now\UTC\60288803 UTC Rockford SER 9-10\01 2014\VOC Analytical Results.dwg Layout: ANSI B(-L) User: garcia; Plotted: May 12, 2014 - 11:52am



AECOM

AREA 9/10 REMEDIAL ACTION ROCKFORD, ILLINOIS PROJECT NO. 60288803.4213			AVERAGE VOC MASS REMOVAL RATE VS TIME PHASE 1 AS/SVE SYSTEM
DATE: 04/28/13	DRWN: JG		FIGURE 7

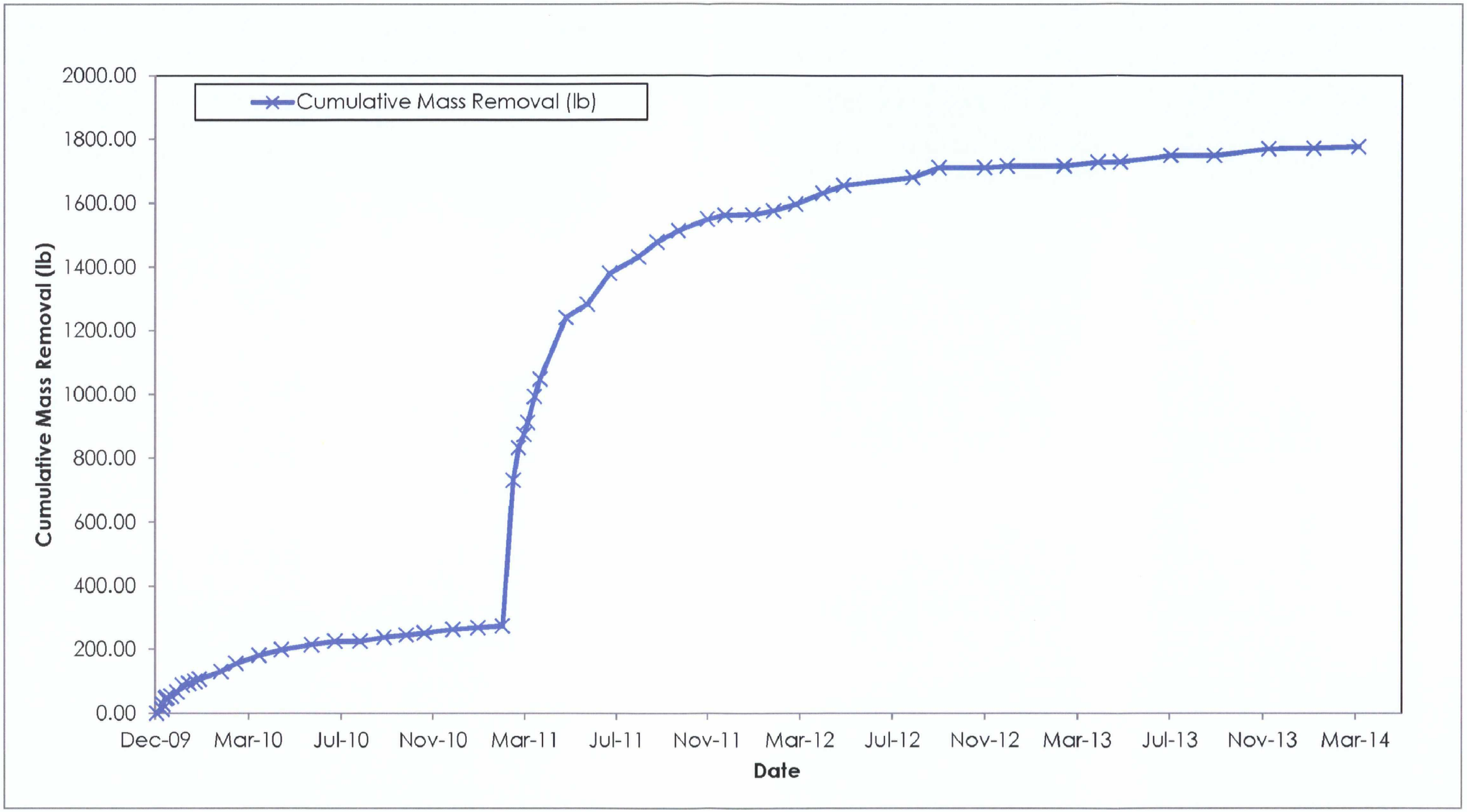
File: U:\Cad_Drive_New\UTC\60288803 UTC Rockford SFR 9-10\01 2014\VOC vs Time Phase 1.dwg Layout: ANSI_B/-LJ User: garciaj Plotted: Apr 28, 2014 - 12:01pm



AECOM

AREA 9/10 REMEDIAL ACTION ROCKFORD, ILLINOIS PROJECT NO. 60288803.4213			AVERAGE VOC MASS REMOVAL RATE VS TIME PHASE 2 AS/SVE SYSTEM
DATE: 10/25/13	DRWN: JG		FIGURE 8

File: U:\Cad Drive New\UTC\60288803 UTC Rockford SLR 9-10\01 2014\VOC vs Time Phase 2.dwg Layout: ANSI B(-LJ User: garciaj Plotted: Apr 28, 2014 - 12:02pm



AECOM

AREA 9/10 REMEDIAL ACTION ROCKFORD, ILLINOIS PROJECT NO. 60288803.4213			CUMULATIVE MASS REMOVAL PHASE 1/ PHASE 2 AS/SVE SYSTEM
DATE: 04/28/14	DRWN: JG		FIGURE 9

File: U:\Cad Drive New\UTC\60288803 UTC Rockford SER 9-10\01 2014\Cumulative Phase 1 & 2.dwg Layout: ANSI B(-LJ User: garcia) Plotted: Apr 28, 2014 - 11:54am

A

A

Appendix A

First Quarter 2014 GMZ and Performance Monitoring Well Analytical Data

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-34630-1
Client Project/Site: UTC HS Plant 1 Rockford

For:
AECOM, Inc.
27755 Diehl Road
Suite 100
Warrenville, Illinois 60555

Attn: Peter Hollatz

Patrick O'Meara

Authorized for release by:
3/12/2014 12:19:43 PM

Patrick O'Meara, Manager of Project Management
(330)966-5725
patrick.omeara@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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Lab Chronicle 35
Certification Summary 39
Chain of Custody 40

Definitions/Glossary

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

Glossary

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

Job ID: 240-34630-1

Laboratory: TestAmerica Canton

Narrative

CASE NARRATIVE

Client: AECOM, Inc.

Project: UTC HS Plant 1 Rockford

Report Number: 240-34630-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 3/1/2014 9:55 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.6° C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples HSSER-SMW08-022514 (240-34630-1), HSSER-GMZ01-022514 (240-34630-2), HSSER-SMW01-022514 (240-34630-3), HSSER-SMW02-022514 (240-34630-4), HSSER-MW203-022514 (240-34630-5), HSSER-MW07FGA-022514 (240-34630-6), HSSER-GMZ04-022614 (240-34630-7), HSSER-SMW21-022614 (240-34630-8), HSSER-SMW20-022614 (240-34630-9), HSSER-GMZ03-022614 (240-34630-10), HSSER-GMZ02-022614 (240-34630-11), HSSER-FBLK01-022514 (240-34630-12), HSSER-DUP01-022614 (240-34630-13), HSSER-PMW01-022814 (240-34630-14), HSSER-PMW02-022814 (240-34630-15), HSSER-EBLK01-022814 (240-34630-16), HSSER-SMW04-022814 (240-34630-17), HSSER-SMW19-022814 (240-34630-18) and HSSER-TRIP02-022514 (240-34630-19) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 03/06/2014 and 03/07/2014.

Methylene Chloride was detected in method blank MB 240-121645/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Samples HSSER-SMW08-022514 (240-34630-1)[2X] and HSSER-GMZ01-022514 (240-34630-2)[1.67X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

Method Summary

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN

Protocol References:

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

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-34630-1	HSSER-SMW08-022514	Water	02/25/14 09:25	03/01/14 09:55
240-34630-2	HSSER-GMZ01-022514	Water	02/25/14 11:20	03/01/14 09:55
240-34630-3	HSSER-SMW01-022514	Water	02/25/14 13:10	03/01/14 09:55
240-34630-4	HSSER-SMW02-022514	Water	02/25/14 14:25	03/01/14 09:55
240-34630-5	HSSER-MW203-022514	Water	02/25/14 16:00	03/01/14 09:55
240-34630-6	HSSER-MW07FGA-022514	Water	02/25/14 17:10	03/01/14 09:55
240-34630-7	HSSER-GMZ04-022614	Water	02/26/14 08:35	03/01/14 09:55
240-34630-8	HSSER-SMW21-022614	Water	02/26/14 10:10	03/01/14 09:55
240-34630-9	HSSER-SMW20-022614	Water	02/26/14 11:35	03/01/14 09:55
240-34630-10	HSSER-GMZ03-022614	Water	02/26/14 13:55	03/01/14 09:55
240-34630-11	HSSER-GMZ02-022614	Water	02/26/14 15:40	03/01/14 09:55
240-34630-12	HSSER-FBLK01-022514	Water	02/25/14 08:25	03/01/14 09:55
240-34630-13	HSSER-DUP01-022614	Water	02/26/14 00:00	03/01/14 09:55
240-34630-14	HSSER-PMW01-022814	Water	02/28/14 08:05	03/01/14 09:55
240-34630-15	HSSER-PMW02-022814	Water	02/28/14 08:15	03/01/14 09:55
240-34630-16	HSSER-EBLK01-022814	Water	02/28/14 07:20	03/01/14 09:55
240-34630-17	HSSER-SMW04-022814	Water	02/28/14 09:45	03/01/14 09:55
240-34630-18	HSSER-SMW19-022814	Water	02/28/14 15:10	03/01/14 09:55
240-34630-19	HSSER-TRIP02-022514	Water	02/25/14 00:00	03/01/14 09:55

Detection Summary

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-SMW08-022514 — Lab Sample ID: 240-34630-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0047		0.0020	0.00044	mg/L	2		8260B	Total/NA
1,1-Dichloroethane	0.0075		0.0020	0.00030	mg/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	0.0020		0.0020	0.00034	mg/L	2		8260B	Total/NA
Tetrachloroethene	0.045		0.0020	0.00058	mg/L	2		8260B	Total/NA
trans-1,2-Dichloroethene	0.00046	J	0.0020	0.00038	mg/L	2		8260B	Total/NA
Trichloroethene	0.0014	J	0.0020	0.00034	mg/L	2		8260B	Total/NA

Client Sample ID: HSSER-GMZ01-022514 — Lab Sample ID: 240-34630-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.016		0.0017	0.00037	mg/L	1.67		8260B	Total/NA
1,1-Dichloroethane	0.0051		0.0017	0.00025	mg/L	1.67		8260B	Total/NA
1,1-Dichloroethene	0.0013	J	0.0017	0.00032	mg/L	1.67		8260B	Total/NA
cis-1,2-Dichloroethene	0.0024		0.0017	0.00028	mg/L	1.67		8260B	Total/NA
Tetrachloroethene	0.036		0.0017	0.00048	mg/L	1.67		8260B	Total/NA
Trichloroethene	0.0052		0.0017	0.00028	mg/L	1.67		8260B	Total/NA

Client Sample ID: HSSER-SMW01-022514 — Lab Sample ID: 240-34630-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0010		0.0010	0.00022	mg/L	1		8260B	Total/NA
Methylene Chloride	0.00057	J	0.0010	0.00033	mg/L	1		8260B	Total/NA
Tetrachloroethene	0.0020		0.0010	0.00029	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-SMW02-022514 — Lab Sample ID: 240-34630-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.00026	J	0.0010	0.00022	mg/L	1		8260B	Total/NA
Methylene Chloride	0.00041	J	0.0010	0.00033	mg/L	1		8260B	Total/NA
Tetrachloroethene	0.00065	J	0.0010	0.00029	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-MW203-022514 — Lab Sample ID: 240-34630-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Tetrachloroethene	0.0060		0.0010	0.00029	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-MW07FGA-022514 — Lab Sample ID: 240-34630-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0016		0.0010	0.00022	mg/L	1		8260B	Total/NA
Methylene Chloride	0.00050	J	0.0010	0.00033	mg/L	1		8260B	Total/NA
Tetrachloroethene	0.00098	J	0.0010	0.00029	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-GMZ04-022614 — Lab Sample ID: 240-34630-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0025		0.0010	0.00022	mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.00028	J	0.0010	0.00015	mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.0013		0.0010	0.00017	mg/L	1		8260B	Total/NA
Methylene Chloride	0.00052	J	0.0010	0.00033	mg/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-SMW21-022614 — Lab Sample ID: 240-34630

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.036		0.0010	0.00022	mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.00076	J	0.0010	0.00015	mg/L	1		8260B	Total/NA
1,1-Dichloroethene	0.0022		0.0010	0.00019	mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.0051		0.0010	0.00017	mg/L	1		8260B	Total/NA
Trichloroethene	0.0026		0.0010	0.00017	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-SMW20-022614 — Lab Sample ID: 240-34630-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.00054	J	0.0010	0.00022	mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.00019	J	0.0010	0.00015	mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.00041	J	0.0010	0.00017	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-GMZ03-022614 — Lab Sample ID: 240-34630-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0011		0.0010	0.00022	mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.00051	J	0.0010	0.00015	mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.00062	J	0.0010	0.00017	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-GMZ02-022614 — Lab Sample ID: 240-34630-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0094		0.0010	0.00022	mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.0036		0.0010	0.00015	mg/L	1		8260B	Total/NA
1,1-Dichloroethene	0.00074	J	0.0010	0.00019	mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.00096	J	0.0010	0.00017	mg/L	1		8260B	Total/NA
Tetrachloroethene	0.00063	J	0.0010	0.00029	mg/L	1		8260B	Total/NA
Trichloroethene	0.00025	J	0.0010	0.00017	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-FBLK01-022514 — Lab Sample ID: 240-34630-12

No Detections.

Client Sample ID: HSSER-DUP01-022614 — Lab Sample ID: 240-34630-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0010		0.0010	0.00022	mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.00056	J	0.0010	0.00015	mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.00058	J	0.0010	0.00017	mg/L	1		8260B	Total/NA
Methylene Chloride	0.00034	J B	0.0010	0.00033	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-PMW01-022814 — Lab Sample ID: 240-34630-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.015		0.0010	0.00022	mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.013		0.0010	0.00015	mg/L	1		8260B	Total/NA
1,1-Dichloroethene	0.00023	J	0.0010	0.00019	mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.0011		0.0010	0.00017	mg/L	1		8260B	Total/NA
Methylene Chloride	0.00038	J B	0.0010	0.00033	mg/L	1		8260B	Total/NA
Tetrachloroethene	0.017		0.0010	0.00029	mg/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: HSSER-PMW01-022814 (Continued) — Lab Sample ID: 240-34630-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.0016		0.0010	0.00017	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-PMW02-022814 — Lab Sample ID: 240-34630-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.012		0.0010	0.00022	mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.0062		0.0010	0.00015	mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.0014		0.0010	0.00017	mg/L	1		8260B	Total/NA
Tetrachloroethene	0.035		0.0010	0.00029	mg/L	1		8260B	Total/NA
Trichloroethene	0.0034		0.0010	0.00017	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-EBLK01-022814 — Lab Sample ID: 240-34630-16

No Detections.

Client Sample ID: HSSER-SMW04-022814 — Lab Sample ID: 240-34630-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.00080	J	0.0010	0.00022	mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.0075		0.0010	0.00015	mg/L	1		8260B	Total/NA
1,1-Dichloroethene	0.0017		0.0010	0.00019	mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.029		0.0010	0.00017	mg/L	1		8260B	Total/NA
Methylene Chloride	0.00040	J B	0.0010	0.00033	mg/L	1		8260B	Total/NA
Tetrachloroethene	0.016		0.0010	0.00029	mg/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.00045	J	0.0010	0.00019	mg/L	1		8260B	Total/NA
Trichloroethene	0.0070		0.0010	0.00017	mg/L	1		8260B	Total/NA
Vinyl chloride	0.019		0.0010	0.00022	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-SMW19-022814 — Lab Sample ID: 240-34630-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.00049	J	0.0010	0.00022	mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.00035	J	0.0010	0.00015	mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.0020		0.0010	0.00017	mg/L	1		8260B	Total/NA
Tetrachloroethene	0.0010		0.0010	0.00029	mg/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.00032	J	0.0010	0.00019	mg/L	1		8260B	Total/NA
Trichloroethene	0.023		0.0010	0.00017	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-TRIP02-022514 — Lab Sample ID: 240-34630-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.00034	J B	0.0010	0.00033	mg/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-SMW08-022514
Date Collected: 02/25/14 09:25
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34630
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.0047**		0.0020	0.00044	mg/L			03/07/14 10:36	2
1,1,2-Trichloroethane	ND		0.0020	0.00054	mg/L			03/07/14 10:36	2
1,1-Dichloroethane	**0.0075**		0.0020	0.00030	mg/L			03/07/14 10:36	2
1,1-Dichloroethene	ND		0.0020	0.00038	mg/L			03/07/14 10:36	2
1,2-Dichloroethane	ND		0.0020	0.00044	mg/L			03/07/14 10:36	2
cis-1,2-Dichloroethene	**0.0020**		0.0020	0.00034	mg/L			03/07/14 10:36	2
Ethylbenzene	ND		0.0020	0.00034	mg/L			03/07/14 10:36	2
Methylene Chloride	ND		0.0020	0.00066	mg/L			03/07/14 10:36	2
Tetrachloroethene	**0.045**		0.0020	0.00058	mg/L			03/07/14 10:36	2
Toluene	ND		0.0020	0.00026	mg/L			03/07/14 10:36	2
trans-1,2-Dichloroethene	**0.00046**	J	0.0020	0.00038	mg/L			03/07/14 10:36	2
Trichloroethene	**0.0014**	J	0.0020	0.00034	mg/L			03/07/14 10:36	2
Vinyl chloride	ND		0.0020	0.00044	mg/L			03/07/14 10:36	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*63 - 129*		*03/07/14 10:36*	*2*
4-Bromofluorobenzene (Surr)	*96*		*66 - 117*		*03/07/14 10:36*	*2*
Toluene-d8 (Surr)	*96*		*74 - 115*		*03/07/14 10:36*	*2*
Dibromofluoromethane (Surr)	*88*		*75 - 121*		*03/07/14 10:36*	*2*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-GMZ01-022514
Date Collected: 02/25/14 11:20
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34630-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.016**		0.0017	0.00037	mg/L			03/07/14 10:59	1.67
1,1,2-Trichloroethane	ND		0.0017	0.00045	mg/L			03/07/14 10:59	1.67
1,1-Dichloroethane	**0.0051**		0.0017	0.00025	mg/L			03/07/14 10:59	1.67
1,1-Dichloroethene	**0.0013**	J	0.0017	0.00032	mg/L			03/07/14 10:59	1.67
1,2-Dichloroethane	ND		0.0017	0.00037	mg/L			03/07/14 10:59	1.67
cis-1,2-Dichloroethene	**0.0024**		0.0017	0.00028	mg/L			03/07/14 10:59	1.67
Ethylbenzene	ND		0.0017	0.00028	mg/L			03/07/14 10:59	1.67
Methylene Chloride	ND		0.0017	0.00055	mg/L			03/07/14 10:59	1.67
Tetrachloroethene	**0.036**		0.0017	0.00048	mg/L			03/07/14 10:59	1.67
Toluene	ND		0.0017	0.00022	mg/L			03/07/14 10:59	1.67
trans-1,2-Dichloroethene	ND		0.0017	0.00032	mg/L			03/07/14 10:59	1.67
Trichloroethene	**0.0052**		0.0017	0.00028	mg/L			03/07/14 10:59	1.67
Vinyl chloride	ND		0.0017	0.00037	mg/L			03/07/14 10:59	1.67

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*63 - 129*		*03/07/14 10:59*	*1.67*
4-Bromofluorobenzene (Surr)	*94*		*66 - 117*		*03/07/14 10:59*	*1.67*
Toluene-d8 (Surr)	*95*		*74 - 115*		*03/07/14 10:59*	*1.67*
Dibromofluoromethane (Surr)	*91*		*75 - 121*		*03/07/14 10:59*	*1.67*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-SMW01-022514

Lab Sample ID: 240-34630

Date Collected: 02/25/14 13:10
Date Received: 03/01/14 09:55

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.0010**		0.0010	0.00022	mg/L			03/06/14 16:22	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 16:22	1
1,1-Dichloroethane	ND		0.0010	0.00015	mg/L			03/06/14 16:22	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 16:22	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 16:22	1
cis-1,2-Dichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 16:22	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 16:22	1
Methylene Chloride	**0.00057**	J	0.0010	0.00033	mg/L			03/06/14 16:22	1
Tetrachloroethene	**0.0020**		0.0010	0.00029	mg/L			03/06/14 16:22	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 16:22	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 16:22	1
Trichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 16:22	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*63 - 129*		*03/06/14 16:22*	*1*
4-Bromofluorobenzene (Surr)	*96*		*66 - 117*		*03/06/14 16:22*	*1*
Toluene-d8 (Surr)	*93*		*74 - 115*		*03/06/14 16:22*	*1*
Dibromofluoromethane (Surr)	*89*		*75 - 121*		*03/06/14 16:22*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-SMW02-022514
Date Collected: 02/25/14 14:25
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34630-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.00026**	**J**	0.0010	0.00022	mg/L			03/06/14 16:45	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 16:45	1
1,1-Dichloroethane	ND		0.0010	0.00015	mg/L			03/06/14 16:45	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 16:45	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 16:45	1
cis-1,2-Dichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 16:45	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 16:45	1
Methylene Chloride	**0.00041**	**J**	0.0010	0.00033	mg/L			03/06/14 16:45	1
Tetrachloroethene	**0.00065**	**J**	0.0010	0.00029	mg/L			03/06/14 16:45	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 16:45	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 16:45	1
Trichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 16:45	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*63 - 129*		*03/06/14 16:45*	*1*
4-Bromofluorobenzene (Surr)	*100*		*66 - 117*		*03/06/14 16:45*	*1*
Toluene-d8 (Surr)	*98*		*74 - 115*		*03/06/14 16:45*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 121*		*03/06/14 16:45*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-MW203-022514

Lab Sample ID: 240-34630

Date Collected: 02/25/14 16:00
Date Received: 03/01/14 09:55

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 17:09	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 17:09	1
1,1-Dichloroethane	ND		0.0010	0.00015	mg/L			03/06/14 17:09	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 17:09	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 17:09	1
cis-1,2-Dichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 17:09	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 17:09	1
Methylene Chloride	ND		0.0010	0.00033	mg/L			03/06/14 17:09	1
Tetrachloroethene	**0.0060**		0.0010	0.00029	mg/L			03/06/14 17:09	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 17:09	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 17:09	1
Trichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 17:09	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*63 - 129*		*03/06/14 17:09*	*1*
4-Bromofluorobenzene (Surr)	*96*		*66 - 117*		*03/06/14 17:09*	*1*
Toluene-d8 (Surr)	*93*		*74 - 115*		*03/06/14 17:09*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 121*		*03/06/14 17:09*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-MW07FGA-022514
Date Collected: 02/25/14 17:10
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34630-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.0016**		0.0010	0.00022	mg/L			03/06/14 17:32	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 17:32	1
1,1-Dichloroethane	ND		0.0010	0.00015	mg/L			03/06/14 17:32	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 17:32	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 17:32	1
cis-1,2-Dichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 17:32	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 17:32	1
Methylene Chloride	**0.00050**	**J**	0.0010	0.00033	mg/L			03/06/14 17:32	1
Tetrachloroethene	**0.00098**	**J**	0.0010	0.00029	mg/L			03/06/14 17:32	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 17:32	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 17:32	1
Trichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 17:32	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*78*		*63 - 129*		*03/06/14 17:32*	*1*
4-Bromofluorobenzene (Surr)	*93*		*66 - 117*		*03/06/14 17:32*	*1*
Toluene-d8 (Surr)	*94*		*74 - 115*		*03/06/14 17:32*	*1*
Dibromofluoromethane (Surr)	*85*		*75 - 121*		*03/06/14 17:32*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-GMZ04-022614

Lab Sample ID: 240-34630

Date Collected: 02/26/14 08:35
Date Received: 03/01/14 09:55

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.0025**		0.0010	0.00022	mg/L			03/06/14 17:56	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 17:56	1
1,1-Dichloroethane	**0.00028**	J	0.0010	0.00015	mg/L			03/06/14 17:56	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 17:56	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 17:56	1
cis-1,2-Dichloroethene	**0.0013**		0.0010	0.00017	mg/L			03/06/14 17:56	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 17:56	1
Methylene Chloride	**0.00052**	J	0.0010	0.00033	mg/L			03/06/14 17:56	1
Tetrachloroethene	ND		0.0010	0.00029	mg/L			03/06/14 17:56	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 17:56	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 17:56	1
Trichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 17:56	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 17:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*63 - 129*		*03/06/14 17:56*	*1*
4-Bromofluorobenzene (Surr)	*93*		*66 - 117*		*03/06/14 17:56*	*1*
Toluene-d8 (Surr)	*95*		*74 - 115*		*03/06/14 17:56*	*1*
Dibromofluoromethane (Surr)	*86*		*75 - 121*		*03/06/14 17:56*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-SMW21-022614
Date Collected: 02/26/14 10:10
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34630-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.036**		0.0010	0.00022	mg/L			03/06/14 18:19	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 18:19	1
1,1-Dichloroethane	**0.00076**	J	0.0010	0.00015	mg/L			03/06/14 18:19	1
1,1-Dichloroethene	**0.0022**		0.0010	0.00019	mg/L			03/06/14 18:19	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 18:19	1
cis-1,2-Dichloroethene	**0.0051**		0.0010	0.00017	mg/L			03/06/14 18:19	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 18:19	1
Methylene Chloride	ND		0.0010	0.00033	mg/L			03/06/14 18:19	1
Tetrachloroethene	ND		0.0010	0.00029	mg/L			03/06/14 18:19	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 18:19	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 18:19	1
Trichloroethene	**0.0026**		0.0010	0.00017	mg/L			03/06/14 18:19	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 18:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*63 - 129*		*03/06/14 18:19*	*1*
4-Bromofluorobenzene (Surr)	*96*		*66 - 117*		*03/06/14 18:19*	*1*
Toluene-d8 (Surr)	*97*		*74 - 115*		*03/06/14 18:19*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 121*		*03/06/14 18:19*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-SMW20-022614
Date Collected: 02/26/14 11:35
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34630-
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.00054**	J	0.0010	0.00022	mg/L			03/06/14 18:43	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 18:43	1
1,1-Dichloroethane	**0.00019**	J	0.0010	0.00015	mg/L			03/06/14 18:43	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 18:43	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 18:43	1
cis-1,2-Dichloroethene	**0.00041**	J	0.0010	0.00017	mg/L			03/06/14 18:43	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 18:43	1
Methylene Chloride	ND		0.0010	0.00033	mg/L			03/06/14 18:43	1
Tetrachloroethene	ND		0.0010	0.00029	mg/L			03/06/14 18:43	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 18:43	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 18:43	1
Trichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 18:43	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*63 - 129*		*03/06/14 18:43*	*1*
4-Bromofluorobenzene (Surr)	*96*		*66 - 117*		*03/06/14 18:43*	*1*
Toluene-d8 (Surr)	*96*		*74 - 115*		*03/06/14 18:43*	*1*
Dibromofluoromethane (Surr)	*93*		*75 - 121*		*03/06/14 18:43*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-GMZ03-022614
Date Collected: 02/26/14 13:55
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34630-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.0011**		0.0010	0.00022	mg/L			03/06/14 19:06	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 19:06	1
1,1-Dichloroethane	**0.00051**	J	0.0010	0.00015	mg/L			03/06/14 19:06	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 19:06	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 19:06	1
cis-1,2-Dichloroethene	**0.00062**	J	0.0010	0.00017	mg/L			03/06/14 19:06	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 19:06	1
Methylene Chloride	ND		0.0010	0.00033	mg/L			03/06/14 19:06	1
Tetrachloroethene	ND		0.0010	0.00029	mg/L			03/06/14 19:06	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 19:06	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 19:06	1
Trichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 19:06	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*63 - 129*		*03/06/14 19:06*	*1*
4-Bromofluorobenzene (Surr)	*94*		*66 - 117*		*03/06/14 19:06*	*1*
Toluene-d8 (Surr)	*94*		*74 - 115*		*03/06/14 19:06*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 121*		*03/06/14 19:06*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-GMZ02-022614

Lab Sample ID: 240-34630-

Date Collected: 02/26/14 15:40
Date Received: 03/01/14 09:55

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.0094**		0.0010	0.00022	mg/L			03/06/14 19:29	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 19:29	1
1,1-Dichloroethane	**0.0036**		0.0010	0.00015	mg/L			03/06/14 19:29	1
1,1-Dichloroethene	**0.00074**	J	0.0010	0.00019	mg/L			03/06/14 19:29	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 19:29	1
cis-1,2-Dichloroethene	**0.00096**	J	0.0010	0.00017	mg/L			03/06/14 19:29	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 19:29	1
Methylene Chloride	ND		0.0010	0.00033	mg/L			03/06/14 19:29	1
Tetrachloroethene	**0.00063**	J	0.0010	0.00029	mg/L			03/06/14 19:29	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 19:29	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 19:29	1
Trichloroethene	**0.00025**	J	0.0010	0.00017	mg/L			03/06/14 19:29	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*63 - 129*		*03/06/14 19:29*	*1*
4-Bromofluorobenzene (Surr)	*95*		*66 - 117*		*03/06/14 19:29*	*1*
Toluene-d8 (Surr)	*96*		*74 - 115*		*03/06/14 19:29*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 121*		*03/06/14 19:29*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-FBLK01-022514
Date Collected: 02/25/14 08:25
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34630-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 16:34	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 16:34	1
1,1-Dichloroethane	ND		0.0010	0.00015	mg/L			03/06/14 16:34	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 16:34	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 16:34	1
cis-1,2-Dichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 16:34	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 16:34	1
Methylene Chloride	ND		0.0010	0.00033	mg/L			03/06/14 16:34	1
Tetrachloroethene	ND		0.0010	0.00029	mg/L			03/06/14 16:34	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 16:34	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 16:34	1
Trichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 16:34	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*63 - 129*		*03/06/14 16:34*	*1*
4-Bromofluorobenzene (Surr)	*84*		*66 - 117*		*03/06/14 16:34*	*1*
Toluene-d8 (Surr)	*85*		*74 - 115*		*03/06/14 16:34*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 121*		*03/06/14 16:34*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-DUP01-022614

Lab Sample ID: 240-34630-

Date Collected: 02/26/14 00:00
Date Received: 03/01/14 09:55

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.0010**		0.0010	0.00022	mg/L			03/06/14 16:57	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 16:57	1
1,1-Dichloroethane	**0.00056**	J	0.0010	0.00015	mg/L			03/06/14 16:57	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 16:57	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 16:57	1
cis-1,2-Dichloroethene	**0.00058**	J	0.0010	0.00017	mg/L			03/06/14 16:57	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 16:57	1
Methylene Chloride	**0.00034**	J B	0.0010	0.00033	mg/L			03/06/14 16:57	1
Tetrachloroethene	ND		0.0010	0.00029	mg/L			03/06/14 16:57	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 16:57	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 16:57	1
Trichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 16:57	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 16:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 129*		*03/06/14 16:57*	*1*
4-Bromofluorobenzene (Surr)	*81*		*66 - 117*		*03/06/14 16:57*	*1*
Toluene-d8 (Surr)	*85*		*74 - 115*		*03/06/14 16:57*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 121*		*03/06/14 16:57*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-PMW01-022814
Date Collected: 02/28/14 08:05
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34630-14
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.015**		0.0010	0.00022	mg/L			03/06/14 17:19	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 17:19	1
1,1-Dichloroethane	**0.013**		0.0010	0.00015	mg/L			03/06/14 17:19	1
1,1-Dichloroethene	**0.00023**	J	0.0010	0.00019	mg/L			03/06/14 17:19	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 17:19	1
cis-1,2-Dichloroethene	**0.0011**		0.0010	0.00017	mg/L			03/06/14 17:19	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 17:19	1
Methylene Chloride	**0.00038**	J B	0.0010	0.00033	mg/L			03/06/14 17:19	1
Tetrachloroethene	**0.017**		0.0010	0.00029	mg/L			03/06/14 17:19	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 17:19	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 17:19	1
Trichloroethene	**0.0016**		0.0010	0.00017	mg/L			03/06/14 17:19	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*63 - 129*		*03/06/14 17:19*	*1*
4-Bromofluorobenzene (Surr)	*80*		*66 - 117*		*03/06/14 17:19*	*1*
Toluene-d8 (Surr)	*85*		*74 - 115*		*03/06/14 17:19*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 121*		*03/06/14 17:19*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-PMW02-022814

Lab Sample ID: 240-34630-

Date Collected: 02/28/14 08:15
Date Received: 03/01/14 09:55

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.012**		0.0010	0.00022	mg/L			03/06/14 17:41	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 17:41	1
1,1-Dichloroethane	**0.0062**		0.0010	0.00015	mg/L			03/06/14 17:41	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 17:41	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 17:41	1
cis-1,2-Dichloroethene	**0.0014**		0.0010	0.00017	mg/L			03/06/14 17:41	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 17:41	1
Methylene Chloride	ND		0.0010	0.00033	mg/L			03/06/14 17:41	1
Tetrachloroethene	**0.035**		0.0010	0.00029	mg/L			03/06/14 17:41	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 17:41	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 17:41	1
Trichloroethene	**0.0034**		0.0010	0.00017	mg/L			03/06/14 17:41	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*63 - 129*		*03/06/14 17:41*	*1*
4-Bromofluorobenzene (Surr)	*77*		*66 - 117*		*03/06/14 17:41*	*1*
Toluene-d8 (Surr)	*88*		*74 - 115*		*03/06/14 17:41*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 121*		*03/06/14 17:41*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-EBLK01-022814
Date Collected: 02/28/14 07:20
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34630-16
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 18:03	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 18:03	1
1,1-Dichloroethane	ND		0.0010	0.00015	mg/L			03/06/14 18:03	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 18:03	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 18:03	1
cis-1,2-Dichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 18:03	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 18:03	1
Methylene Chloride	ND		0.0010	0.00033	mg/L			03/06/14 18:03	1
Tetrachloroethene	ND		0.0010	0.00029	mg/L			03/06/14 18:03	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 18:03	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 18:03	1
Trichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 18:03	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*63 - 129*		*03/06/14 18:03*	*1*
4-Bromofluorobenzene (Surr)	*83*		*66 - 117*		*03/06/14 18:03*	*1*
Toluene-d8 (Surr)	*86*		*74 - 115*		*03/06/14 18:03*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 121*		*03/06/14 18:03*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-SMW04-022814

Lab Sample ID: 240-34630-

Date Collected: 02/28/14 09:45
Date Received: 03/01/14 09:55

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.00080**	J	0.0010	0.00022	mg/L			03/06/14 18:25	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 18:25	1
1,1-Dichloroethane	**0.0075**		0.0010	0.00015	mg/L			03/06/14 18:25	1
1,1-Dichloroethene	**0.0017**		0.0010	0.00019	mg/L			03/06/14 18:25	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 18:25	1
cis-1,2-Dichloroethene	**0.029**		0.0010	0.00017	mg/L			03/06/14 18:25	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 18:25	1
Methylene Chloride	**0.00040**	J B	0.0010	0.00033	mg/L			03/06/14 18:25	1
Tetrachloroethene	**0.016**		0.0010	0.00029	mg/L			03/06/14 18:25	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 18:25	1
trans-1,2-Dichloroethene	**0.00045**	J	0.0010	0.00019	mg/L			03/06/14 18:25	1
Trichloroethene	**0.0070**		0.0010	0.00017	mg/L			03/06/14 18:25	1
Vinyl chloride	**0.019**		0.0010	0.00022	mg/L			03/06/14 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 129*		*03/06/14 18:25*	*1*
4-Bromofluorobenzene (Surr)	*93*		*66 - 117*		*03/06/14 18:25*	*1*
Toluene-d8 (Surr)	*86*		*74 - 115*		*03/06/14 18:25*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 121*		*03/06/14 18:25*	*1*

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Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-SMW19-022814
Date Collected: 02/28/14 15:10
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34630-18
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.00049**	J	0.0010	0.00022	mg/L			03/06/14 18:48	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 18:48	1
1,1-Dichloroethane	**0.00035**	J	0.0010	0.00015	mg/L			03/06/14 18:48	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 18:48	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 18:48	1
cis-1,2-Dichloroethene	**0.0020**		0.0010	0.00017	mg/L			03/06/14 18:48	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 18:48	1
Methylene Chloride	ND		0.0010	0.00033	mg/L			03/06/14 18:48	1
Tetrachloroethene	**0.0010**		0.0010	0.00029	mg/L			03/06/14 18:48	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 18:48	1
trans-1,2-Dichloroethene	**0.00032**	J	0.0010	0.00019	mg/L			03/06/14 18:48	1
Trichloroethene	**0.023**		0.0010	0.00017	mg/L			03/06/14 18:48	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 18:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 129*		*03/06/14 18:48*	*1*
4-Bromofluorobenzene (Surr)	*83*		*66 - 117*		*03/06/14 18:48*	*1*
Toluene-d8 (Surr)	*87*		*74 - 115*		*03/06/14 18:48*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 121*		*03/06/14 18:48*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-TRIP02-022514

Lab Sample ID: 240-34630-

Date Collected: 02/25/14 00:00
Date Received: 03/01/14 09:55

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 19:10	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 19:10	1
1,1-Dichloroethane	ND		0.0010	0.00015	mg/L			03/06/14 19:10	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 19:10	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 19:10	1
cis-1,2-Dichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 19:10	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 19:10	1
Methylene Chloride	**0.00034**	**J B**	0.0010	0.00033	mg/L			03/06/14 19:10	1
Tetrachloroethene	ND		0.0010	0.00029	mg/L			03/06/14 19:10	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 19:10	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 19:10	1
Trichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 19:10	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 129*		*03/06/14 19:10*	*1*
4-Bromofluorobenzene (Surr)	*80*		*66 - 117*		*03/06/14 19:10*	*1*
Toluene-d8 (Surr)	*86*		*74 - 115*		*03/06/14 19:10*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 121*		*03/06/14 19:10*	*1*

Surrogate Summary

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(63-129)	(66-117)	(74-115)	(75-121)
240-34630-1	HSSER-SMW08-022514	79	96	96	88
240-34630-2	HSSER-GMZ01-022514	81	94	95	91
240-34630-3	HSSER-SMW01-022514	80	96	93	89
240-34630-4	HSSER-SMW02-022514	85	100	98	91
240-34630-5	HSSER-MW203-022514	82	96	93	91
240-34630-6	HSSER-MW07FGA-022514	78	93	94	85
240-34630-7	HSSER-GMZ04-022614	80	93	95	86
240-34630-8	HSSER-SMW21-022614	83	96	97	92
240-34630-9	HSSER-SMW20-022614	82	96	96	93
240-34630-10	HSSER-GMZ03-022614	82	94	94	90
240-34630-11	HSSER-GMZ02-022614	79	95	96	91
240-34630-11 MS	HSSER-GMZ02-022614	77	96	91	89
240-34630-11 MSD	HSSER-GMZ02-022614	77	96	97	89
240-34630-12	HSSER-FBLK01-022514	104	84	85	96
240-34630-13	HSSER-DUP01-022614	103	81	85	95
240-34630-14	HSSER-PMW01-022814	104	80	85	95
240-34630-15	HSSER-PMW02-022814	104	77	88	97
240-34630-16	HSSER-EBLK01-022814	105	83	86	95
240-34630-17	HSSER-SMW04-022814	103	93	86	99
240-34630-18	HSSER-SMW19-022814	101	83	87	98
240-34630-19	HSSER-TRIP02-022514	100	80	86	95
LCS 240-121639/4	Lab Control Sample	81	101	93	93
LCS 240-121645/4	Lab Control Sample	90	94	91	91
LCS 240-121772/4	Lab Control Sample	76	99	95	90
MB 240-121639/6	Method Blank	79	97	93	89
MB 240-121645/5	Method Blank	100	87	86	98
MB 240-121772/38	Method Blank	79	92	94	89

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

Lab Sample ID: MB 240-121639/6
Matrix: Water
Analysis Batch: 121639

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 11:25	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 11:25	1
1,1-Dichloroethane	ND		0.0010	0.00015	mg/L			03/06/14 11:25	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 11:25	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 11:25	1
cis-1,2-Dichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 11:25	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 11:25	1
Methylene Chloride	ND		0.0010	0.00033	mg/L			03/06/14 11:25	1
Tetrachloroethene	ND		0.0010	0.00029	mg/L			03/06/14 11:25	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 11:25	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 11:25	1
Trichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 11:25	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 11:25	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*63 - 129*		*03/06/14 11:25*	*1*
4-Bromofluorobenzene (Surr)	*97*		*66 - 117*		*03/06/14 11:25*	*1*
Toluene-d8 (Surr)	*93*		*74 - 115*		*03/06/14 11:25*	*1*
Dibromofluoromethane (Surr)	*89*		*75 - 121*		*03/06/14 11:25*	*1*

Lab Sample ID: LCS 240-121639/4
Matrix: Water
Analysis Batch: 121639

Client Sample ID: Lab Control Samp
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0100	0.00905		mg/L		91	74 - 118
1,1,2-Trichloroethane	0.0100	0.0103		mg/L		103	80 - 112
1,1-Dichloroethane	0.0100	0.00950		mg/L		95	82 - 115
1,1-Dichloroethene	0.0100	0.00835		mg/L		83	78 - 131
1,2-Dichloroethane	0.0100	0.00939		mg/L		94	71 - 127
cis-1,2-Dichloroethene	0.0100	0.00966		mg/L		97	80 - 113
Ethylbenzene	0.0100	0.0101		mg/L		101	83 - 112
Methylene Chloride	0.0100	0.00709		mg/L		71	66 - 131
Tetrachloroethene	0.0100	0.0107		mg/L		107	79 - 114
Toluene	0.0100	0.00989		mg/L		99	84 - 111
trans-1,2-Dichloroethene	0.0100	0.00968		mg/L		97	83 - 117
Trichloroethene	0.0100	0.0106		mg/L		106	76 - 117
Vinyl chloride	0.0100	0.00916		mg/L		92	53 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*81*		*63 - 129*
4-Bromofluorobenzene (Surr)	*101*		*66 - 117*
Toluene-d8 (Surr)	*93*		*74 - 115*
Dibromofluoromethane (Surr)	*93*		*75 - 121*

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

Lab Sample ID: 240-34630-11 MS
Matrix: Water
Analysis Batch: 121639

Client Sample ID: HSSER-GMZ02-022614
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0094		0.0100	0.0187		mg/L		93	68 - 121
1,1,2-Trichloroethane	ND		0.0100	0.0101		mg/L		101	75 - 115
1,1-Dichloroethane	0.0036		0.0100	0.0130		mg/L		94	79 - 116
1,1-Dichloroethene	0.00074	J	0.0100	0.00968		mg/L		89	74 - 135
1,2-Dichloroethane	ND		0.0100	0.00925		mg/L		92	68 - 129
cis-1,2-Dichloroethene	0.00096	J	0.0100	0.0105		mg/L		95	70 - 120
Ethylbenzene	ND		0.0100	0.00986		mg/L		99	75 - 116
Methylene Chloride	ND		0.0100	0.00859		mg/L		86	63 - 128
Tetrachloroethene	0.00063	J	0.0100	0.0110		mg/L		103	70 - 117
Toluene	ND		0.0100	0.00989		mg/L		99	78 - 114
trans-1,2-Dichloroethene	ND		0.0100	0.00965		mg/L		96	80 - 119
Trichloroethene	0.00025	J	0.0100	0.0104		mg/L		101	66 - 120
Vinyl chloride	ND		0.0100	0.00773		mg/L		77	49 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*77*		*63 - 129*
4-Bromofluorobenzene (Surr)	*96*		*66 - 117*
Toluene-d8 (Surr)	*91*		*74 - 115*
Dibromofluoromethane (Surr)	*89*		*75 - 121*

Lab Sample ID: 240-34630-11 MSD
Matrix: Water
Analysis Batch: 121639

Client Sample ID: HSSER-GMZ02-022614
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0094		0.0100	0.0184		mg/L		89	68 - 121	2	30
1,1,2-Trichloroethane	ND		0.0100	0.0106		mg/L		106	75 - 115	5	30
1,1-Dichloroethane	0.0036		0.0100	0.0129		mg/L		92	79 - 116	1	30
1,1-Dichloroethene	0.00074	J	0.0100	0.00988		mg/L		91	74 - 135	2	30
1,2-Dichloroethane	ND		0.0100	0.00923		mg/L		92	68 - 129	0	30
cis-1,2-Dichloroethene	0.00096	J	0.0100	0.0107		mg/L		98	70 - 120	2	30
Ethylbenzene	ND		0.0100	0.00991		mg/L		99	75 - 116	0	30
Methylene Chloride	ND		0.0100	0.00883		mg/L		88	63 - 128	3	30
Tetrachloroethene	0.00063	J	0.0100	0.0109		mg/L		103	70 - 117	0	30
Toluene	ND		0.0100	0.0102		mg/L		102	78 - 114	3	30
trans-1,2-Dichloroethene	ND		0.0100	0.00976		mg/L		98	80 - 119	1	30
Trichloroethene	0.00025	J	0.0100	0.0104		mg/L		102	66 - 120	1	30
Vinyl chloride	ND		0.0100	0.00807		mg/L		81	49 - 130	4	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*77*		*63 - 129*
4-Bromofluorobenzene (Surr)	*96*		*66 - 117*
Toluene-d8 (Surr)	*97*		*74 - 115*
Dibromofluoromethane (Surr)	*89*		*75 - 121*

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

Lab Sample ID: MB 240-121645/5
Matrix: Water
Analysis Batch: 121645

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 10:52	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 10:52	1
1,1-Dichloroethane	ND		0.0010	0.00015	mg/L			03/06/14 10:52	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 10:52	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 10:52	1
cis-1,2-Dichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 10:52	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 10:52	1
Methylene Chloride	0.000337	J	0.0010	0.00033	mg/L			03/06/14 10:52	1
Tetrachloroethene	ND		0.0010	0.00029	mg/L			03/06/14 10:52	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 10:52	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 10:52	1
Trichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 10:52	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 10:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 129*		*03/06/14 10:52*	*1*
4-Bromofluorobenzene (Surr)	*87*		*66 - 117*		*03/06/14 10:52*	*1*
Toluene-d8 (Surr)	*86*		*74 - 115*		*03/06/14 10:52*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 121*		*03/06/14 10:52*	*1*

Lab Sample ID: LCS 240-121645/4
Matrix: Water
Analysis Batch: 121645

Client Sample ID: Lab Control Samp
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0100	0.0102		mg/L		102	74 - 118
1,1,2-Trichloroethane	0.0100	0.00939		mg/L		94	80 - 112
1,1-Dichloroethane	0.0100	0.00963		mg/L		96	82 - 115
1,1-Dichloroethene	0.0100	0.00930		mg/L		93	78 - 131
1,2-Dichloroethane	0.0100	0.00939		mg/L		94	71 - 127
cis-1,2-Dichloroethene	0.0100	0.00952		mg/L		95	80 - 113
Ethylbenzene	0.0100	0.00928		mg/L		93	83 - 112
Methylene Chloride	0.0100	0.00963		mg/L		96	66 - 131
Tetrachloroethene	0.0100	0.00974		mg/L		97	79 - 114
Toluene	0.0100	0.00901		mg/L		90	84 - 111
trans-1,2-Dichloroethene	0.0100	0.00980		mg/L		98	83 - 117
Trichloroethene	0.0100	0.00920		mg/L		92	76 - 117
Vinyl chloride	0.0100	0.00998		mg/L		100	53 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*63 - 129*
4-Bromofluorobenzene (Surr)	*94*		*66 - 117*
Toluene-d8 (Surr)	*91*		*74 - 115*
Dibromofluoromethane (Surr)	*91*		*75 - 121*

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

Lab Sample ID: MB 240-121772/38
Matrix: Water
Analysis Batch: 121772

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.0010	0.00022	mg/L			03/07/14 10:13	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/07/14 10:13	1
1,1-Dichloroethane	ND		0.0010	0.00015	mg/L			03/07/14 10:13	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/07/14 10:13	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/07/14 10:13	1
cis-1,2-Dichloroethene	ND		0.0010	0.00017	mg/L			03/07/14 10:13	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/07/14 10:13	1
Methylene Chloride	ND		0.0010	0.00033	mg/L			03/07/14 10:13	1
Tetrachloroethene	ND		0.0010	0.00029	mg/L			03/07/14 10:13	1
Toluene	ND		0.0010	0.00013	mg/L			03/07/14 10:13	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/07/14 10:13	1
Trichloroethene	ND		0.0010	0.00017	mg/L			03/07/14 10:13	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/07/14 10:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*63 - 129*		*03/07/14 10:13*	*1*
4-Bromofluorobenzene (Surr)	*92*		*66 - 117*		*03/07/14 10:13*	*1*
Toluene-d8 (Surr)	*94*		*74 - 115*		*03/07/14 10:13*	*1*
Dibromofluoromethane (Surr)	*89*		*75 - 121*		*03/07/14 10:13*	*1*

Lab Sample ID: LCS 240-121772/4
Matrix: Water
Analysis Batch: 121772

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0100	0.00944		mg/L		94	74 - 118
1,1,2-Trichloroethane	0.0100	0.00996		mg/L		100	80 - 112
1,1-Dichloroethane	0.0100	0.00908		mg/L		91	82 - 115
1,1-Dichloroethene	0.0100	0.00872		mg/L		87	78 - 131
1,2-Dichloroethane	0.0100	0.00877		mg/L		88	71 - 127
cis-1,2-Dichloroethene	0.0100	0.00933		mg/L		93	80 - 113
Ethylbenzene	0.0100	0.00997		mg/L		100	83 - 112
Methylene Chloride	0.0100	0.00794		mg/L		79	66 - 131
Tetrachloroethene	0.0100	0.0109		mg/L		109	79 - 114
Toluene	0.0100	0.0101		mg/L		101	84 - 111
trans-1,2-Dichloroethene	0.0100	0.00937		mg/L		94	83 - 117
Trichloroethene	0.0100	0.0103		mg/L		103	76 - 117
Vinyl chloride	0.0100	0.00821		mg/L		82	53 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*76*		*63 - 129*
4-Bromofluorobenzene (Surr)	*99*		*66 - 117*
Toluene-d8 (Surr)	*95*		*74 - 115*
Dibromofluoromethane (Surr)	*90*		*75 - 121*

QC Association Summary

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

GC/MS VOA

Analysis Batch: 121639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-34630-3	HSSER-SMW01-022514	Total/NA	Water	8260B	
240-34630-4	HSSER-SMW02-022514	Total/NA	Water	8260B	
240-34630-5	HSSER-MW203-022514	Total/NA	Water	8260B	
240-34630-6	HSSER-MW07FGA-022514	Total/NA	Water	8260B	
240-34630-7	HSSER-GMZ04-022614	Total/NA	Water	8260B	
240-34630-8	HSSER-SMW21-022614	Total/NA	Water	8260B	
240-34630-9	HSSER-SMW20-022614	Total/NA	Water	8260B	
240-34630-10	HSSER-GMZ03-022614	Total/NA	Water	8260B	
240-34630-11	HSSER-GMZ02-022614	Total/NA	Water	8260B	
240-34630-11 MS	HSSER-GMZ02-022614	Total/NA	Water	8260B	
240-34630-11 MSD	HSSER-GMZ02-022614	Total/NA	Water	8260B	
LCS 240-121639/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-121639/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 121645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-34630-12	HSSER-FBLK01-022514	Total/NA	Water	8260B	
240-34630-13	HSSER-DUP01-022614	Total/NA	Water	8260B	
240-34630-14	HSSER-PMW01-022814	Total/NA	Water	8260B	
240-34630-15	HSSER-PMW02-022814	Total/NA	Water	8260B	
240-34630-16	HSSER-EBLK01-022814	Total/NA	Water	8260B	
240-34630-17	HSSER-SMW04-022814	Total/NA	Water	8260B	
240-34630-18	HSSER-SMW19-022814	Total/NA	Water	8260B	
240-34630-19	HSSER-TRIP02-022514	Total/NA	Water	8260B	
LCS 240-121645/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-121645/5	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 121772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-34630-1	HSSER-SMW08-022514	Total/NA	Water	8260B	
240-34630-2	HSSER-GMZ01-022514	Total/NA	Water	8260B	
LCS 240-121772/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-121772/38	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-SMW08-022514 — Lab Sample ID: 240-34630-1

Date Collected: 02/25/14 09:25 — **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	121772	03/07/14 10:36	LEE	TAL CAN

Client Sample ID: HSSER-GMZ01-022514 — Lab Sample ID: 240-34630-2

Date Collected: 02/25/14 11:20 — **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1.67	121772	03/07/14 10:59	LEE	TAL CAN

Client Sample ID: HSSER-SMW01-022514 — Lab Sample ID: 240-34630-3

Date Collected: 02/25/14 13:10 — **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121639	03/06/14 16:22	LEE	TAL CAN

Client Sample ID: HSSER-SMW02-022514 — Lab Sample ID: 240-34630-4

Date Collected: 02/25/14 14:25 — **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121639	03/06/14 16:45	LEE	TAL CAN

Client Sample ID: HSSER-MW203-022514 — Lab Sample ID: 240-34630-5

Date Collected: 02/25/14 16:00 — **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121639	03/06/14 17:09	LEE	TAL CAN

Client Sample ID: HSSER-MW07FGA-022514 — Lab Sample ID: 240-34630-6

Date Collected: 02/25/14 17:10 — **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121639	03/06/14 17:32	LEE	TAL CAN

Client Sample ID: HSSER-GMZ04-022614 **Lab Sample ID: 240-34630**
Date Collected: 02/26/14 08:35 **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121639	03/06/14 17:56	LEE	TAL CAN

Client Sample ID: HSSER-SMW21-022614 **Lab Sample ID: 240-34630-8**
Date Collected: 02/26/14 10:10 **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121639	03/06/14 18:19	LEE	TAL CAN

Client Sample ID: HSSER-SMW20-022614 **Lab Sample ID: 240-34630-9**
Date Collected: 02/26/14 11:35 **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121639	03/06/14 18:43	LEE	TAL CAN

Client Sample ID: HSSER-GMZ03-022614 **Lab Sample ID: 240-34630-10**
Date Collected: 02/26/14 13:55 **Matrix: Wat**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121639	03/06/14 19:06	LEE	TAL CAN

Client Sample ID: HSSER-GMZ02-022614 **Lab Sample ID: 240-34630-11**
Date Collected: 02/26/14 15:40 **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121639	03/06/14 19:29	LEE	TAL CAN

Client Sample ID: HSSER-FBLK01-022514 **Lab Sample ID: 240-34630-12**
Date Collected: 02/25/14 08:25 **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121645	03/06/14 16:34	LEE	TAL CAN

Lab Chronicle

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-DUP01-022614 — Lab Sample ID: 240-34630-13

Date Collected: 02/26/14 00:00 — **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121645	03/06/14 16:57	LEE	TAL CAN

Client Sample ID: HSSER-PMW01-022814 — Lab Sample ID: 240-34630-14

Date Collected: 02/28/14 08:05 — **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121645	03/06/14 17:19	LEE	TAL CAN

Client Sample ID: HSSER-PMW02-022814 — Lab Sample ID: 240-34630-15

Date Collected: 02/28/14 08:15 — **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121645	03/06/14 17:41	LEE	TAL CAN

Client Sample ID: HSSER-EBLK01-022814 — Lab Sample ID: 240-34630-16

Date Collected: 02/28/14 07:20 — **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121645	03/06/14 18:03	LEE	TAL CAN

Client Sample ID: HSSER-SMW04-022814 — Lab Sample ID: 240-34630-17

Date Collected: 02/28/14 09:45 — **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121645	03/06/14 18:25	LEE	TAL CAN

Client Sample ID: HSSER-SMW19-022814 — Lab Sample ID: 240-34630-18

Date Collected: 02/28/14 15:10 — **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121645	03/06/14 18:48	LEE	TAL CAN

Lab Chronicle

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Client Sample ID: HSSER-TRIP02-022514
Date Collected: 02/25/14 00:00
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34630-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121645	03/06/14 19:10	LEE	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34630-1

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-14
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-14
Kansas	NELAP	7	E-10336	04-01-14 *
Kentucky (UST)	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-14
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-14
Texas	NELAP	6		08-31-14
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-15
West Virginia DEP	State Program	3	210	12-31-14
Wisconsin	State Program	5	999518190	08-31-14

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* Expired certification is currently pending renewal and is considered valid.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS

240-34630 Chain of Custody

TestAmerica Canton
4101 Shuffel Street, N. R.
North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

1.0

Chain of Custody Record

022499

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Peter Hollatz	Site Contact: Peter Hollatz	Date: 2-28-14	COC No:
Company Name: AECOM	Tel/Fax: Peter.Hollatz@aecom.com	Lab Contact: Pat Omara	Carrier: Fedex	1 of 2 COCs
Address: 27755 Diehl Rd Suite 100	Analysis Turnaround Time			Sampler:
City/State/Zip: Warrenville, IL 60555	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 630-836-1700	TAT if different from Below _____			Walk-in Client:
Fax: 630-836-1711	☒ 2 weeks			Lab Sampling:
Project Name: UTC-HS-Plant 1	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
PO#	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOC 8260B	Sample Specific Notes:
HSSER-SMW08-022514	2-25-14	0925	G	2	3			X	
HSSER-GM201-022514		1120	G	2	3			X	
HSSER-SMW01-022514		1310	G	2	3			X	
HSSER-SMW02-022514		1425	G	2	3			X	
HSSER-MW203-022514		1600	G	2	3			X	
HSSER-MW07FGA-022514		1710	G	2	3			X	
HSSER-GM204-022614	2-26-14	0835	G	2	3			X	
HSSER-SMW21-022614		1010	G	2	3			X	
HSSER-SMW20-022614		1135	G	2	3			X	
HSSER-GM203-022614		1355	G	2	3			X	
HSSER-GM202-022614		1540	G	2	3			X	
HSSER-FBLK01-022514	2-25-14	0825	G	2	3			X	

Preservation Used: 1=Ice, 2=HCL, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	AECOM	2-28-14 2000	Fedex		2-28-14 2000
Relinquished by:	Company:	Date/Time:	Received by: [signature]	Company: TA	Date/Time: 3-1-14 955
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

1.6

Chain of Custody Record

022500

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Peter Hollatz	Site Contact: Peter Hollatz	Date: 2-28-14	COC No:
Company Name: AECOM	Tel/Fax: Peter.Hollatz@aecom.com	Lab Contact: Pat Omears	Carrier: Fedex	2 of 2 COCs
Address: 27755 Diehl Rd	Analysis Turnaround Time			Sampler:
City/State/Zip: Warrenville, IL 60555	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 630-836-1700	TAT if different from Below _____			Walk-in Client:
Fax: 630-836-1711	☒ 2 weeks			Lab Sampling:
Project Name: UTC-HS-Plant 1	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)	VOC's 8260B	Sample Specific Notes:
HSSER-DUP01-022614	2-26-14	0000	G	2	3			X	
HSSER-MS01-022614	2-26-14	1540	G	2	3			X	
HSSER-MSD01-022614	2-26-14	1540	G	2	3			X	
HSSER-PMW01-022814	2-28-14	0805	G	2	3			X	
HSSER-PMW02-022814		0815	G	2	3			X	
HSSER-EBLK01-022814		0720	G	2	3			X	
HSSER-SMW04-022814		0945	G	2	3			X	
HSSER-SMW19-022814		1510	G	2	3			X	
HSSER-TB02-022514	2-25-14	—	G	2	2			X	

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	AECOM	2-28-14 2000	Fedex		2-28-14 2000
Relinquished by:	Company:	Date/Time:	Received by: [signature]	Company: TA	Date/Time: 3-1-14 955
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative Login # : 34630
Canton Facility

Client AECOM Site Name _____ Cooler unpacked by:

Cooler Received on 3-1-14 Opened on 3-1-14

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF +0 °C)	Observed Cooler Temp. 1.6 °C	Corrected Cooler Temp. 1.6 °C	
IR GUN# 4	(CF -1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	☐ See Multiple Cooler Form
IR GUN# 5	(CF +1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 8	(CF +1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   - Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   - Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC391982
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-34628-1
Client Project/Site: UTC HS Plant 1 Rockford

For:
AECOM, Inc.
27755 Diehl Road
Suite 100
Warrenville, Illinois 60555

Attn: Peter Hollatz

Patrick O'Meara

Authorized for release by:
3/10/2014 6:40:53 PM

Patrick O'Meara, Manager of Project Management
(330)966-5725
patrick.omeara@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

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

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

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

CASE NARRATIVE

Client: AECOM, Inc.

Project: UTC HS Plant 1 Rockford

Report Number: 240-34628-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT
The samples were received on 3/1/2014 9:55 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2° C.

VOLATILE ORGANIC COMPOUNDS (GCMS)
Samples HSSER-RAMW01-022814 (240-34628-1), HSSER-RAMW04-022814 (240-34628-2), HSSER-RAMW02-022814 (240-34628-3), HSSER-RAMW05-022814 (240-34628-4), HSSER-RAMW03-022814 (240-34628-5), HSSER-RAMW06-022814 (240-34628-6), HSSER-RAMW08-022814 (240-34628-7), HSSER-RAMW07-022814 (240-34628-8), HSSER-FBLK02-022814 (240-34628-9), HSSER-DUP02-022814 (240-34628-10), HSSER-EBLK02-022814 (240-34628-11) and HSSER-TRIP01-022514 (240-34628-12) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 03/06/2014.

Methylene Chloride was detected in method blank MB 240-121645/5 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

Samples HSSER-RAMW05-022814 (240-34628-4)[10X] and HSSER-RAMW07-022814 (240-34628-8)[7.14X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the VOCs analysis. All other quality control parameters were within the acceptance limits.

Method Summary

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN

Protocol References:

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

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-34628-1	HSSER-RAMW01-022814	Water	02/28/14 09:45	03/01/14 09:55
240-34628-2	HSSER-RAMW04-022814	Water	02/28/14 11:10	03/01/14 09:55
240-34628-3	HSSER-RAMW02-022814	Water	02/28/14 11:30	03/01/14 09:55
240-34628-4	HSSER-RAMW05-022814	Water	02/28/14 12:40	03/01/14 09:55
240-34628-5	HSSER-RAMW03-022814	Water	02/28/14 13:10	03/01/14 09:55
240-34628-6	HSSER-RAMW06-022814	Water	02/28/14 13:50	03/01/14 09:55
240-34628-7	HSSER-RAMW08-022814	Water	02/28/14 15:00	03/01/14 09:55
240-34628-8	HSSER-RAMW07-022814	Water	02/28/14 16:25	03/01/14 09:55
240-34628-9	HSSER-FBLK02-022814	Water	02/28/14 09:50	03/01/14 09:55
240-34628-10	HSSER-DUP02-022814	Water	02/28/14 00:00	03/01/14 09:55
240-34628-11	HSSER-EBLK02-022814	Water	02/28/14 10:25	03/01/14 09:55
240-34628-12	HSSER-TRIP01-022514	Water	02/28/14 00:00	03/01/14 09:55

Detection Summary

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

Client Sample ID: HSSER-RAMW01-022814 — Lab Sample ID: 240-34628

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0071		0.0010	0.00022	mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.0084		0.0010	0.00015	mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.0011		0.0010	0.00017	mg/L	1		8260B	Total/NA
Methylene Chloride	0.00044	J B	0.0010	0.00033	mg/L	1		8260B	Total/NA
Tetrachloroethene	0.016		0.0010	0.00029	mg/L	1		8260B	Total/NA
Trichloroethene	0.0016		0.0010	0.00017	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-RAMW04-022814 — Lab Sample ID: 240-34628-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0034		0.0010	0.00022	mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.0010		0.0010	0.00015	mg/L	1		8260B	Total/NA
Tetrachloroethene	0.00071	J	0.0010	0.00029	mg/L	1		8260B	Total/NA
Trichloroethene	0.00026	J	0.0010	0.00017	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-RAMW02-022814 — Lab Sample ID: 240-34628-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0036		0.0010	0.00022	mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.0025		0.0010	0.00015	mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.00041	J	0.0010	0.00017	mg/L	1		8260B	Total/NA
Methylene Chloride	0.00053	J B	0.0010	0.00033	mg/L	1		8260B	Total/NA
Tetrachloroethene	0.0050		0.0010	0.00029	mg/L	1		8260B	Total/NA
Trichloroethene	0.0012		0.0010	0.00017	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-RAMW05-022814 — Lab Sample ID: 240-34628-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.37		0.010	0.0022	mg/L	10		8260B	Total/NA
1,1-Dichloroethane	0.0038	J	0.010	0.0015	mg/L	10		8260B	Total/NA
1,1-Dichloroethene	0.0026	J	0.010	0.0019	mg/L	10		8260B	Total/NA
cis-1,2-Dichloroethene	0.020		0.010	0.0017	mg/L	10		8260B	Total/NA
Trichloroethene	0.014		0.010	0.0017	mg/L	10		8260B	Total/NA

Client Sample ID: HSSER-RAMW03-022814 — Lab Sample ID: 240-34628-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.00066	J	0.0010	0.00022	mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.00058	J	0.0010	0.00015	mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.00037	J	0.0010	0.00017	mg/L	1		8260B	Total/NA
Methylene Chloride	0.00039	J B	0.0010	0.00033	mg/L	1		8260B	Total/NA
Tetrachloroethene	0.00098	J	0.0010	0.00029	mg/L	1		8260B	Total/NA
Trichloroethene	0.00037	J	0.0010	0.00017	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-RAMW06-022814 — Lab Sample ID: 240-34628-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.012		0.0010	0.00022	mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.0052		0.0010	0.00017	mg/L	1		8260B	Total/NA
Methylene Chloride	0.00062	J B	0.0010	0.00033	mg/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

Client Sample ID: HSSER-RAMW06-022814 (Continued) — Lab Sample ID: 240-34628-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.00036	J	0.0010	0.00017	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-RAMW08-022814 — Lab Sample ID: 240-34628-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0025		0.0010	0.00022	mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.0032		0.0010	0.00015	mg/L	1		8260B	Total/NA
Methylene Chloride	0.00042	J B	0.0010	0.00033	mg/L	1		8260B	Total/NA
Tetrachloroethene	0.00073	J	0.0010	0.00029	mg/L	1		8260B	Total/NA
Trichloroethene	0.00023	J	0.0010	0.00017	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-RAMW07-022814 — Lab Sample ID: 240-34628-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.28		0.0071	0.0016	mg/L	7.14		8260B	Total/NA
1,1-Dichloroethane	0.0042	J	0.0071	0.0011	mg/L	7.14		8260B	Total/NA
1,1-Dichloroethene	0.0028	J	0.0071	0.0014	mg/L	7.14		8260B	Total/NA
cis-1,2-Dichloroethene	0.0042	J	0.0071	0.0012	mg/L	7.14		8260B	Total/NA
Tetrachloroethene	0.0043	J	0.0071	0.0021	mg/L	7.14		8260B	Total/NA
Trichloroethene	0.0043	J	0.0071	0.0012	mg/L	7.14		8260B	Total/NA

Client Sample ID: HSSER-FBLK02-022814 — Lab Sample ID: 240-34628-9

No Detections.

Client Sample ID: HSSER-DUP02-022814 — Lab Sample ID: 240-34628-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.00065	J	0.0010	0.00022	mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.00060	J	0.0010	0.00015	mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.00035	J	0.0010	0.00017	mg/L	1		8260B	Total/NA
Methylene Chloride	0.00061	J B	0.0010	0.00033	mg/L	1		8260B	Total/NA
Tetrachloroethene	0.00090	J	0.0010	0.00029	mg/L	1		8260B	Total/NA
Trichloroethene	0.00033	J	0.0010	0.00017	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-EBLK02-022814 — Lab Sample ID: 240-34628-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	0.00056	J B	0.0010	0.00033	mg/L	1		8260B	Total/NA

Client Sample ID: HSSER-TRIP01-022514 — Lab Sample ID: 240-34628-12

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

Client Sample ID: HSSER-RAMW01-022814

Lab Sample ID: 240-34628

Date Collected: 02/28/14 09:45
Date Received: 03/01/14 09:55

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.0071**		0.0010	0.00022	mg/L			03/06/14 11:18	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 11:18	1
1,1-Dichloroethane	**0.0084**		0.0010	0.00015	mg/L			03/06/14 11:18	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 11:18	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 11:18	1
cis-1,2-Dichloroethene	**0.0011**		0.0010	0.00017	mg/L			03/06/14 11:18	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 11:18	1
Methylene Chloride	**0.00044**	**J B**	0.0010	0.00033	mg/L			03/06/14 11:18	1
Tetrachloroethene	**0.016**		0.0010	0.00029	mg/L			03/06/14 11:18	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 11:18	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 11:18	1
Trichloroethene	**0.0016**		0.0010	0.00017	mg/L			03/06/14 11:18	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 11:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*63 - 129*		*03/06/14 11:18*	*1*
4-Bromofluorobenzene (Surr)	*87*		*66 - 117*		*03/06/14 11:18*	*1*
Toluene-d8 (Surr)	*89*		*74 - 115*		*03/06/14 11:18*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 121*		*03/06/14 11:18*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

Client Sample ID: HSSER-RAMW04-022814
Date Collected: 02/28/14 11:10
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34628-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.0034**		0.0010	0.00022	mg/L			03/06/14 11:40	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 11:40	1
1,1-Dichloroethane	**0.0010**		0.0010	0.00015	mg/L			03/06/14 11:40	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 11:40	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 11:40	1
cis-1,2-Dichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 11:40	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 11:40	1
Methylene Chloride	ND		0.0010	0.00033	mg/L			03/06/14 11:40	1
Tetrachloroethene	**0.00071**	J	0.0010	0.00029	mg/L			03/06/14 11:40	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 11:40	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 11:40	1
Trichloroethene	**0.00026**	J	0.0010	0.00017	mg/L			03/06/14 11:40	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 11:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*63 - 129*		*03/06/14 11:40*	*1*
4-Bromofluorobenzene (Surr)	*83*		*66 - 117*		*03/06/14 11:40*	*1*
Toluene-d8 (Surr)	*83*		*74 - 115*		*03/06/14 11:40*	*1*
Dibromofluoromethane (Surr)	*94*		*75 - 121*		*03/06/14 11:40*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

Client Sample ID: HSSER-RAMW02-022814

Lab Sample ID: 240-34628

Date Collected: 02/28/14 11:30
Date Received: 03/01/14 09:55

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.0036**		0.0010	0.00022	mg/L			03/06/14 12:03	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 12:03	1
1,1-Dichloroethane	**0.0025**		0.0010	0.00015	mg/L			03/06/14 12:03	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 12:03	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 12:03	1
cis-1,2-Dichloroethene	**0.00041**	J	0.0010	0.00017	mg/L			03/06/14 12:03	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 12:03	1
Methylene Chloride	**0.00053**	J B	0.0010	0.00033	mg/L			03/06/14 12:03	1
Tetrachloroethene	**0.0050**		0.0010	0.00029	mg/L			03/06/14 12:03	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 12:03	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 12:03	1
Trichloroethene	**0.0012**		0.0010	0.00017	mg/L			03/06/14 12:03	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 12:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 129*		*03/06/14 12:03*	*1*
4-Bromofluorobenzene (Surr)	*82*		*66 - 117*		*03/06/14 12:03*	*1*
Toluene-d8 (Surr)	*87*		*74 - 115*		*03/06/14 12:03*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 121*		*03/06/14 12:03*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

Client Sample ID: HSSER-RAMW05-022814
Date Collected: 02/28/14 12:40
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34628-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.37**		0.010	0.0022	mg/L			03/06/14 13:11	10
1,1,2-Trichloroethane	ND		0.010	0.0027	mg/L			03/06/14 13:11	10
1,1-Dichloroethane	**0.0038**	J	0.010	0.0015	mg/L			03/06/14 13:11	10
1,1-Dichloroethene	**0.0026**	J	0.010	0.0019	mg/L			03/06/14 13:11	10
1,2-Dichloroethane	ND		0.010	0.0022	mg/L			03/06/14 13:11	10
cis-1,2-Dichloroethene	**0.020**		0.010	0.0017	mg/L			03/06/14 13:11	10
Ethylbenzene	ND		0.010	0.0017	mg/L			03/06/14 13:11	10
Methylene Chloride	ND		0.010	0.0033	mg/L			03/06/14 13:11	10
Tetrachloroethene	ND		0.010	0.0029	mg/L			03/06/14 13:11	10
Toluene	ND		0.010	0.0013	mg/L			03/06/14 13:11	10
trans-1,2-Dichloroethene	ND		0.010	0.0019	mg/L			03/06/14 13:11	10
Trichloroethene	**0.014**		0.010	0.0017	mg/L			03/06/14 13:11	10
Vinyl chloride	ND		0.010	0.0022	mg/L			03/06/14 13:11	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*63 - 129*		*03/06/14 13:11*	*10*
4-Bromofluorobenzene (Surr)	*82*		*66 - 117*		*03/06/14 13:11*	*10*
Toluene-d8 (Surr)	*86*		*74 - 115*		*03/06/14 13:11*	*10*
Dibromofluoromethane (Surr)	*95*		*75 - 121*		*03/06/14 13:11*	*10*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

Client Sample ID: HSSER-RAMW03-022814

Lab Sample ID: 240-34628

Date Collected: 02/28/14 13:10
Date Received: 03/01/14 09:55

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.00066**	**J**	0.0010	0.00022	mg/L			03/06/14 13:34	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 13:34	1
1,1-Dichloroethane	**0.00058**	**J**	0.0010	0.00015	mg/L			03/06/14 13:34	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 13:34	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 13:34	1
cis-1,2-Dichloroethene	**0.00037**	**J**	0.0010	0.00017	mg/L			03/06/14 13:34	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 13:34	1
Methylene Chloride	**0.00039**	**J B**	0.0010	0.00033	mg/L			03/06/14 13:34	1
Tetrachloroethene	**0.00098**	**J**	0.0010	0.00029	mg/L			03/06/14 13:34	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 13:34	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 13:34	1
Trichloroethene	**0.00037**	**J**	0.0010	0.00017	mg/L			03/06/14 13:34	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*63 - 129*		*03/06/14 13:34*	*1*
4-Bromofluorobenzene (Surr)	*82*		*66 - 117*		*03/06/14 13:34*	*1*
Toluene-d8 (Surr)	*87*		*74 - 115*		*03/06/14 13:34*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 121*		*03/06/14 13:34*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

Client Sample ID: HSSER-RAMW06-022814
Date Collected: 02/28/14 13:50
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34628-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.012**		0.0010	0.00022	mg/L			03/06/14 13:57	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 13:57	1
1,1-Dichloroethane	ND		0.0010	0.00015	mg/L			03/06/14 13:57	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 13:57	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 13:57	1
cis-1,2-Dichloroethene	**0.0052**		0.0010	0.00017	mg/L			03/06/14 13:57	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 13:57	1
Methylene Chloride	**0.00062**	**J B**	0.0010	0.00033	mg/L			03/06/14 13:57	1
Tetrachloroethene	ND		0.0010	0.00029	mg/L			03/06/14 13:57	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 13:57	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 13:57	1
Trichloroethene	**0.00036**	**J**	0.0010	0.00017	mg/L			03/06/14 13:57	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 13:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 129*		*03/06/14 13:57*	*1*
4-Bromofluorobenzene (Surr)	*83*		*66 - 117*		*03/06/14 13:57*	*1*
Toluene-d8 (Surr)	*85*		*74 - 115*		*03/06/14 13:57*	*1*
Dibromofluoromethane (Surr)	*94*		*75 - 121*		*03/06/14 13:57*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

Client Sample ID: HSSER-RAMW08-022814
Date Collected: 02/28/14 15:00
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34628
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.0025**		0.0010	0.00022	mg/L			03/06/14 14:19	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 14:19	1
1,1-Dichloroethane	**0.0032**		0.0010	0.00015	mg/L			03/06/14 14:19	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 14:19	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 14:19	1
cis-1,2-Dichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 14:19	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 14:19	1
Methylene Chloride	**0.00042**	**J B**	0.0010	0.00033	mg/L			03/06/14 14:19	1
Tetrachloroethene	**0.00073**	**J**	0.0010	0.00029	mg/L			03/06/14 14:19	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 14:19	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 14:19	1
Trichloroethene	**0.00023**	**J**	0.0010	0.00017	mg/L			03/06/14 14:19	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 14:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 129*		*03/06/14 14:19*	*1*
4-Bromofluorobenzene (Surr)	*86*		*66 - 117*		*03/06/14 14:19*	*1*
Toluene-d8 (Surr)	*84*		*74 - 115*		*03/06/14 14:19*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 121*		*03/06/14 14:19*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

Client Sample ID: HSSER-RAMW07-022814
Date Collected: 02/28/14 16:25
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34628-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.28**		0.0071	0.0016	mg/L			03/06/14 14:41	7.14
1,1,2-Trichloroethane	ND		0.0071	0.0019	mg/L			03/06/14 14:41	7.14
1,1-Dichloroethane	**0.0042**	J	0.0071	0.0011	mg/L			03/06/14 14:41	7.14
1,1-Dichloroethene	**0.0028**	J	0.0071	0.0014	mg/L			03/06/14 14:41	7.14
1,2-Dichloroethane	ND		0.0071	0.0016	mg/L			03/06/14 14:41	7.14
cis-1,2-Dichloroethene	**0.0042**	J	0.0071	0.0012	mg/L			03/06/14 14:41	7.14
Ethylbenzene	ND		0.0071	0.0012	mg/L			03/06/14 14:41	7.14
Methylene Chloride	ND		0.0071	0.0024	mg/L			03/06/14 14:41	7.14
Tetrachloroethene	**0.0043**	J	0.0071	0.0021	mg/L			03/06/14 14:41	7.14
Toluene	ND		0.0071	0.00093	mg/L			03/06/14 14:41	7.14
trans-1,2-Dichloroethene	ND		0.0071	0.0014	mg/L			03/06/14 14:41	7.14
Trichloroethene	**0.0043**	J	0.0071	0.0012	mg/L			03/06/14 14:41	7.14
Vinyl chloride	ND		0.0071	0.0016	mg/L			03/06/14 14:41	7.14

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 129*		*03/06/14 14:41*	*7.14*
4-Bromofluorobenzene (Surr)	*84*		*66 - 117*		*03/06/14 14:41*	*7.14*
Toluene-d8 (Surr)	*86*		*74 - 115*		*03/06/14 14:41*	*7.14*
Dibromofluoromethane (Surr)	*97*		*75 - 121*		*03/06/14 14:41*	*7.14*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

Client Sample ID: HSSER-FBLK02-022814
Date Collected: 02/28/14 09:50
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34628
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 15:04	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 15:04	1
1,1-Dichloroethane	ND		0.0010	0.00015	mg/L			03/06/14 15:04	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 15:04	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 15:04	1
cis-1,2-Dichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 15:04	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 15:04	1
Methylene Chloride	ND		0.0010	0.00033	mg/L			03/06/14 15:04	1
Tetrachloroethene	ND		0.0010	0.00029	mg/L			03/06/14 15:04	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 15:04	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 15:04	1
Trichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 15:04	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*63 - 129*		*03/06/14 15:04*	*1*
4-Bromofluorobenzene (Surr)	*83*		*66 - 117*		*03/06/14 15:04*	*1*
Toluene-d8 (Surr)	*86*		*74 - 115*		*03/06/14 15:04*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 121*		*03/06/14 15:04*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

Client Sample ID: HSSER-DUP02-022814
Date Collected: 02/28/14 00:00
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34628-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.00065**	J	0.0010	0.00022	mg/L			03/06/14 15:27	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 15:27	1
1,1-Dichloroethane	**0.00060**	J	0.0010	0.00015	mg/L			03/06/14 15:27	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 15:27	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 15:27	1
cis-1,2-Dichloroethene	**0.00035**	J	0.0010	0.00017	mg/L			03/06/14 15:27	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 15:27	1
Methylene Chloride	**0.00061**	J B	0.0010	0.00033	mg/L			03/06/14 15:27	1
Tetrachloroethene	**0.00090**	J	0.0010	0.00029	mg/L			03/06/14 15:27	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 15:27	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 15:27	1
Trichloroethene	**0.00033**	J	0.0010	0.00017	mg/L			03/06/14 15:27	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 129*		*03/06/14 15:27*	*1*
4-Bromofluorobenzene (Surr)	*83*		*66 - 117*		*03/06/14 15:27*	*1*
Toluene-d8 (Surr)	*83*		*74 - 115*		*03/06/14 15:27*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 121*		*03/06/14 15:27*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

Client Sample ID: HSSER-EBLK02-022814

Lab Sample ID: 240-34628-1

Date Collected: 02/28/14 10:25
Date Received: 03/01/14 09:55

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 15:49	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 15:49	1
1,1-Dichloroethane	ND		0.0010	0.00015	mg/L			03/06/14 15:49	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 15:49	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 15:49	1
cis-1,2-Dichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 15:49	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 15:49	1
Methylene Chloride	**0.00056**	**J B**	0.0010	0.00033	mg/L			03/06/14 15:49	1
Tetrachloroethene	ND		0.0010	0.00029	mg/L			03/06/14 15:49	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 15:49	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 15:49	1
Trichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 15:49	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 129*		*03/06/14 15:49*	*1*
4-Bromofluorobenzene (Surr)	*82*		*66 - 117*		*03/06/14 15:49*	*1*
Toluene-d8 (Surr)	*88*		*74 - 115*		*03/06/14 15:49*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 121*		*03/06/14 15:49*	*1*

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

Client Sample ID: HSSER-TRIP01-022514
Date Collected: 02/28/14 00:00
Date Received: 03/01/14 09:55

Lab Sample ID: 240-34628-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 16:12	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 16:12	1
1,1-Dichloroethane	ND		0.0010	0.00015	mg/L			03/06/14 16:12	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 16:12	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 16:12	1
cis-1,2-Dichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 16:12	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 16:12	1
Methylene Chloride	ND		0.0010	0.00033	mg/L			03/06/14 16:12	1
Tetrachloroethene	ND		0.0010	0.00029	mg/L			03/06/14 16:12	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 16:12	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 16:12	1
Trichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 16:12	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 16:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*63 - 129*		*03/06/14 16:12*	*1*
4-Bromofluorobenzene (Surr)	*79*		*66 - 117*		*03/06/14 16:12*	*1*
Toluene-d8 (Surr)	*87*		*74 - 115*		*03/06/14 16:12*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 121*		*03/06/14 16:12*	*1*

Surrogate Summary

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(63-129)	(66-117)	(74-115)	(75-121)
240-34628-1	HSSER-RAMW01-022814	107	87	89	104
240-34628-2	HSSER-RAMW04-022814	99	83	83	94
240-34628-3	HSSER-RAMW02-022814	103	82	87	96
240-34628-3 MS	HSSER-RAMW02-022814	90	94	92	92
240-34628-3 MSD	HSSER-RAMW02-022814	93	92	94	92
240-34628-4	HSSER-RAMW05-022814	99	82	86	95
240-34628-5	HSSER-RAMW03-022814	98	82	87	92
240-34628-6	HSSER-RAMW06-022814	100	83	85	94
240-34628-7	HSSER-RAMW08-022814	101	86	84	99
240-34628-8	HSSER-RAMW07-022814	100	84	86	97
240-34628-9	HSSER-FBLK02-022814	102	83	86	91
240-34628-10	HSSER-DUP02-022814	101	83	83	91
240-34628-11	HSSER-EBLK02-022814	101	82	88	91
240-34628-12	HSSER-TRIP01-022514	103	79	87	92
LCS 240-121645/4	Lab Control Sample	90	94	91	91
MB 240-121645/5	Method Blank	100	87	86	98

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

TOL = Toluene-d8 (Surr)

DBFM = Dibromofluoromethane (Surr)

QC Sample Results

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

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

Lab Sample ID: MB 240-121645/5
Matrix: Water
Analysis Batch: 121645

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 10:52	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/06/14 10:52	1
1,1-Dichloroethane	ND		0.0010	0.00015	mg/L			03/06/14 10:52	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 10:52	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/06/14 10:52	1
cis-1,2-Dichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 10:52	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/06/14 10:52	1
Methylene Chloride	0.000337	J	0.0010	0.00033	mg/L			03/06/14 10:52	1
Tetrachloroethene	ND		0.0010	0.00029	mg/L			03/06/14 10:52	1
Toluene	ND		0.0010	0.00013	mg/L			03/06/14 10:52	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/06/14 10:52	1
Trichloroethene	ND		0.0010	0.00017	mg/L			03/06/14 10:52	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/06/14 10:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*63 - 129*		*03/06/14 10:52*	*1*
4-Bromofluorobenzene (Surr)	*87*		*66 - 117*		*03/06/14 10:52*	*1*
Toluene-d8 (Surr)	*86*		*74 - 115*		*03/06/14 10:52*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 121*		*03/06/14 10:52*	*1*

Lab Sample ID: LCS 240-121645/4
Matrix: Water
Analysis Batch: 121645

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0100	0.0102		mg/L		102	74 - 118
1,1,2-Trichloroethane	0.0100	0.00939		mg/L		94	80 - 112
1,1-Dichloroethane	0.0100	0.00963		mg/L		96	82 - 115
1,1-Dichloroethene	0.0100	0.00930		mg/L		93	78 - 131
1,2-Dichloroethane	0.0100	0.00939		mg/L		94	71 - 127
cis-1,2-Dichloroethene	0.0100	0.00952		mg/L		95	80 - 113
Ethylbenzene	0.0100	0.00928		mg/L		93	83 - 112
Methylene Chloride	0.0100	0.00963		mg/L		96	66 - 131
Tetrachloroethene	0.0100	0.00974		mg/L		97	79 - 114
Toluene	0.0100	0.00901		mg/L		90	84 - 111
trans-1,2-Dichloroethene	0.0100	0.00980		mg/L		98	83 - 117
Trichloroethene	0.0100	0.00920		mg/L		92	76 - 117
Vinyl chloride	0.0100	0.00998		mg/L		100	53 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*63 - 129*
4-Bromofluorobenzene (Surr)	*94*		*66 - 117*
Toluene-d8 (Surr)	*91*		*74 - 115*
Dibromofluoromethane (Surr)	*91*		*75 - 121*

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

Lab Sample ID: 240-34628-3 MS
Matrix: Water
Analysis Batch: 121645

Client Sample ID: HSSER-RAMW02-022814
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0036		0.0100	0.0147		mg/L		111	68 - 121
1,1,2-Trichloroethane	ND		0.0100	0.0100		mg/L		100	75 - 115
1,1-Dichloroethane	0.0025		0.0100	0.0126		mg/L		101	79 - 116
1,1-Dichloroethene	ND		0.0100	0.00994		mg/L		99	74 - 135
1,2-Dichloroethane	ND		0.0100	0.00992		mg/L		99	68 - 129
cis-1,2-Dichloroethene	0.00041	J	0.0100	0.0102		mg/L		98	70 - 120
Ethylbenzene	ND		0.0100	0.00997		mg/L		100	75 - 116
Methylene Chloride	0.00053	J B	0.0100	0.0103		mg/L		98	63 - 128
Tetrachloroethene	0.0050		0.0100	0.0154		mg/L		103	70 - 117
Toluene	ND		0.0100	0.00958		mg/L		96	78 - 114
trans-1,2-Dichloroethene	ND		0.0100	0.0106		mg/L		106	80 - 119
Trichloroethene	0.0012		0.0100	0.0107		mg/L		95	66 - 120
Vinyl chloride	ND		0.0100	0.0110		mg/L		110	49 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*63 - 129*
4-Bromofluorobenzene (Surr)	*94*		*66 - 117*
Toluene-d8 (Surr)	*92*		*74 - 115*
Dibromofluoromethane (Surr)	*92*		*75 - 121*

Lab Sample ID: 240-34628-3 MSD
Matrix: Water
Analysis Batch: 121645

Client Sample ID: HSSER-RAMW02-0228
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	0.0036		0.0100	0.0143		mg/L		107	68 - 121	2	30
1,1,2-Trichloroethane	ND		0.0100	0.0101		mg/L		101	75 - 115	0	30
1,1-Dichloroethane	0.0025		0.0100	0.0122		mg/L		96	79 - 116	3	30
1,1-Dichloroethene	ND		0.0100	0.00990		mg/L		99	74 - 135	0	30
1,2-Dichloroethane	ND		0.0100	0.00993		mg/L		99	68 - 129	0	30
cis-1,2-Dichloroethene	0.00041	J	0.0100	0.00995		mg/L		95	70 - 120	3	30
Ethylbenzene	ND		0.0100	0.00993		mg/L		99	75 - 116	0	30
Methylene Chloride	0.00053	J B	0.0100	0.0101		mg/L		96	63 - 128	2	30
Tetrachloroethene	0.0050		0.0100	0.0155		mg/L		104	70 - 117	1	30
Toluene	ND		0.0100	0.00962		mg/L		96	78 - 114	0	30
trans-1,2-Dichloroethene	ND		0.0100	0.0104		mg/L		104	80 - 119	3	30
Trichloroethene	0.0012		0.0100	0.0107		mg/L		94	66 - 120	1	30
Vinyl chloride	ND		0.0100	0.0111		mg/L		111	49 - 130	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*63 - 129*
4-Bromofluorobenzene (Surr)	*92*		*66 - 117*
Toluene-d8 (Surr)	*94*		*74 - 115*
Dibromofluoromethane (Surr)	*92*		*75 - 121*

QC Association Summary

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

GC/MS VOA

Analysis Batch: 121645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-34628-1	HSSER-RAMW01-022814	Total/NA	Water	8260B	
240-34628-2	HSSER-RAMW04-022814	Total/NA	Water	8260B	
240-34628-3	HSSER-RAMW02-022814	Total/NA	Water	8260B	
240-34628-3 MS	HSSER-RAMW02-022814	Total/NA	Water	8260B	
240-34628-3 MSD	HSSER-RAMW02-022814	Total/NA	Water	8260B	
240-34628-4	HSSER-RAMW05-022814	Total/NA	Water	8260B	
240-34628-5	HSSER-RAMW03-022814	Total/NA	Water	8260B	
240-34628-6	HSSER-RAMW06-022814	Total/NA	Water	8260B	
240-34628-7	HSSER-RAMW08-022814	Total/NA	Water	8260B	
240-34628-8	HSSER-RAMW07-022814	Total/NA	Water	8260B	
240-34628-9	HSSER-FBLK02-022814	Total/NA	Water	8260B	
240-34628-10	HSSER-DUP02-022814	Total/NA	Water	8260B	
240-34628-11	HSSER-EBLK02-022814	Total/NA	Water	8260B	
240-34628-12	HSSER-TRIP01-022514	Total/NA	Water	8260B	
LCS 240-121645/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-121645/5	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

Client Sample ID: HSSER-RAMW01-022814

Lab Sample ID: 240-34628-1

Date Collected: 02/28/14 09:45
Date Received: 03/01/14 09:55

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121645	03/06/14 11:18	LEE	TAL CAN

Client Sample ID: HSSER-RAMW04-022814

Lab Sample ID: 240-34628-2

Date Collected: 02/28/14 11:10
Date Received: 03/01/14 09:55

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121645	03/06/14 11:40	LEE	TAL CAN

Client Sample ID: HSSER-RAMW02-022814

Lab Sample ID: 240-34628-3

Date Collected: 02/28/14 11:30
Date Received: 03/01/14 09:55

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121645	03/06/14 12:03	LEE	TAL CAN

Client Sample ID: HSSER-RAMW05-022814

Lab Sample ID: 240-34628-4

Date Collected: 02/28/14 12:40
Date Received: 03/01/14 09:55

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	121645	03/06/14 13:11	LEE	TAL CAN

Client Sample ID: HSSER-RAMW03-022814

Lab Sample ID: 240-34628-5

Date Collected: 02/28/14 13:10
Date Received: 03/01/14 09:55

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121645	03/06/14 13:34	LEE	TAL CAN

Client Sample ID: HSSER-RAMW06-022814

Lab Sample ID: 240-34628-6

Date Collected: 02/28/14 13:50
Date Received: 03/01/14 09:55

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121645	03/06/14 13:57	LEE	TAL CAN

Lab Chronicle

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

Client Sample ID: HSSER-RAMW08-022814 — Lab Sample ID: 240-34628-7

Date Collected: 02/28/14 15:00 — **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121645	03/06/14 14:19	LEE	TAL CAN

Client Sample ID: HSSER-RAMW07-022814 — Lab Sample ID: 240-34628-8

Date Collected: 02/28/14 16:25 — **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		7.14	121645	03/06/14 14:41	LEE	TAL CAN

Client Sample ID: HSSER-FBLK02-022814 — Lab Sample ID: 240-34628-9

Date Collected: 02/28/14 09:50 — **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121645	03/06/14 15:04	LEE	TAL CAN

Client Sample ID: HSSER-DUP02-022814 — Lab Sample ID: 240-34628-10

Date Collected: 02/28/14 00:00 — **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121645	03/06/14 15:27	LEE	TAL CAN

Client Sample ID: HSSER-EBLK02-022814 — Lab Sample ID: 240-34628-11

Date Collected: 02/28/14 10:25 — **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121645	03/06/14 15:49	LEE	TAL CAN

Client Sample ID: HSSER-TRIP01-022514 — Lab Sample ID: 240-34628-12

Date Collected: 02/28/14 00:00 — **Matrix: Water**
Date Received: 03/01/14 09:55

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	121645	03/06/14 16:12	LEE	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: AECOM, Inc.
Project/Site: UTC HS Plant 1 Rockford

TestAmerica Job ID: 240-34628-1

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-14
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-14
Kansas	NELAP	7	E-10336	04-01-14 *
Kentucky (UST)	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-14
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-14
Texas	NELAP	6		08-31-14
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-15
West Virginia DEP	State Program	3	210	12-31-14
Wisconsin	State Program	5	999518190	08-31-14

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* Expired certification is currently pending renewal and is considered valid.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS

240-34628 Chain of Custody

4101 Shuffel Street, N.W. North Canton, OH 44720 tel 330.497.9396 fax 330.497.0772 www.testamericainc.com

TestAmerica Canton
4101 Shuffel Street, N. N.

North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

2, 2

Chain of Custody Record

022502

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Peter Hollatz	Site Contact: Peter Hollatz	Date: 2-28-14	COC No:
Company Name: AECOM	Tel/Fax: Peter.Hollatz@aecom.com	Lab Contact: Pat Omears	Carrier: Fedex	1 of 2 COCs
Address: 27755 Diehl Rd	Analysis Turnaround Time			Sampler:
City/State/Zip: Warrenville, IL 60555	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 630-836-1700	TAT if different from Below _____			Walk-in Client:
Fax: 630-836-1711	☒ 2 weeks			Lab Sampling:
Project Name: UTC-HS-Plant 1	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOC's & 260B	Sample Specific Notes:
HSSER-RAMW01-022814	2-28-14	0945	G	2	3			X	
HSSER-RAMW04-022814		1110		2	3			X	
HSSER-RAMW02-022814		1130		2	3			X	
HSSER-RAMW05-022814		1240		2	3			X	
HSSER-RAMW03-022814		1310		2	3			X	
HSSER-RAMW06-022814		1350		2	3			X	
HSSER-RAMW08-022814		1500		2	3			X	
HSSER-RAMW07-022814		1625		2	3			X	
HSSER-FBLK02-022814		0950		2	3			X	
HSSER-MS02-022814		1130		2	3			X	
HSSER-MSD02-022814		1130		2	3			X	
HSSER-DUP02-022814		0000		2	3			X	

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6=Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	AECOM	2-28-14 2000	Fedex		2-28-14 2000
Relinquished by:	Company:	Date/Time:	Received by: [signature]	Company: TA	Date/Time: 3-1-14 955
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton
4101 Shuffel Street, N. W.

North Canton, OH 44720
Phone: 330.497.9396 Fax: 330.497.0772

Chain of Custody Record

022501

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: Peter Holatz	Site Contact: Peter Holatz	Date: 2-28-14	COC No:
Company Name: AECOM	Tel/Fax: Peter.Holatz@aecom.com	Lab Contact: Pat Omears	Carrier: Fedex	2 of 2 COCs
Address: 27755 Diehl Rd	Analysis Turnaround Time			Sampler:
City/State/Zip: Warrenville, IL 60555	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 630-836-1700	TAT if different from Below _____			Walk-in Client:
Fax: 630-836-1711	☒ 2 weeks			Lab Sampling:
Project Name: UTC-HS-Plant 1	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
P O #	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	VOC 8260B										Sample Specific Notes:
HSSFR-EBLK02-022814	2-28-14	1025	G	2	3			X										
HSSFR-TripG1-022514	2-25-14	—	G	2	2			X										

Preservation Used: 1=Ice, 2=HCl, 3=H2SO4, 4=HNO3, 5=NaOH, 6= Other

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

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

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	AECOM	2-28-14 0800	Fedex		2-28-14 2000
Relinquished by:	Company:	Date/Time:	Received by: [signature]	Company: TA	Date/Time: 3-1-14 955
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

3/10/2014

TestAmerica Canton Sample Receipt Form/Narrative **Login # : 341028**
Canton Facility

Client AECOM Site Name _____ Cooler unpacked by: [signature]

Cooler Received on 3-1-14 Opened on 3-1-14

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A	(CF +0 °C)	Observed Cooler Temp. 2.2 °C	Corrected Cooler Temp. 2.2 °C	
IR GUN# 4	(CF -1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	☐ See Multiple Cooler Form
IR GUN# 5	(CF +1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	
IR GUN# 8	(CF +1 °C)	Observed Cooler Temp. _____ °C	Corrected Cooler Temp. _____ °C	

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes ~~No~~ NS 3-1-14
   - Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   - Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC391982
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other
Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: [signature]

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____.

B

B

Appendix B

First Quarter 2014 Effluent Air Laboratory Analytical Reports

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1/30/2014
Mr. Peter Hollatz
AECOM Environment
27755 Diehl Road
Suite 100
Warrenville IL 60555

Project Name: UTC-SER.9110
Project #: 60312350
Workorder #: 1401250

Dear Mr. Peter Hollatz

The following report includes the data for the above referenced project for sample(s) received on 1/20/2014 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-14A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott
Project Manager

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WORK ORDER #: 1401250

Work Order Summary

CLIENT:	Mr. Peter Hollatz AECOM Environment 27755 Diehl Road Suite 100 Warrenville, IL 60555	**BILL TO:**	Accounts Payable-Warrenville AECOM Environment 27755 Diehl Road Suite 100 Warrenville, IL 60555
PHONE:	630-836-1700	**P.O. #**	46287ACM
FAX:	630-836-1711	**PROJECT #**	60312350 UTC-SER.9110
DATE RECEIVED:	01/20/2014	**CONTACT:**	Ausha Scott
DATE COMPLETED:	01/30/2014		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	P1SVE-EFFC2-011514	Modified TO-14A	4.3 "Hg	14.9 psi
02A	P1SVE-EFFC1-011514	Modified TO-14A	3.1 "Hg	14.8 psi
03A	P1SVE-EFFC3-011514	Modified TO-14A	3.9 "Hg	15 psi
04A	P2SVE-EFFC4-011514	Modified TO-14A	4.5 "Hg	15.2 psi
05A	P2SVE-EFFC5-011514	Modified TO-14A	1.2 "Hg	14.9 psi
06A	Lab Blank	Modified TO-14A	NA	NA
07A	CCV	Modified TO-14A	NA	NA
08A	LCS	Modified TO-14A	NA	NA
08AA	LCSD	Modified TO-14A	NA	NA

CERTIFIED BY: Heidi Hayes

Technical Director

DATE: 01/30/14

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-13-6, UT NELAP CA009332013-4, VA NELAP - 460197, WA NELAP - C935
Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2013, Expiration date: 10/17/2014.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-14A
AECOM Environment
Workorder# 1401250

Five 1 Liter Summa Canister samples were received on January 20, 2014. The laboratory performed analysis via modified EPA Method TO-14A using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications. Please note that TO-14A was validated for specially treated canisters, and the use of Tedlar bags for sample collection is outside the scope of the method.

Requirement	*TO-14A*	*ATL Modifications*
Initial Calibration criteria	RSD</=30%	Follow TO-15 requirements of RSD</=30% with two compounds allowed out to </=40%RSD.
BFB absolute abundance criteria	Within 10% of that from previous day	CCV internal standard area counts are compared to ICAL, corrective action when recovery is less than 60%.
Blank acceptance criteria	<0.20 ppbv	<Reporting Limit
Sample Drying System	Nafion Dryer	Multibed hydrophobic sorbent
BFB ion abundance criteria	Ion abundance listed in Table 4 of TO-14A	Follow ion abundance criteria listed in Method TO-15

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Dilution was performed on sample P2SVE-EFFC5-011514 due to the presence of high level target species.

Definition of Data Qualifying Flags

Nine qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.
C - Estimated calculation due to estimated sampling rate.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Client Sample ID: P1SVE-EFFC2-011514

Lab ID#: 1401250-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	1.2	3.3	4.6	13
1,1-Dichloroethane	1.2	55	4.8	220
cis-1,2-Dichloroethene	1.2	2.9	4.6	11
1,1,1-Trichloroethane	1.2	160	6.4	880
Trichloroethene	1.2	7.2	6.3	39
Toluene	1.2	4.9	4.4	18
Tetrachloroethene	1.2	7.2	8.0	49

Client Sample ID: P1SVE-EFFC1-011514

Lab ID#: 1401250-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	1.1	1.3	4.4	5.1
1,1-Dichloroethane	1.1	30	4.5	120
cis-1,2-Dichloroethene	1.1	4.7	4.4	18
1,1,1-Trichloroethane	1.1	100	6.1	540
Trichloroethene	1.1	9.1	6.0	49
Tetrachloroethene	1.1	69	7.6	470

Client Sample ID: P1SVE-EFFC3-011514

Lab ID#: 1401250-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	1.2	4.1	4.6	16
1,1-Dichloroethane	1.2	5.0	4.7	20
cis-1,2-Dichloroethene	1.2	16	4.6	62
1,1,1-Trichloroethane	1.2	240	6.3	1300
Trichloroethene	1.2	7.6	6.2	41
Tetrachloroethene	1.2	18	7.9	120

Client Sample ID: P2SVE-EFFC4-011514

Lab ID#: 1401250-04A

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Summary of Detected Compounds
MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Client Sample ID: P2SVE-EFFC4-011514

Lab ID#: 1401250-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	1.2	3.3	4.7	13
1,1-Dichloroethane	1.2	5.5	4.8	22
cis-1,2-Dichloroethene	1.2	9.6	4.7	38
1,1,1-Trichloroethane	1.2	200	6.5	1100
Trichloroethene	1.2	11	6.4	59
Tetrachloroethene	1.2	51	8.1	340

Client Sample ID: P2SVE-EFFC5-011514

Lab ID#: 1401250-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	3.5	10	14	40
1,1-Dichloroethane	3.5	24	14	99
cis-1,2-Dichloroethene	3.5	23	14	92
1,1,1-Trichloroethane	3.5	950	19	5200
Trichloroethene	3.5	37	19	200
Tetrachloroethene	3.5	82	24	560

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Client Sample ID: P1SVE-EFFC2-011514

Lab ID#: 1401250-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**17012309**	**Date of Collection:**	**1/15/14 11:45:00 AM**
Dil. Factor:	**2.35**	**Date of Analysis:**	**1/23/14 11:49 AM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Chloroethane	4.7	Not Detected	12	Not Detected
1,1-Dichloroethene	1.2	3.3	4.6	13
Acetone	12	Not Detected	28	Not Detected
Methylene Chloride	12	Not Detected	41	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
1,1-Dichloroethane	1.2	55	4.8	220
2-Butanone (Methyl Ethyl Ketone)	4.7	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.2	2.9	4.6	11
Chloroform	1.2	Not Detected	5.7	Not Detected
1,1,1-Trichloroethane	1.2	160	6.4	880
Carbon Tetrachloride	1.2	Not Detected	7.4	Not Detected
Benzene	1.2	Not Detected	3.8	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	7.2	6.3	39
Toluene	1.2	4.9	4.4	18
1,1,2-Trichloroethane	1.2	Not Detected	6.4	Not Detected
Tetrachloroethene	1.2	7.2	8.0	49
Ethyl Benzene	1.2	Not Detected	5.1	Not Detected
m,p-Xylene	1.2	Not Detected	5.1	Not Detected
o-Xylene	1.2	Not Detected	5.1	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: P1SVE-EFFC1-011514

Lab ID#: 1401250-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**17012310**	**Date of Collection:**	**1/15/14 11:55:00 AM**
Dil. Factor:	**2.24**	**Date of Analysis:**	**1/23/14 12:10 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
Chloroethane	4.5	Not Detected	12	Not Detected
1,1-Dichloroethene	1.1	1.3	4.4	5.1
Acetone	11	Not Detected	27	Not Detected
Methylene Chloride	11	Not Detected	39	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
1,1-Dichloroethane	1.1	30	4.5	120
2-Butanone (Methyl Ethyl Ketone)	4.5	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	4.7	4.4	18
Chloroform	1.1	Not Detected	5.5	Not Detected
1,1,1-Trichloroethane	1.1	100	6.1	540
Carbon Tetrachloride	1.1	Not Detected	7.0	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	9.1	6.0	49
Toluene	1.1	Not Detected	4.2	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.1	Not Detected
Tetrachloroethene	1.1	69	7.6	470
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
m,p-Xylene	1.1	Not Detected	4.9	Not Detected
o-Xylene	1.1	Not Detected	4.9	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	84	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: P1SVE-EFFC3-011514

Lab ID#: 1401250-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**17012311**	**Date of Collection:**	**1/15/14 12:05:00 PM**
Dil. Factor:	**2.32**	**Date of Analysis:**	**1/23/14 12:32 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Chloroethane	4.6	Not Detected	12	Not Detected
1,1-Dichloroethene	1.2	4.1	4.6	16
Acetone	12	Not Detected	28	Not Detected
Methylene Chloride	12	Not Detected	40	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.6	Not Detected
1,1-Dichloroethane	1.2	5.0	4.7	20
2-Butanone (Methyl Ethyl Ketone)	4.6	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.2	16	4.6	62
Chloroform	1.2	Not Detected	5.7	Not Detected
1,1,1-Trichloroethane	1.2	240	6.3	1300
Carbon Tetrachloride	1.2	Not Detected	7.3	Not Detected
Benzene	1.2	Not Detected	3.7	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.7	Not Detected
Trichloroethene	1.2	7.6	6.2	41
Toluene	1.2	Not Detected	4.4	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.3	Not Detected
Tetrachloroethene	1.2	18	7.9	120
Ethyl Benzene	1.2	Not Detected	5.0	Not Detected
m,p-Xylene	1.2	Not Detected	5.0	Not Detected
o-Xylene	1.2	Not Detected	5.0	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: P2SVE-EFFC4-011514

Lab ID#: 1401250-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**17012312**	**Date of Collection:**	**1/15/14 12:12:00 PM**
Dil. Factor:	**2.39**	**Date of Analysis:**	**1/23/14 12:53 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.0	Not Detected
Chloroethane	4.8	Not Detected	13	Not Detected
1,1-Dichloroethene	1.2	3.3	4.7	13
Acetone	12	Not Detected	28	Not Detected
Methylene Chloride	12	Not Detected	42	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.7	Not Detected
1,1-Dichloroethane	1.2	5.5	4.8	22
2-Butanone (Methyl Ethyl Ketone)	4.8	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.2	9.6	4.7	38
Chloroform	1.2	Not Detected	5.8	Not Detected
1,1,1-Trichloroethane	1.2	200	6.5	1100
Carbon Tetrachloride	1.2	Not Detected	7.5	Not Detected
Benzene	1.2	Not Detected	3.8	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.8	Not Detected
Trichloroethene	1.2	11	6.4	59
Toluene	1.2	Not Detected	4.5	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.5	Not Detected
Tetrachloroethene	1.2	51	8.1	340
Ethyl Benzene	1.2	Not Detected	5.2	Not Detected
m,p-Xylene	1.2	Not Detected	5.2	Not Detected
o-Xylene	1.2	Not Detected	5.2	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	85	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	103	70-130

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Client Sample ID: P2SVE-EFFC5-011514

Lab ID#: 1401250-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**17012313**	**Date of Collection:**	**1/15/14 12:15:00 PM**
Dil. Factor:	**6.99**	**Date of Analysis:**	**1/23/14 01:14 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	3.5	Not Detected	8.9	Not Detected
Chloroethane	14	Not Detected	37	Not Detected
1,1-Dichloroethene	3.5	10	14	40
Acetone	35	Not Detected	83	Not Detected
Methylene Chloride	35	Not Detected	120	Not Detected
trans-1,2-Dichloroethene	3.5	Not Detected	14	Not Detected
1,1-Dichloroethane	3.5	24	14	99
2-Butanone (Methyl Ethyl Ketone)	14	Not Detected	41	Not Detected
cis-1,2-Dichloroethene	3.5	23	14	92
Chloroform	3.5	Not Detected	17	Not Detected
1,1,1-Trichloroethane	3.5	950	19	5200
Carbon Tetrachloride	3.5	Not Detected	22	Not Detected
Benzene	3.5	Not Detected	11	Not Detected
1,2-Dichloroethane	3.5	Not Detected	14	Not Detected
Trichloroethene	3.5	37	19	200
Toluene	3.5	Not Detected	13	Not Detected
1,1,2-Trichloroethane	3.5	Not Detected	19	Not Detected
Tetrachloroethene	3.5	82	24	560
Ethyl Benzene	3.5	Not Detected	15	Not Detected
m,p-Xylene	3.5	Not Detected	15	Not Detected
o-Xylene	3.5	Not Detected	15	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	85	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	105	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1401250-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**17012305**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 1/23/14 10:12 AM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	82	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	105	70-130

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Client Sample ID: CCV

Lab ID#: 1401250-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**17012302**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 1/23/14 08:58 AM**	

Compound	**%Recovery**
Vinyl Chloride	110
Chloroethane	114
1,1-Dichloroethene	107
Acetone	102
Methylene Chloride	97
trans-1,2-Dichloroethene	108
1,1-Dichloroethane	102
2-Butanone (Methyl Ethyl Ketone)	108
cis-1,2-Dichloroethene	98
Chloroform	108
1,1,1-Trichloroethane	100
Carbon Tetrachloride	103
Benzene	111
1,2-Dichloroethane	95
Trichloroethene	107
Toluene	110
1,1,2-Trichloroethane	105
Tetrachloroethene	115
Ethyl Benzene	107
m,p-Xylene	107
o-Xylene	106

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: LCS

Lab ID#: 1401250-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**17012303**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 1/23/14 09:20 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	87	70-130
Chloroethane	87	70-130
1,1-Dichloroethene	94	70-130
Acetone	84	70-130
Methylene Chloride	81	70-130
trans-1,2-Dichloroethene	75	70-130
1,1-Dichloroethane	83	70-130
2-Butanone (Methyl Ethyl Ketone)	84	70-130
cis-1,2-Dichloroethene	88	70-130
Chloroform	85	70-130
1,1,1-Trichloroethane	79	70-130
Carbon Tetrachloride	81	70-130
Benzene	86	70-130
1,2-Dichloroethane	74	70-130
Trichloroethene	83	70-130
Toluene	84	70-130
1,1,2-Trichloroethane	84	70-130
Tetrachloroethene	92	70-130
Ethyl Benzene	85	70-130
m,p-Xylene	85	70-130
o-Xylene	82	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: LCSD

Lab ID#: 1401250-08AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**17012304**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 1/23/14 09:41 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	86	70-130
Chloroethane	90	70-130
1,1-Dichloroethene	97	70-130
Acetone	83	70-130
Methylene Chloride	82	70-130
trans-1,2-Dichloroethene	76	70-130
1,1-Dichloroethane	84	70-130
2-Butanone (Methyl Ethyl Ketone)	86	70-130
cis-1,2-Dichloroethene	86	70-130
Chloroform	86	70-130
1,1,1-Trichloroethane	80	70-130
Carbon Tetrachloride	81	70-130
Benzene	87	70-130
1,2-Dichloroethane	75	70-130
Trichloroethene	83	70-130
Toluene	85	70-130
1,1,2-Trichloroethane	83	70-130
Tetrachloroethene	91	70-130
Ethyl Benzene	84	70-130
m,p-Xylene	84	70-130
o-Xylene	82	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	102	70-130

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3/20/2014
Mr. Peter Hollatz
AECOM Environment
27755 Diehl Road
Suite 100
Warrenville IL 60555

Project Name: UTC SER 9110
Project #: 60312350
Workorder #: 1403299

Dear Mr. Peter Hollatz

The following report includes the data for the above referenced project for sample(s) received on 3/17/2014 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-14A are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Ausha Scott at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Ausha Scott
Project Manager

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WORK ORDER #: 1403299

Work Order Summary

CLIENT:	Mr. Peter Hollatz AECOM Environment 27755 Diehl Road Suite 100 Warrenville, IL 60555	**BILL TO:**	Accounts Payable-Warrenville AECOM Environment 27755 Diehl Road Suite 100 Warrenville, IL 60555
PHONE:	630-836-1700	**P.O. #**	51992
FAX:	630-836-1711	**PROJECT #**	60312350 UTC SER 9110
DATE RECEIVED:	03/17/2014	**CONTACT:**	Ausha Scott
DATE COMPLETED:	03/20/2014		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	P1SVE-EFFC1-031414	Modified TO-14A	2.6 "Hg	15.1 psi
02A	P1SVE-EFFC2-031414	Modified TO-14A	4.9 "Hg	15.3 psi
02AA	P1SVE-EFFC2-031414 Lab Duplicate	Modified TO-14A	4.9 "Hg	15.3 psi
03A	P1SVE-EFFC3-031414	Modified TO-14A	5.7 "Hg	14.6 psi
04A	P2SVE-EFFC4-031414	Modified TO-14A	3.9 "Hg	15.2 psi
05A	P2SVE-EFFC5-031414	Modified TO-14A	4.3 "Hg	15 psi
06A	P1DUP01-031414	Modified TO-14A	5.7 "Hg	15 psi
07A	FBLK01-031414	Modified TO-14A	3.5 "Hg	14.9 psi
08A	Lab Blank	Modified TO-14A	NA	NA
09A	CCV	Modified TO-14A	NA	NA
10A	LCS	Modified TO-14A	NA	NA
10AA	LCSD	Modified TO-14A	NA	NA

CERTIFIED BY: Heidi Hayes

Technical Director

DATE: 03/20/14

Certification numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-13-6, UT NELAP CA009332013-4, VA NELAP - 460197, WA NELAP - C935
Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2013, Expiration date: 10/17/2014.
Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-14A
AECOM Environment
Workorder# 1403299

Seven 1 Liter Summa Canister samples were received on March 17, 2014. The laboratory performed analysis via modified EPA Method TO-14A using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications. Please note that TO-14A was validated for specially treated canisters, and the use of Tedlar bags for sample collection is outside the scope of the method.

Requirement	*TO-14A*	*ATL Modifications*
Initial Calibration criteria	RSD</=30%	Follow TO-15 requirements of RSD</=30% with two compounds allowed out to </=40%RSD.
BFB absolute abundance criteria	Within 10% of that from previous day	CCV internal standard area counts are compared to ICAL, corrective action when recovery is less than 60%.
Blank acceptance criteria	<0.20 ppbv	<Reporting Limit
Sample Drying System	Nafion Dryer	Multibed hydrophobic sorbent
BFB ion abundance criteria	Ion abundance listed in Table 4 of TO-14A	Follow ion abundance criteria listed in Method TO-15

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Dilution was performed on samples P2SVE-EFFC4-031414 and P2SVE-EFFC5-031414 due to the presence of high level target species.

Definition of Data Qualifying Flags

Nine qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.

UJ- Non-detected compound associated with low bias in the CCV
N - The identification is based on presumptive evidence.
C - Estimated calculation due to estimated sampling rate.

File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Client Sample ID: P1SVE-EFFC1-031414

Lab ID#: 1403299-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	1.1	3.8	4.4	15
1,1-Dichloroethane	1.1	34	4.5	140
cis-1,2-Dichloroethene	1.1	6.1	4.4	24
1,1,1-Trichloroethane	1.1	78	6.0	420
Trichloroethene	1.1	7.0	6.0	38
Tetrachloroethene	1.1	30	7.5	200

Client Sample ID: P1SVE-EFFC2-031414

Lab ID#: 1403299-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	1.2	1.9	4.8	7.6
1,1,1-Trichloroethane	1.2	16	6.6	85

Client Sample ID: P1SVE-EFFC2-031414 Lab Duplicate

Lab ID#: 1403299-02AA

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	1.2	2.2	4.8	8.7
1,1,1-Trichloroethane	1.2	15	6.6	80
Tetrachloroethene	1.2	1.3	8.3	8.9

Client Sample ID: P1SVE-EFFC3-031414

Lab ID#: 1403299-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	1.2	2.4	4.9	9.4
1,1-Dichloroethane	1.2	8.7	5.0	35
cis-1,2-Dichloroethene	1.2	6.4	4.9	25
1,1,1-Trichloroethane	1.2	72	6.7	390
Trichloroethene	1.2	8.1	6.6	43
Tetrachloroethene	1.2	9.5	8.3	65

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Summary of Detected Compounds
MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

Client Sample ID: P2SVE-EFFC4-031414

Lab ID#: 1403299-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	2.6	8.2	10	33
1,1-Dichloroethane	2.6	6.2	10	25
cis-1,2-Dichloroethene	2.6	18	10	72
1,1,1-Trichloroethane	2.6	430	14	2400
Trichloroethene	2.6	14	14	76
Tetrachloroethene	2.6	7.8	18	53

Client Sample ID: P2SVE-EFFC5-031414

Lab ID#: 1403299-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
1,1-Dichloroethene	7.8	24	31	95
1,1-Dichloroethane	7.8	32	32	130
cis-1,2-Dichloroethene	7.8	88	31	350
1,1,1-Trichloroethane	7.8	1400	43	7400
Trichloroethene	7.8	41	42	220
Tetrachloroethene	7.8	30	53	200

Client Sample ID: P1DUP01-031414

Lab ID#: 1403299-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Acetone	12	15	30	36
1,1-Dichloroethane	1.2	1.6	5.0	6.4
cis-1,2-Dichloroethene	1.2	1.8	5.0	7.4
1,1,1-Trichloroethane	1.2	19	6.8	100
Trichloroethene	1.2	1.5	6.7	8.0
Tetrachloroethene	1.2	1.7	8.5	12

Client Sample ID: FBLK01-031414

Lab ID#: 1403299-07A

No Detections Were Found.

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Client Sample ID: P1SVE-EFFC1-031414

Lab ID#: 1403299-01A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**j031914**	**Date of Collection:**	**3/14/14 10:45:00 AM**
Dil. Factor:	**2.22**	**Date of Analysis:**	**3/19/14 05:03 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
Chloroethane	4.4	Not Detected	12	Not Detected
1,1-Dichloroethene	1.1	3.8	4.4	15
Acetone	11	Not Detected	26	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
1,1-Dichloroethane	1.1	34	4.5	140
2-Butanone (Methyl Ethyl Ketone)	4.4	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	6.1	4.4	24
Chloroform	1.1	Not Detected	5.4	Not Detected
1,1,1-Trichloroethane	1.1	78	6.0	420
Carbon Tetrachloride	1.1	Not Detected	7.0	Not Detected
Benzene	1.1	Not Detected	3.5	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.5	Not Detected
Trichloroethene	1.1	7.0	6.0	38
Toluene	1.1	Not Detected	4.2	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Tetrachloroethene	1.1	30	7.5	200
Ethyl Benzene	1.1	Not Detected	4.8	Not Detected
m,p-Xylene	1.1	Not Detected	4.8	Not Detected
o-Xylene	1.1	Not Detected	4.8	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	80	70-130

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Client Sample ID: P1SVE-EFFC2-031414

Lab ID#: 1403299-02A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**j031915**	**Date of Collection:**	**3/14/14 10:35:00 AM**
Dil. Factor:	**2.44**	**Date of Analysis:**	**3/19/14 05:50 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
Chloroethane	4.9	Not Detected	13	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Acetone	12	Not Detected	29	Not Detected
Methylene Chloride	12	Not Detected	42	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.9	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.2	1.9	4.8	7.6
Chloroform	1.2	Not Detected	6.0	Not Detected
1,1,1-Trichloroethane	1.2	16	6.6	85
Carbon Tetrachloride	1.2	Not Detected	7.7	Not Detected
Benzene	1.2	Not Detected	3.9	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
Toluene	1.2	Not Detected	4.6	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.6	Not Detected
Tetrachloroethene	1.2	Not Detected	8.3	Not Detected
Ethyl Benzene	1.2	Not Detected	5.3	Not Detected
m,p-Xylene	1.2	Not Detected	5.3	Not Detected
o-Xylene	1.2	Not Detected	5.3	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	81	70-130

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Client Sample ID: P1SVE-EFFC2-031414 Lab Duplicate

Lab ID#: 1403299-02AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**j031916**	**Date of Collection:**	**3/14/14 10:35:00 AM**
Dil. Factor:	**2.44**	**Date of Analysis:**	**3/19/14 06:23 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
Chloroethane	4.9	Not Detected	13	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Acetone	12	Not Detected	29	Not Detected
Methylene Chloride	12	Not Detected	42	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.9	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.2	2.2	4.8	8.7
Chloroform	1.2	Not Detected	6.0	Not Detected
1,1,1-Trichloroethane	1.2	15	6.6	80
Carbon Tetrachloride	1.2	Not Detected	7.7	Not Detected
Benzene	1.2	Not Detected	3.9	Not Detected
1,2-Dichloroethane	1.2	Not Detected	4.9	Not Detected
Trichloroethene	1.2	Not Detected	6.6	Not Detected
Toluene	1.2	Not Detected	4.6	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.6	Not Detected
Tetrachloroethene	1.2	1.3	8.3	8.9
Ethyl Benzene	1.2	Not Detected	5.3	Not Detected
m,p-Xylene	1.2	Not Detected	5.3	Not Detected
o-Xylene	1.2	Not Detected	5.3	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	93	70-130
4-Bromofluorobenzene	81	70-130

eurofins | Air Toxics

Client Sample ID: P1SVE-EFFC3-031414

Lab ID#: 1403299-03A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**j031917**	**Date of Collection:**	**3/14/14 10:55:00 AM**
Dil. Factor:	**2.46**	**Date of Analysis:**	**3/19/14 07:06 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
Chloroethane	4.9	Not Detected	13	Not Detected
1,1-Dichloroethene	1.2	2.4	4.9	9.4
Acetone	12	Not Detected	29	Not Detected
Methylene Chloride	12	Not Detected	43	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.9	Not Detected
1,1-Dichloroethane	1.2	8.7	5.0	35
2-Butanone (Methyl Ethyl Ketone)	4.9	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.2	6.4	4.9	25
Chloroform	1.2	Not Detected	6.0	Not Detected
1,1,1-Trichloroethane	1.2	72	6.7	390
Carbon Tetrachloride	1.2	Not Detected	7.7	Not Detected
Benzene	1.2	Not Detected	3.9	Not Detected
1,2-Dichloroethane	1.2	Not Detected	5.0	Not Detected
Trichloroethene	1.2	8.1	6.6	43
Toluene	1.2	Not Detected	4.6	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.7	Not Detected
Tetrachloroethene	1.2	9.5	8.3	65
Ethyl Benzene	1.2	Not Detected	5.3	Not Detected
m,p-Xylene	1.2	Not Detected	5.3	Not Detected
o-Xylene	1.2	Not Detected	5.3	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	94	70-130
Toluene-d8	92	70-130
4-Bromofluorobenzene	79	70-130

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Client Sample ID: P2SVE-EFFC4-031414

Lab ID#: 1403299-04A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**j031918**	**Date of Collection:**	**3/14/14 9:10:00 AM**
Dil. Factor:	**5.20**	**Date of Analysis:**	**3/19/14 07:35 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	2.6	Not Detected	6.6	Not Detected
Chloroethane	10	Not Detected	27	Not Detected
1,1-Dichloroethene	2.6	8.2	10	33
Acetone	26	Not Detected	62	Not Detected
Methylene Chloride	26	Not Detected	90	Not Detected
trans-1,2-Dichloroethene	2.6	Not Detected	10	Not Detected
1,1-Dichloroethane	2.6	6.2	10	25
2-Butanone (Methyl Ethyl Ketone)	10	Not Detected	31	Not Detected
cis-1,2-Dichloroethene	2.6	18	10	72
Chloroform	2.6	Not Detected	13	Not Detected
1,1,1-Trichloroethane	2.6	430	14	2400
Carbon Tetrachloride	2.6	Not Detected	16	Not Detected
Benzene	2.6	Not Detected	8.3	Not Detected
1,2-Dichloroethane	2.6	Not Detected	10	Not Detected
Trichloroethene	2.6	14	14	76
Toluene	2.6	Not Detected	9.8	Not Detected
1,1,2-Trichloroethane	2.6	Not Detected	14	Not Detected
Tetrachloroethene	2.6	7.8	18	53
Ethyl Benzene	2.6	Not Detected	11	Not Detected
m,p-Xylene	2.6	Not Detected	11	Not Detected
o-Xylene	2.6	Not Detected	11	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	93	70-130
Toluene-d8	93	70-130
4-Bromofluorobenzene	77	70-130

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Client Sample ID: P2SVE-EFFC5-031414

Lab ID#: 1403299-05A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**j031921**	**Date of Collection:**	**3/14/14 9:55:00 AM**
Dil. Factor:	**15.7**	**Date of Analysis:**	**3/19/14 09:49 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	7.8	Not Detected	20	Not Detected
Chloroethane	31	Not Detected	83	Not Detected
1,1-Dichloroethene	7.8	24	31	95
Acetone	78	Not Detected	190	Not Detected
Methylene Chloride	78	Not Detected	270	Not Detected
trans-1,2-Dichloroethene	7.8	Not Detected	31	Not Detected
1,1-Dichloroethane	7.8	32	32	130
2-Butanone (Methyl Ethyl Ketone)	31	Not Detected	92	Not Detected
cis-1,2-Dichloroethene	7.8	88	31	350
Chloroform	7.8	Not Detected	38	Not Detected
1,1,1-Trichloroethane	7.8	1400	43	7400
Carbon Tetrachloride	7.8	Not Detected	49	Not Detected
Benzene	7.8	Not Detected	25	Not Detected
1,2-Dichloroethane	7.8	Not Detected	32	Not Detected
Trichloroethene	7.8	41	42	220
Toluene	7.8	Not Detected	30	Not Detected
1,1,2-Trichloroethane	7.8	Not Detected	43	Not Detected
Tetrachloroethene	7.8	30	53	200
Ethyl Benzene	7.8	Not Detected	34	Not Detected
m,p-Xylene	7.8	Not Detected	34	Not Detected
o-Xylene	7.8	Not Detected	34	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	91	70-130
Toluene-d8	90	70-130
4-Bromofluorobenzene	80	70-130

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Client Sample ID: P1DUP01-031414

Lab ID#: 1403299-06A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**j031919**	**Date of Collection: 3/14/14**	
Dil. Factor:	**2.50**	**Date of Analysis: 3/19/14 08:48 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.2	Not Detected	3.2	Not Detected
Chloroethane	5.0	Not Detected	13	Not Detected
1,1-Dichloroethene	1.2	Not Detected	5.0	Not Detected
Acetone	12	15	30	36
Methylene Chloride	12	Not Detected	43	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	5.0	Not Detected
1,1-Dichloroethane	1.2	1.6	5.0	6.4
2-Butanone (Methyl Ethyl Ketone)	5.0	Not Detected	15	Not Detected
cis-1,2-Dichloroethene	1.2	1.8	5.0	7.4
Chloroform	1.2	Not Detected	6.1	Not Detected
1,1,1-Trichloroethane	1.2	19	6.8	100
Carbon Tetrachloride	1.2	Not Detected	7.9	Not Detected
Benzene	1.2	Not Detected	4.0	Not Detected
1,2-Dichloroethane	1.2	Not Detected	5.0	Not Detected
Trichloroethene	1.2	1.5	6.7	8.0
Toluene	1.2	Not Detected	4.7	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.8	Not Detected
Tetrachloroethene	1.2	1.7	8.5	12
Ethyl Benzene	1.2	Not Detected	5.4	Not Detected
m,p-Xylene	1.2	Not Detected	5.4	Not Detected
o-Xylene	1.2	Not Detected	5.4	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	90	70-130
Toluene-d8	94	70-130
4-Bromofluorobenzene	79	70-130

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Client Sample ID: FBLK01-031414

Lab ID#: 1403299-07A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**j031920**	**Date of Collection:**	**3/14/14 11:00:00 AM**
Dil. Factor:	**2.28**	**Date of Analysis:**	**3/19/14 09:17 PM**

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
Chloroethane	4.6	Not Detected	12	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Acetone	11	Not Detected	27	Not Detected
Methylene Chloride	11	Not Detected	40	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.6	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Chloroform	1.1	Not Detected	5.6	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Carbon Tetrachloride	1.1	Not Detected	7.2	Not Detected
Benzene	1.1	Not Detected	3.6	Not Detected
1,2-Dichloroethane	1.1	Not Detected	4.6	Not Detected
Trichloroethene	1.1	Not Detected	6.1	Not Detected
Toluene	1.1	Not Detected	4.3	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Tetrachloroethene	1.1	Not Detected	7.7	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
m,p-Xylene	1.1	Not Detected	5.0	Not Detected
o-Xylene	1.1	Not Detected	5.0	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	79	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1403299-08A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	j031907	Date of Collection: NA	
Dil. Factor:	1.00	Date of Analysis: 3/19/14 11:18 AM	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Chloroethane	2.0	Not Detected	5.3	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Carbon Tetrachloride	0.50	Not Detected	3.1	Not Detected
Benzene	0.50	Not Detected	1.6	Not Detected
1,2-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detected
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	88	70-130
Toluene-d8	96	70-130
4-Bromofluorobenzene	84	70-130

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Client Sample ID: CCV

Lab ID#: 1403299-09A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**j031902**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 3/19/14 07:53 AM**

Compound	%Recovery
Vinyl Chloride	116
Chloroethane	115
1,1-Dichloroethene	97
Acetone	117
Methylene Chloride	111
trans-1,2-Dichloroethene	109
1,1-Dichloroethane	108
2-Butanone (Methyl Ethyl Ketone)	114
cis-1,2-Dichloroethene	102
Chloroform	92
1,1,1-Trichloroethane	84
Carbon Tetrachloride	82
Benzene	113
1,2-Dichloroethane	89
Trichloroethene	95
Toluene	94
1,1,2-Trichloroethane	116
Tetrachloroethene	95
Ethyl Benzene	106
m,p-Xylene	104
o-Xylene	100

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	92	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	87	70-130

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Client Sample ID: LCS

Lab ID#: 1403299-10A

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**j031903**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/19/14 08:35 AM**	

Compound	%Recovery	Method Limits
Vinyl Chloride	115	70-130
Chloroethane	112	70-130
1,1-Dichloroethene	110	70-130
Acetone	119	70-130
Methylene Chloride	122	70-130
trans-1,2-Dichloroethene	90	70-130
1,1-Dichloroethane	106	70-130
2-Butanone (Methyl Ethyl Ketone)	113	70-130
cis-1,2-Dichloroethene	108	70-130
Chloroform	89	70-130
1,1,1-Trichloroethane	82	70-130
Carbon Tetrachloride	81	70-130
Benzene	118	70-130
1,2-Dichloroethane	93	70-130
Trichloroethene	99	70-130
Toluene	96	70-130
1,1,2-Trichloroethane	115	70-130
Tetrachloroethene	98	70-130
Ethyl Benzene	110	70-130
m,p-Xylene	105	70-130
o-Xylene	101	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	86	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	86	70-130

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Client Sample ID: LCSD

Lab ID#: 1403299-10AA

MODIFIED EPA METHOD TO-14A GC/MS FULL SCAN

File Name:	**j031904**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 3/19/14 09:15 AM**	

Compound	**%Recovery**	**Method Limits**
Vinyl Chloride	114	70-130
Chloroethane	112	70-130
1,1-Dichloroethene	108	70-130
Acetone	119	70-130
Methylene Chloride	124	70-130
trans-1,2-Dichloroethene	91	70-130
1,1-Dichloroethane	108	70-130
2-Butanone (Methyl Ethyl Ketone)	114	70-130
cis-1,2-Dichloroethene	111	70-130
Chloroform	90	70-130
1,1,1-Trichloroethane	82	70-130
Carbon Tetrachloride	82	70-130
Benzene	117	70-130
1,2-Dichloroethane	91	70-130
Trichloroethene	100	70-130
Toluene	95	70-130
1,1,2-Trichloroethane	115	70-130
Tetrachloroethene	94	70-130
Ethyl Benzene	108	70-130
m,p-Xylene	104	70-130
o-Xylene	100	70-130

Container Type: NA - Not Applicable

Surrogates	**%Recovery**	**Method Limits**
1,2-Dichloroethane-d4	88	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	85	70-130

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Appendix C

First Quarter 2014 Systems Moisture Separator Tank Analytical Reports

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Canton
4101 Shuffel Street NW
North Canton, OH 44720
Tel: (330)497-9396

TestAmerica Job ID: 240-35145-1
Client Project/Site: UTCSER Area 9/10

For:
AECOM, Inc.
27755 Diehl Road
Suite 100
Warrenville, Illinois 60555

Attn: Peter Hollatz

Patrick O'Meara

Authorized for release by:
3/27/2014 1:21:19 PM

Patrick O'Meara, Manager of Project Management
(330)966-5725
patrick.omeara@testamericainc.com

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www.testamericainc.com

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

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

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Definitions/Glossary

Client: AECOM, Inc.
Project/Site: UTCSER Area 9/10

TestAmerica Job ID: 240-35145-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

CASE NARRATIVE

Client: AECOM, Inc.

Project: UTCSER Area 9/10

Report Number: 240-35145-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

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

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The sample was received on 3/18/2014 9:20 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.6° C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Sample HS-SER-MSPHASE1-031414 (240-35145-1) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 03/25/2014.

No difficulties were encountered during the VOCs analysis. All quality control parameters were within the acceptance limits.

Method Summary

Client: AECOM, Inc.
Project/Site: UTCSER Area 9/10

TestAmerica Job ID: 240-35145-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN

Protocol References:

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

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: AECOM, Inc.
Project/Site: UTCSER Area 9/10

TestAmerica Job ID: 240-35145-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-35145-1	HS-SER-MSPHASE1-031414	Water	03/14/14 12:15	03/18/14 09:20

Detection Summary

Client: AECOM, Inc.
Project/Site: UTCSER Area 9/10

TestAmerica Job ID: 240-35145-1

Client Sample ID: HS-SER-MSPHASE1-031414 — Lab Sample ID: 240-35145-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.0029		0.0010	0.00022	mg/L	1		8260B	Total/NA
1,1-Dichloroethane	0.00040	J	0.0010	0.00015	mg/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	0.0012		0.0010	0.00017	mg/L	1		8260B	Total/NA
Tetrachloroethene	0.00030	J	0.0010	0.00029	mg/L	1		8260B	Total/NA
Trichloroethene	0.00028	J	0.0010	0.00017	mg/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: AECOM, Inc.
Project/Site: UTCSER Area 9/10

TestAmerica Job ID: 240-35145-1

Client Sample ID: HS-SER-MSPHASE1-031414
Date Collected: 03/14/14 12:15
Date Received: 03/18/14 09:20

Lab Sample ID: 240-35145
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.0029**		0.0010	0.00022	mg/L			03/25/14 16:06	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/25/14 16:06	1
1,1-Dichloroethane	**0.00040**	J	0.0010	0.00015	mg/L			03/25/14 16:06	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/25/14 16:06	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/25/14 16:06	1
cis-1,2-Dichloroethene	**0.0012**		0.0010	0.00017	mg/L			03/25/14 16:06	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/25/14 16:06	1
Methylene Chloride	ND		0.0010	0.00033	mg/L			03/25/14 16:06	1
Tetrachloroethene	**0.00030**	J	0.0010	0.00029	mg/L			03/25/14 16:06	1
Toluene	ND		0.0010	0.00013	mg/L			03/25/14 16:06	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/25/14 16:06	1
Trichloroethene	**0.00028**	J	0.0010	0.00017	mg/L			03/25/14 16:06	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/25/14 16:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*63 - 129*		*03/25/14 16:06*	*1*
4-Bromofluorobenzene (Surr)	*86*		*66 - 120*		*03/25/14 16:06*	*1*
Toluene-d8 (Surr)	*88*		*74 - 120*		*03/25/14 16:06*	*1*
Dibromofluoromethane (Surr)	*96*		*75 - 121*		*03/25/14 16:06*	*1*

Surrogate Summary

Client: AECOM, Inc.
Project/Site: UTCSER Area 9/10

TestAmerica Job ID: 240-35145-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	**Client Sample ID**	**(63-129)**	**(66-120)**	**(74-120)**	**(75-121)**
240-35145-1	HS-SER-MSPHASE1-031414	105	86	88	96
LCS 240-123868/4	Lab Control Sample	93	94	93	95
MB 240-123868/32	Method Blank	101	84	90	91

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

Lab Sample ID: MB 240-123868/32
Matrix: Water
Analysis Batch: 123868

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.0010	0.00022	mg/L			03/25/14 12:03	1
1,1,2-Trichloroethane	ND		0.0010	0.00027	mg/L			03/25/14 12:03	1
1,1-Dichloroethane	ND		0.0010	0.00015	mg/L			03/25/14 12:03	1
1,1-Dichloroethene	ND		0.0010	0.00019	mg/L			03/25/14 12:03	1
1,2-Dichloroethane	ND		0.0010	0.00022	mg/L			03/25/14 12:03	1
cis-1,2-Dichloroethene	ND		0.0010	0.00017	mg/L			03/25/14 12:03	1
Ethylbenzene	ND		0.0010	0.00017	mg/L			03/25/14 12:03	1
Methylene Chloride	ND		0.0010	0.00033	mg/L			03/25/14 12:03	1
Tetrachloroethene	ND		0.0010	0.00029	mg/L			03/25/14 12:03	1
Toluene	ND		0.0010	0.00013	mg/L			03/25/14 12:03	1
trans-1,2-Dichloroethene	ND		0.0010	0.00019	mg/L			03/25/14 12:03	1
Trichloroethene	ND		0.0010	0.00017	mg/L			03/25/14 12:03	1
Vinyl chloride	ND		0.0010	0.00022	mg/L			03/25/14 12:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*63 - 129*		*03/25/14 12:03*	*1*
4-Bromofluorobenzene (Surr)	*84*		*66 - 120*		*03/25/14 12:03*	*1*
Toluene-d8 (Surr)	*90*		*74 - 120*		*03/25/14 12:03*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 121*		*03/25/14 12:03*	*1*

Lab Sample ID: LCS 240-123868/4
Matrix: Water
Analysis Batch: 123868

Client Sample ID: Lab Control Samp
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	0.0100	0.00923		mg/L		92	74 - 120
1,1,2-Trichloroethane	0.0100	0.00928		mg/L		93	80 - 120
1,1-Dichloroethane	0.0100	0.00986		mg/L		99	80 - 120
1,1-Dichloroethene	0.0100	0.00969		mg/L		97	78 - 131
1,2-Dichloroethane	0.0100	0.0101		mg/L		101	71 - 127
cis-1,2-Dichloroethene	0.0100	0.00968		mg/L		97	80 - 120
Ethylbenzene	0.0100	0.00952		mg/L		95	80 - 120
Methylene Chloride	0.0100	0.0104		mg/L		104	66 - 131
Tetrachloroethene	0.0100	0.00938		mg/L		94	79 - 120
Toluene	0.0100	0.00980		mg/L		98	80 - 120
trans-1,2-Dichloroethene	0.0100	0.00995		mg/L		100	80 - 120
Trichloroethene	0.0100	0.00948		mg/L		95	76 - 120
Vinyl chloride	0.0100	0.00798		mg/L		80	53 - 127

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*63 - 129*
4-Bromofluorobenzene (Surr)	*94*		*66 - 120*
Toluene-d8 (Surr)	*93*		*74 - 120*
Dibromofluoromethane (Surr)	*95*		*75 - 121*

QC Association Summary

Client: AECOM, Inc.
Project/Site: UTCSER Area 9/10

TestAmerica Job ID: 240-35145-1

GC/MS VOA

Analysis Batch: 123868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-35145-1	HS-SER-MSPHASE1-031414	Total/NA	Water	8260B	
LCS 240-123868/4	Lab Control Sample	Total/NA	Water	8260B	
MB 240-123868/32	Method Blank	Total/NA	Water	8260B	

Lab Chronicle

Client: AECOM, Inc.
Project/Site: UTCSER Area 9/10

TestAmerica Job ID: 240-35145-1

Client Sample ID: HS-SER-MSPHASE1-031414
Date Collected: 03/14/14 12:15
Date Received: 03/18/14 09:20

Lab Sample ID: 240-35145-
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	123868	03/25/14 16:06	LEE	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Certification Summary

Client: AECOM, Inc.
Project/Site: UTCSER Area 9/10

TestAmerica Job ID: 240-35145-1

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14
Connecticut	State Program	1	PH-0590	12-31-14
Florida	NELAP	4	E87225	06-30-14
Georgia	State Program	4	N/A	06-30-14
Illinois	NELAP	5	200004	07-31-14
Kansas	NELAP	7	E-10336	04-01-14 *
Kentucky (UST)	State Program	4	58	06-30-14
L-A-B	DoD ELAP		L2315	07-18-16
Minnesota	NELAP	5	039-999-348	12-31-14
Nevada	State Program	9	OH-000482008A	07-31-14
New Jersey	NELAP	2	OH001	06-30-14
New York	NELAP	2	10975	04-01-14
Ohio VAP	State Program	5	CL0024	10-31-15
Pennsylvania	NELAP	3	68-00340	08-31-14
Texas	NELAP	6		08-31-14
USDA	Federal		P330-13-00319	11-26-16
Virginia	NELAP	3	460175	09-14-14
Washington	State Program	10	C971	01-12-15
West Virginia DEP	State Program	3	210	12-31-14
Wisconsin	State Program	5	999518190	08-31-14

* Expired certification is currently pending renewal and is considered valid.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

CHAIN OF CUSTODY
AND
RECEIVING DOCUMENTS

240-35145 Chain of Custody

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4142 (0408)

Client: AECOM	Project Manager: PETER HOLLATZ	Date: 3/17/14	Chain of Custody Number: 003100
Address: 27755 DIEHL RD SUITE # 100	Telephone Number (Area Code)/Fax Number: 630.839.5386	Lab Number:	Page 1 of 1
City: WARRENVILLE; State: IL; Zip Code: 60555	Site Contact: —	Lab Contact: PAT OMEARA	
Project Name and Location (State): UTC SER AREA 9/10	Carrier/Waybill Number: —		
Contract/Purchase Order/Quote No.: —			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis (Attach list if more space is needed): VOC 8260B*	Special Instructions/ Conditions of Receipt
HS-SER-MS PHASE 1-031414	3/14/14	1215		X						X			X	

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal: ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other STANDARD

QC Requirements (Specify):

	Date	Time		Date	Time
1. Relinquished By: Nick P.	3/17/14	1600	1. Received By:	3-18-14	926
2. Relinquished By			2. Received By		
3. Relinquished By			3. Received By		

Comments: * LIST OF 13 VOCs

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

TestAmerica Canton Sample Receipt Form/Narrative Login # : 35145
Canton Facility

Client AECOM Site Name _____ Cooler unpacked by:

Cooler Received on 3-18-14 Opened on 3-18-14

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt

IR GUN# A (CF +0 °C) Observed Cooler Temp. 0.6 °C Corrected Cooler Temp. 0.6 °C

IR GUN# 4 (CF -1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C ☐ See Multiple Cooler Form

IR GUN# 5 (CF +1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

IR GUN# 8 (CF +1 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity _____ Yes No
   - Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   - Were custody seals on the bottle(s)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Did all bottles arrive in good condition (Unbroken)? Yes No
7. Could all bottle labels be reconciled with the COC? Yes No
8. Were correct bottle(s) used for the test(s) indicated? Yes No
9. Sufficient quantity received to perform indicated analyses? Yes No
10. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC391902
11. Were VOAs on the COC? Yes No
12. Were air bubbles >6 mm in any VOA vials? Yes No NA
13. Was a trip blank present in the cooler(s)? Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

15. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____.

D

D

Appendix D

First Quarter 2014 Phase1/Phase 2 AS/SVE System Operations Data Sheets

DAILY DOCUMENTATION SHEET

Control Panel Touch Screen

DATE	11-17-13	11-18-13	1-15-14	1-16-14	1-17-14	1-18-14	1-19-14	1-20-14	1-21-14	1-22-14
TIME	10:50 Am	8:52 Am	1240	1:40 Pm	1:26 Pm	6:30 Am	1:00 Pm	8:50	9:50	12:50
OBSERVER'S INITIALS	OL	RK	NJP	RK	RK	RA	OL	OL	RK	RK
ALARMS										
Shut Down Alarm Code	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Non-critical Alarm Code	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HOURS METERS										
B-701 SVE (hrs)	26207	26229	27622	27647	27670	27690	27718	27738	27762	27789
C-2201 SPRG (hrs)	24114	24136	24145	24170	24194	24215	24242	24262	24286	24315
F-2501 H-XCH (hrs)	24114	24136	24145	24170	24194	24215	24242	24262	24286	24315
ANALOGS										
MV-701 SVE POS (%)	29	29	29	29	29	29	29	29	29	29
PT-701 SVE (-wc)	-81.6	81.6	-81.6	81.6	68.0	81.6	-81.6	-81.6	81.6	68.0
PT-2501 SPRG (psi)	13.1	12.0	13.2	13.0	12.8	12.8	12.9	13.0	13.0	12.7
SET POINTS										
PTLA-2501 SPRG (psi)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
PTHA-2501 SPRG (psi)	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
SET POINTS 2										
SVON-101 SVE (min)	60	60	60	60	60	60	60	60	60	60
SVON-102 SVE (min)	60	60	60	60	60	60	60	60	60	60
SVON-103 SVE (min)	180	180	180	180	180	180	180	180	180	180
SET POINTS 3										
SVON-2801 SPRG (min)	60	60	60	60	60	60	60	60	60	60
SVON-2802 SPRG (min)	60	60	60	60	60	60	60	60	60	60
SVON-2803 SPRG (min)	180	180	180	180	180	180	180	180	180	180
SPRG DELAY (min)	Ø	Ø	0	Ø	Ø	Ø	Ø	Ø	Ø	Ø
SET POINTS 4										
MV-701 SVE POS (%)	30	30	30	30	30	30	30	30	30	30

DAILY DOCUMENTATION SHEET

Control Panel Touch Screen

DATE	1-23-14	1-24-14	1-25-14	1-26-14	1-27-14	1-28-14	1-29-14	1-30-14	1-31-14	2-1-14
TIME	10:45Am	10:34Am	12:27 Pm	8:56Am	10:20Am	10:44Am	12:46 Pm	10:46Am	10:12Am	7:28Am
OBSERVER'S INITIALS	KA	RK	RK	KA	RK	RK	RK	RK	RK	RK
ALARMS										
Shut Down Alarm Code	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Non-critical Alarm Code	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HOURS METERS										
B-701 SVE (hrs)	27811	27835	27861	27881	27907	27931	27956	27978	28001	28022
C-2201 SPRG (hrs)	24337	24361	24387	24407	24433	24458	24482	24505	24528	24550
F-2501 H-XCH (hrs)	24337	24361	24387	24407	24433	24458	24482	24505	24528	24550
ANALOGS										
MV-701 SVE POS (%)	29	29	29	29	29	29	29	29	29	29
PT-701 SVE (-wc)	81.6	81.6	81.6	81.6	81.6	81.6	81.6	81.6	68.0	81.6
PT-2501 SPRG (psi)	13.0	13.0	13.0	12.9	11.7	13.0	11.8	13.1	13.4	13.2
SET POINTS										
PTLA-2501 SPRG (psi)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
PTHA-2501 SPRG (psi)	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
SET POINTS 2										
SVON-101 SVE (min)	60	60	60	60	60	60	60	60	60	60
SVON-102 SVE (min)	60	60	60	60	60	60	60	60	60	60
SVON-103 SVE (min)	180	180	180	180	180	180	180	180	180	180
SET POINTS 3										
SVON-2801 SPRG (min)	60	60	60	60	60	60	60	60	60	60
SVON-2802 SPRG (min)	60	60	60	60	60	60	60	60	60	60
SVON-2803 SPRG (min)	180	180	180	180	180	180	180	180	180	180
SPRG DELAY (min)	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø
SET POINTS 4										
MV-701 SVE POS (%)	30	30	30	30	30	30	30	30	30	30

DAILY DOCUMENTATION SHEET

Control Panel Touch Screen

DATE	2-2-14	2-3-14	2-4-13	2-5-13	2-6-13	2-7-14	2-8-14	2-9-14	2-10-14	2-11-14
TIME	12:02 Pm	8:40 Am	10:19 Am	1:14 Pm	12:26 Pm	1:18 Pm	10:24 AM	12:40 Pm	2:22 Pm	1:35 Pm
OBSERVER'S INITIALS	DL	RK	RK	RK	RK	RK	RK	RA	RK	RK
ALARMS										
Shut Down Alarm Code	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Non-critical Alarm Code	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HOURS METERS										
B-701 SVE (hrs)	2851	28072	28097	28124	28147	28172	28193	28219	28245	28268
C-2201 SPRG (hrs)	24578	24599	24625	24652	24676	24701	24722	24749	24774	24798
F-2501 H-XCH (hrs)	24578	24599	24625	24652	24676	24701	24722	24749	24774	24798
ANALOGS										
MV-701 SVE POS (%)	29	29	29	29	29	29	29	29	29	29
PT-701 SVE (-wc)	-68	81.6	81.6	81.6	81.6	81.6	81.6	68.0	81.6	81.6
PT-2501 SPRG (psi)	13.0	13.8	13.2	12.1	13.2	13.3	13.2	12.9	13.8	11.9
SET POINTS										
PTLA-2501 SPRG (psi)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
PTHA-2501 SPRG (psi)	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
SET POINTS 2										
SVON-101 SVE (min)	60	60	60	60	60	60	60	60	60	60
SVON-102 SVE (min)	60	60	60	60	60	60	60	60	60	60
SVON-103 SVE (min)	180	180	180	180	180	180	180	180	180	180
SET POINTS 3										
SVON-2801 SPRG (min)	60	60	60	60	60	60	60	60	60	60
SVON-2802 SPRG (min)	60	60	60	60	60	60	60	60	60	60
SVON-2803 SPRG (min)	180	180	180	180	180	180	180	180	180	180
SPRG DELAY (min)	0	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø
SET POINTS 4										
MV-701 SVE POS (%)	30	30	30	30	30	30	30	30	30	30

DAILY DOCUMENTATION SHEET

Control Panel Touch Screen

DATE	2-12-14	2-13-14	2-14-14	2-15-14	2-16-14	2-17-14	2-18-14	2-19-14	2-20-14	2-21-14
TIME	10:44Am	2:22 Pm	8:09Am	10:15 Am	1235pm	7:54Am	10:04Am	1010	12:19pm	1:15 P
OBSERVER'S INITIALS	RK	RK	RK	RK	DL	RK	RK	A.H	RK	RK
ALARMS										
Shut Down Alarm Code	NA	NA	NA	NA	NA	NA	NA	N/A	NA	NA
Non-critical Alarm Code	NA	NA	NA	NA	NA	NA	NA	N/A	NA	NA
HOURS METERS										
B-701 SVE (hrs)	28289	28317	28334	28361	28387	28406	28432	28456	28482	28507
C-2201 SPRG (hrs)	24819	24847	24865	24892	24918	24937	24964	24988	25014	25039
F-2501 H-XCH (hrs)	24819	24847	24865	24892	24918	24937	24964	24988	25014	25039
ANALOGS										
MV-701 SVE POS (%)	29	29	29	29	29	29	29	29	29	29
PT-701 SVE (-wc)	68.0	81.6	81.6	81.6	-81.6	81.6	68.0	81.6	81.6	81.6
PT-2501 SPRG (psi)	12.7	13.2	13.2	13.2	11.5	12.4	12.8	11.4	14.4	14.5
SET POINTS										
PTLA-2501 SPRG (psi)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
PTHA-2501 SPRG (psi)	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
SET POINTS 2										
SVON-101 SVE (min)	60	60	60	60	60	60	60	60	60	60
SVON-102 SVE (min)	60	60	60	60	60	60	60	60	60	60
SVON-103 SVE (min)	180	180	180	180	180	180	180	180	180	180
SET POINTS 3										
SVON-2801 SPRG (min)	60	60	60	60	60	60	60	60	60	60
SVON-2802 SPRG (min)	60	60	60	60	60	60	60	60	60	60
SVON-2803 SPRG (min)	180	180	180	180	180	180	180	180	180	180
SPRG DELAY (min)	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø
SET POINTS 4										
MV-701 SVE POS (%)	30	30	30	30	30	30	30	30	30	30

DAILY DOCUMENTATION SHEET

Control Panel Touch Screen

DATE	3-1-14	3-2-14	3-3-14	3-4-14	3-6-14	3-7-14	3-8-14	3-9-14	3-10-14	3-11-14
TIME	11:16 Am	11:30 AM	10:23 Am	10:11 Am	11:05 Am	8:16 Am	7:45 Am	11:40 Am	10:11 Am	1:47 Pm
OBSERVER'S INITIALS	RK	DL	RK	RK	RK	RK	RK	RA	RK	RK
ALARMS										
Shut Down Alarm Code	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Non-critical Alarm Code	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
HOURS METERS										
B-701 SVE (hrs)	28526	28550	28573	28597	28646	28667	28690	28717	28740	28767
C-2201 SPRG (hrs)	25058	25083	25106	25130	25179	25201	25224	25251	25274	25302
F-2501 H-XCH (hrs)	25058	25083	25106	25130	25179	25201	25224	25251	25274	25302
ANALOGS										
MV-701 SVE POS (%)	29	29	29	29	29	29	29	29	29	29
PT-701 SVE (-wc)	81.6	81.6	81.6	81.6	81.6	81.6	81.6	68.0	81.6	68.0
PT-2501 SPRG (psi)	14.1	14.3	11.5	14.3	14.2	11.5	14.4	12.7	14.5	12.6
SET POINTS										
PTLA-2501 SPRG (psi)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
PTHA-2501 SPRG (psi)	17.0	17	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
SET POINTS 2										
SVON-101 SVE (min)	60	60	60	60	60	60	60	60	60	60
SVON-102 SVE (min)	60	60	60	60	60	60	60	60	60	60
SVON-103 SVE (min)	180	180	180	180	180	180	180	180	180	180
SET POINTS 3										
SVON-2801 SPRG (min)	60	60	60	60	60	60	60	60	60	60
SVON-2802 SPRG (min)	60	60	60	60	60	60	60	60	60	60
SVON-2803 SPRG (min)	180	180	180	180	180	180	180	180	180	180
SPRG DELAY (min)	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø
SET POINTS 4										
MV-701 SVE POS (%)	30	30	30	30	30	30	30	30	30	30

DAILY DOCUMENTATION SHEET

Control Panel Touch Screen

DATE	3-12-13	3-13-14	3/14/14							
TIME	1:04 Pm	2:34pm	1020							
OBSERVER'S INITIALS	RK	RK	NP							
ALARMS										
Shut Down Alarm Code	NA	NA	N/A							
Non-critical Alarm Code	NA	NA	N/A							
HOURS METERS										
B-701 SVE (hrs)	28790	28816	28836							
C-2201 SPRG (hrs)	25325	25351	25371							
F-2501 H-XCH (hrs)	25325	25351	25371							
ANALOGS										
MV-701 SVE POS (%)	29	29	29							
PT-701 SVE (-wc)	81.6	68.0	68.0							
PT-2501 SPRG (psi)	11.6	12.9	12.9							
SET POINTS										
PTLA-2501 SPRG (psi)	2.0	2.0	2.0							
PTHA-2501 SPRG (psi)	17.0	17.0	17.0							
SET POINTS 2										
SVON-101 SVE (min)	60	60	60							
SVON-102 SVE (min)	60	60	60							
SVON-103 SVE (min)	180	180	180							
SET POINTS 3										
SVON-2801 SPRG (min)	60	60	60							
SVON-2802 SPRG (min)	60	60	60							
SVON-2803 SPRG (min)	180	180	180							
SPRG DELAY (min)	Ø	Ø	0							
SET POINTS 4										
MV-701 SVE POS (%)	30	30	30							

WEEKLY DOCUMENTATION SHEET

SYSTEM COMPONENTS

DATE	11-18-13	1-15-14	1-27-14	2-3-14	2-11-14	2-17-14	3-3-14	3-10-14	3/14/14
TIME	8:47 Am	1240	10:22 Am	8:42 Am	1:38 Pm	7:56 Am	10:25 Am	10:13 Am	1020
OBSERVER'S INITIALS	RK	NJP	RK	RK	RK	RK	RK	RK	NJP

SYSTEM LEAKS, EXCESSIVE OR UNFAMILAR NOISE, MOISTURE, ETC.

Comments and Notes	NA	NA	NA	NA	NA	NA	NA	NA	NP

SOIL VAPOR EXTRACTION (SVE)

Hours of Operation (hrs)	26229	27622	27907	28072	28268	28306	28573	28740	28836
Inlet Vacuum (-wc)	84	86	86	88	82	82	82	86	82
Pre-Filter Vacuum (-wc)	86	90	88	90	90	88	88	90	82
Post-Filter Vacuum (-wc)	76	78	76	78	78	78	70	78	68
Outlet Pressure (wc)	8	8	8	8	8	8	8	7	7
Outlet Temperature (°F)	145	128	122	125	123	134	120	140	135
Outlet Magnehelic* (in H_2O)	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Water Level Sight Glass (in)	Ø	0	Ø	2"	Ø	5"	8"	9"	9"

AIR SPARGE (SPRG)

Hours Operation (hrs)	24136	24145	24433	24599	24798	24937	25106	25274	25371
Oil Sight Glass (half pt.)	OK	OK	OK	OK	OK	OK	OK	OK	OK

HEAT EXCHANGER (H-XCH)

Hours Operation (hrs)	24136	24145	24433	24599	24798	24937	25106	25274	25371
Inlet Temperature (°F)	201	180	176	180	175	190	180	205	200
Inlet Pressure (psi)	14	17	16	17	17	16	15	17	16
Outlet Temperature (°F)	101	80	82	84	82	90	88	98	100
Outlet Pressure (psi)	13.5	15	13	16	14	14	12.5	16	16
Outlet Magnehelic* (in H_2O)	4.0	4	4	4	4	4	4	3.5	4

ELECTRICAL USAGE (see display panel below main breaker and next to control panel)

Kilowatts (kwh)	139794	140104	141607	142482	143544	144374	145197	146081	146600

* Keep plastic pinch valves on tubing to magnehelic gauge closed except when taking a reading.

MONTHLY DOCUMENTATION SHEET

SVE MANIFOLD

DATE	10-24-13	11.18.13	1-15-14	2-19-14	3/14/14					
TIME	1200	1400	1240	1010	1020					
INITIALS	A.H.	P.H.	NOP	A.H.	NP					

MAGNEHELIC GAUGE*

CELL 1	SVE-1 (in H_2O)	0.9	0.9	1.1	1.0	1.1					
	SVE-2 (in H_2O)	1.5	1.4	1.4	1.5	1.4					
CELL 2	SVE-3 (in H_2O)	1.2	1.3	1.3	1.3	1.2					
	SVE-4 (in H_2O)	1.3	1.2	1.1	1.1	1.2					
CELL 3	SVE-5 (in H_2O)	0.20 ~~0.02~~ AH	0.30	0.10	0.80	0.80					
	SVE-6 (in H_2O)	0.60	0.0	0.0	0.90	0.80					

VACUUM GAUGE

CELL 1	SVE-1 (-wc)	32	30	30	30	29					
	SVE-2 (-wc)	30	30	30	30	30					
CELL 2	SVE-3 (-wc)	20	20	20	20	20					
	SVE-4 (-wc)	20	20	19.5	19	20					
CELL 3	SVE-5 (-wc)	36	35	36	34	35					
	SVE-6 (-wc)	36	40	38	38	38					

*Keep plastic pinch valves on tubing to magnehelic gauge closed except [illegible]n taking a reading.

MONTHLY DOCUMENTATION SHEET

AIR SPARGE MANIFOLD

DATE		10-24-13	11.18.13	1-15-14	2.19.14	3/14/14					
TIME		1200	1400	1240	1010	1020					
INITIALS		A.H.	D.H.	NP	A.H.	NP					
ROTOMETER											
CELL 1	AS-1 (scfm)	18	20	17.5	20	16					
	AS-2 (scfm)	20	20	20	21	20					
	AS-3 (scfm)	20	20	21	21	21					
	AS-4 (scfm)	19	19	19.5	18.5	19					
	AS-5 (scfm)	18	20	18.5	20	18.5					
CELL 2	AS-6 (scfm)	16	16	17	17	16					
	AS-7 (scfm)	16	16.5	17	17	16					
	AS-8 (scfm)	21	21.5	21	21.5	21					
	AS-9 (scfm)	16	17.5	16	18.5	20					
	AS-10 (scfm)	23	23	23	22.5	23.5					
CELL 3	AS-11 (scfm)	16	16.5	15	18	20					
	AS-12 (scfm)	18	17	19	20	21					
	AS-13 (scfm)	17	16	18	18.5	18					
	AS-14 (scfm)	24	23	25	19	20					
	AS-15 (scfm)	21	20	21.5	16	17					
PRESSURE GAUGE											
CELL 1	AS-1 (psi)	11.5	10.5	12	9	11					
	AS-2 (psi)	11.0	11	11	8.5	10					
	AS-3 (psi)	10.5	10	11	10	9.5					
	AS-4 (psi)	11.0	10.5	12	9.5	10.5					
	AS-5 (psi)	11.0	10.5	13	10	11					
CELL 2	AS-6 (psi)	11.5	11	11	~~11~~ 10.5	10					
	AS-7 (psi)	13	13	13	~~12~~ 13	11					
	AS-8 (psi)	11.5	11.5	12	~~12.5~~ 11	11					
	AS-9 (psi)	13	12.5	13	12	11.5					
	AS-10 (psi)	12.5	12.5	13	12.5	12.5					
CELL 3	AS-11 (psi)	10.5	11	11.5	10.5	11					
	AS-12 (psi)	13.5	13.5	13.5	14.0	12.5					
	AS-13 (psi)	13.0	13	13	14.0	12.5					
	AS-14 (psi)	12.0	13.5	13	14.0	14					
	AS-15 (psi)	12.5	13	13.5	13.5	14					

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MONTHLY DOCUMENTATION SHEET

WELL HEAD GAUGES

Ph: (630) 792-1680
Fx: (630) 792-1691

DATE		4-19-12	5-16-12	9-17-12	11-15-12	7/15/13	9-9-13	10-24-13	11-18-13	1-15-14	2-19-14
TIME		1210	11:00	12:00	2:30	0945	1300	1200	1400	1240	1010
INITIALS		LT	DV	DV	DV	PA	A.H.	A.H.	A.H.	NJP	A.H.
CELL 1	AS-1 (psi)	3	3	3	5	3	2	7	10/6.5	COVERED	Covered
	AS-2 (psi)	5	5	5	7	2	4	7	10/6		
	AS-3 (psi)	3	3	3	0	6	8	10	10/9		
	AS-4 (psi)	4	4	4	6	2	0	7	10/6		
	AS-5 (psi)	12	12	12	12	12	12	12	10/12		
CELL 2	AS-6 (psi)	4	3	4	5	5	5	8	7.5		
	AS-7 (psi)	4	5	4	6	0	5	7	7.5		
	AS-8 (psi)	6	6	6	7	1.5	4	6.5	4.5		
	AS-9 (psi)	0	2	2	5	1	0	0	0.0	0	
	AS-10 (psi)	4	4	4	5	1	1	6	5.0	2	
CELL 3	AS-11 (psi)	0	0	0	0	0	5	10	9	0	
	AS-12 (psi)	2	2	2	4	0	0	5	4	0	
	AS-13 (psi)	5	4	4	6	4	3	6.5	6	0	
	AS-14 (psi)	3	4	4	5	0	0	3	3.5	6	
	AS-15 (psi)	6	6	6	8	5	3	8	8	0	
CELL 1	SVE-1 (in H_2O)	-6	5	5	5	5	5	5	5	COVERED	Covered
	SVE-2 (in H_2O)	-5	5	5	5	5	5	1.5	5		
CELL 2	SVE-3 (in H_2O)	-9	9	9	8	10	8	2	5		
	SVE-4 (in H_2O)	-2	2	2	2	3	3	1	5	1	
CELL 3	SVE-5 (in H_2O)	-10	10	10	10	10	10	2.5	10	2.5	
	SVE-6 (in H_2O)	-2	2	2	2	0	0	0	2	2	

MONTHLY DOCUMENTATION SHEET

WELL HEAD GAUGES

DATE		3/14/14									
TIME		1020									
INITIALS		NP									
CELL 1	AS-1 (psi)	COVERED									
	AS-2 (psi)										
	AS-3 (psi)										
	AS-4 (psi)										
	AS-5 (psi)										
CELL 2	AS-6 (psi)										
	AS-7 (psi)										
	AS-8 (psi)										
	AS-9 (psi)										
	AS-10 (psi)										
CELL 3	AS-11 (psi)										
	AS-12 (psi)										
	AS-13 (psi)										
	AS-14 (psi)										
	AS-15 (psi)										

CELL 1	SVE-1 (in H_2O)	COVERED									
	SVE-2 (in H_2O)										
CELL 2	SVE-3 (in H_2O)										
	SVE-4 (in H_2O)										
CELL 3	SVE-5 (in H_2O)										
	SVE-6 (in H_2O)										

DAILY DOCUMENTATION SHEET

BUILDINGS 1 - 2

Control Panel Touch Screen

DATE	11-14-13	11-15-13	11-16-13	11-17-13	11-18-13	1-15-14	1-16-14	1-24-14	1-25-14
TIME	10:25 AM	12:42 Pm	12:08 Pm	11:06 AM	9:09 AM	1:41 Pm	1:28 Pm	10:38 AM	12:33 Pm
OBSERVER'S INITIALS	TR	RK	RK	DL	RK	RK	RK	RK	RK
WEATHER CONDITIONS									
Indoor Room Temp (°F), Outdoor Conditions: (Rain, Snow, Clear, Overcast, etc.)	CLEAR 54°F	CLEAR 64°F	RAIN 64°F	RAIN 64°F	CLEAR 46°F	CLEAR 28°F	CLOUDY 71°F	SUNNY 72°F	SUNNY 76°F
ALARMS									
Alarm Code	NA	NA	NA	NA	NA	NA	NA	NA	SCREEN DARK UNABLE TO READ
P&ID									
PDT-701 SVE (-wc)	0.42	0.39	0.36	.30	0.44	0.53	0.31	SCREEN	
PT-701 SVE (-wc)	-68	-70	-72	-77	-71	-70	-82	DARK-	
PT-702 SVE (-wc)	55.0	54.3	53.9	52.1	55.5	58.9	53.9	UNABLE	
PT-2201 SPRG (psi)	28.0	15.9	16.8	26.7	28.1	15.9	28.9	TO	
P-401 PUMP (cycles)	91	92	92	93	94	95	95	TAKE	
P&ID2									
PDT-801 SVE (-wc)	0.26	0.25	0.22	.22	0.21	0.24	0.22	READING	
PT-801 SVE (-wc)	-54	-55	-59	-64	-57	-48	-59		
PT-802 SVE (-wc)	51.6	51.6	50.6	49.2	52.6	56.2	52.4		
PT-2301 SPRG (psi)	0.0	1.7	0.6	3.4	0.0	5.0	7.9		
P-501 PUMP (cycles)	407	408	409	409	410	411	412		

DAILY DOCUMENTATION SHEET

BUILDINGS 1 - 2

Control Panel Touch Screen

DATE	11-14-13	11-15-13	11-16-13	11-17-13	11-18-13	1-15-14	1-16-14	1-24-14	1-25-14
TIME	10:25 Am	12:42 Pm	12:08 Pm	11:06 Am	9:10 Am	1:41 Pm	1:28 Pm	10:38 Am	12:33 Pm
OBSERVER'S INITIALS	RK	RK	RK	DL	RK	RK	RK	RK	RK
HOURS METERS									
B-701 SVE (hrs)	12007	12025	12040	12040	12069	12074	12089	?	SCREEN
C-2201 SPRG (hrs)	11916	11933	11949	11963	11978	11983	11998		STILL
C-2202 SPRG (hrs)	11846	11863	11879	11893	11907	11913	11928		DARK
B-801 SVE (hrs)	11930	11948	11964	11978	11992	11997	12012		
C-2301 SPRG (hrs)	11636	11653	11669	11683	11697	11703	11718		
C-2302 SPRG (hrs)	11620	11637	11653	11667	11682	11686	11701		
SET POINTS									
PAL-701 SVE (wc)	-27	-27	-27	-27	-27	-27	-27		
PAH-702 SVE (wc)	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
PAL-702 SVE (wc)	10.0	10.0	10.0	10.0	10.0	10.0	10.0		
PAH-2201 SPRG (psi)	30.0	30.0	30.0	30.0	30.0	30.0	30.0		
PAL-2201 SPRG (psi)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
PAL-801 SVE (wc)	-25	-25	-25	-25	-25	-25	-25		
PAH-802 SVE (wc)	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
PAL-802 SVE (wc)	10.0	10.0	10.0	10.0	10.0	10.0	10.0		
PAH-2301 SPRG (psi)	30.0	30.0	30.0	30.0	30.0	30	30		
PAL-2301 SPRG (psi)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
SV-2801 SPRG (min)	40	40	40	40	40	40	40		
SV-2802 SPRG (min)	20	20	20	20	20	20	20		
SV-2901 SPRG (min)	20	20	20	20	20	20	20		
SV-2902 SPRG (min)	20	20	20	20	20	20	20		

DAILY DOCUMENTATION SHEET

BUILDINGS 1 - 2

Control Panel Touch Screen

DATE	1-26-14	1-27-14	1-28-14	1-29-14	1-30-14	1-31-14	2-1-14	2-2-14	2-3-14
TIME	9:05 Am	10:37 Am	9:34 Am	12:58 Pm	10:51 Am	10:19 Am	7:34 AM	12:15	8:18 Am
OBSERVER'S INITIALS	KA	RK	RK	RK	RK	RK	RK	DL	RK

WEATHER CONDITIONS

Indoor Room Temp (°F), Outdoor Conditions: (Rain, Snow, Clear, Overcast, etc.)	Cloudy.	Screen Black Notified AECOM	Screen Black	Clear 74°F	Cloudy 76°F	Overcast 76°F	Snowy 76°F	Sunny 76	Sunny 72

ALARMS

Alarm Code	Screen Black-	on 1-25-14		Screen Dark —	Dark Screen	Dark Screen	Screen Dark.	Dark Screen	Dark Screen

P&ID

PDT-701 SVE (-wc)	No	No		0.11	0.02	0.04	0.04	.002	004
PT-701 SVE (-wc)	Reading	Reading		-91	-97	-87	-89	.92	-94
PT-702 SVE (-wc)				50.5	48.4	52.1	51.0	51.1	50.4
PT-2201 SPRG (psi)				28.7	28.9	28.7	28.9	15.6	16.3
P-401 PUMP (cycles)				2	2	2	2	2	2

P&ID2

PDT-801 SVE (-wc)				0.11	0.08	0.07	0.08	.06	0.03
PT-801 SVE (-wc)				-58	-65	-59	-63	-55	-59
PT-802 SVE (-wc)				53.2	51.1	53.8	52.6	54.8	55.5
PT-2301 SPRG (psi)				8.4	7.7	7.2	6.9	6.4	6.1
P-501 PUMP (cycles)				13	13	14	15	16	17

DAILY DOCUMENTATION SHEET

BUILDINGS 1 - 2

Control Panel Touch Screen

DATE	1-26-14	1-27-14	1-28-14	1-29-14	1-30-14	1-31-14	2-1-14	2-2-14	2-3-14
TIME	9:05 AM	10:37 AM	9:34 AM	12:58 PM	10:52 AM	10:19 AM	7:35 AM	12:15 PM	8:18 AM
OBSERVER'S INITIALS	KA	TK	TK	TK	TK	TK	TK	DL	TK
HOURS METERS									
B-701 SVE (hrs)	NO	No		104	125	149	170	199	219
C-2201 SPRG (hrs)	READING	READING		104	125	149	170	199	219
C-2202 SPRG (hrs)				104	125	149	170	199	219
B-801 SVE (hrs)				104	125	149	170	199	219
C-2301 SPRG (hrs)				104	125	149	170	199	219
C-2302 SPRG (hrs)				104	125	149	170	199	219
SET POINTS									
PAL-701 SVE (wc)				-27	-27	-27	-27	-27	-27
PAH-702 SVE (wc)				100.0	100.0	100.0	100.0	100.0	100.0
PAL-702 SVE (wc)				10.0	10.0	10.0	10.0	10.0	10.0
PAH-2201 SPRG (psi)				30.0	30.0	30.0	30.0	30.0	30.0
PAL-2201 SPRG (psi)				0.0	0.0	0.0	0.0	0.0	0.0
PAL-801 SVE (wc)				-25	-25	-25	-25	-25	-25
PAH-802 SVE (wc)				100.0	100.0	100.0	100.0	100.0	100.0
PAL-802 SVE (wc)				10.0	10.0	10.0	10.0	10.0	10.0
PAH-2301 SPRG (psi)				30.0	30.0	30.0	30.0	30.0	30.0
PAL-2301 SPRG (psi)				0.0	0.0	0.0	0.0	0.0	0.0
SV-2801 SPRG (min)				40	40	40	40	40	40
SV-2802 SPRG (min)				20	20	20	20	20	20
SV-2901 SPRG (min)				20	20	20	20	20	20
SV-2902 SPRG (min)				20	20	20	20	20	20

DAILY DOCUMENTATION SHEET

BUILDINGS 1 - 2

Control Panel Touch Screen

DATE	2-4-14	2-5-14	2-6-14	2-7-14	2-8-14	2-9-14	2-10-14	2-11-14	2-12-14
TIME	10:24 AM	1:19 Pm	12:32 Pm	1:25 Pm	10:30 AM	12:05 PM	2:26 Pm	1:21 Pm	10:49 AM
OBSERVER'S INITIALS	RK	RK	RK	RK	RK	KA	RK	RK	RK

WEATHER CONDITIONS

Indoor Room Temp (°F), Outdoor Conditions: (Rain, Snow, Clear, Overcast, etc.)	Cloudy 78°F	Snowy 78°F	Sunny/Cold. Rm Temp. 76°F	Sunny Cold Rm Temp 78°F	Snow/Rm Temp 76°F	Sunny Cold 76.F	Sunny Cold 76°F	Sunny Cold. 76°F	Cloudy 76°F

ALARMS

Alarm Code	Screen Dark.	Dark Screen	Screen Dark.	Dark Touch Screen	Dark Touch Screen	Dark Touch Screen	Dark Touch Screen	Dark Screen	Dark Screen

P&ID

PDT-701 SVE (-wc)	0.03	0.04	0.01	0.01	0.04	0.00	0.01	0.00	0.02
PT-701 SVE (-wc)	-92	-93	-91	-91	-95	-95	-93	-92	-95
PT-702 SVE (-wc)	47.9	48.7	54.4	49.6	49.6	49.1	49.9	49.2	48.6
PT-2201 SPRG (psi)	15.9	28.7	29.0	28.6	15.9	15.5	29.0	16.2	28.8
P-401 PUMP (cycles)	2	2	2	3	3	3	3	3	3

P&ID2

PDT-801 SVE (-wc)	0.07	0.03	0.06	0.05	0.04	0.04	0.06	0.03	0.06
PT-801 SVE (-wc)	-57	-57	-57	-29	-37	-39	-36	-35	-39
PT-802 SVE (-wc)	52.2	52.7	56.3	62.2	59.6	59.3	61.0	59.9	59.2
PT-2301 SPRG (psi)	5.1	5.5	4.5	5.1	5.2	5.7	5.0	4.3	4.0
P-501 PUMP (cycles)	19	20	21	22	22	22	22	22	22

DAILY DOCUMENTATION SHEET

BUILDINGS 1 - 2

Control Panel Touch Screen

DATE	2-4-14	2-5-14	2-6-14	2-7-14	2-8-14	2-9-14	2-10-14	2-11-14	2-12-14
TIME	10:24 Am	1:19 Pm	12:32 Pm	1:25 Pm	10:30 Am	12:05 PM	22 Pm	1:21 Pm	10:50 AM
OBSERVER'S INITIALS	TK	TK	TK	TK	TK	RA	TK	TK	TK
HOURS METERS									
B-701 SVE (hrs)	245	272	295	320	341	367	392	415	436
C-2201 SPRG (hrs)	245	272	295	320	341	367	392	415	436
C-2202 SPRG (hrs)	245	272	295	320	341	367	392	415	436
B-801 SVE (hrs)	245	272	295	320	341	366	392	415	436
C-2301 SPRG (hrs)	245	272	295	320	341	366	392	415	436
C-2302 SPRG (hrs)	245	272	295	320	341	366	392	415	436
SET POINTS									
PAL-701 SVE (wc)	-27	-27	-27	-27	-27	-27	-27	-27	-27
PAH-702 SVE (wc)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PAL-702 SVE (wc)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
PAH-2201 SPRG (psi)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
PAL-2201 SPRG (psi)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAL-801 SVE (wc)	-25	-25	-25	-25	-25	-25	-25	-25	-25
PAH-802 SVE (wc)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PAL-802 SVE (wc)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
PAH-2301 SPRG (psi)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
PAL-2301 SPRG (psi)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SV-2801 SPRG (min)	40	40	40	40	40	40	40	40	40
SV-2802 SPRG (min)	20	20	20	20	20	20	20	20	20
SV-2901 SPRG (min)	20	20	20	20	20	20	20	20	20
SV-2902 SPRG (min)	20	20	20	20	20	20	20	20	20

DAILY DOCUMENTATION SHEET

BUILDINGS 1 - 2

Control Panel Touch Screen

DATE	2-13-14	2-14-14	2-15-14	2-16-14	2-17-14	2-18-14	2-19-14	2-20-14	2-21-14
TIME	2:26 Pm	8:16 AM	10:34 Am	12:40	8:17 Am	10:10 Am	0900	12:26 Pm	1:29 Pm
OBSERVER'S INITIALS	RK	RK	RK	DL	RK	RK	A.H.	RK	RK
WEATHER CONDITIONS									
Indoor Room Temp (°F), Outdoor Conditions: (Rain, Snow, Clear, Overcast, etc.)	Cloudy 79°F	Cloudy Snow 76°F	Sunny 78°F	Sunny 78°F	Snow 78°F	Sunny 80°F	Sunny 35°F 80°F	Rain 40°F 78°F	Sunny 80°F
ALARMS									
Alarm Code	NA	NA	NA	NA	NA	NA	N/A.	NA	AWNING BLEW OFF, TOO
P&ID									
PDT-701 SVE (-wc)	0.00	0.03	0.02	.02	0.00	0.01	0.00	0.00	BRIGHT
PT-701 SVE (-wc)	-102	-100	-97	-96	-99	-100	-85	-91	TO
PT-702 SVE (-wc)	45.2	47.3	47.7	47.6	46.9	45.3	49.6	49.4	TAKE
PT-2201 SPRG (psi)	28.7	29.0	28.9	28.7	29.0	28.8	15.3	28.5	READING
P-401 PUMP (cycles)	3	3	3	3	3	3	3	3	
P&ID2									
PDT-801 SVE (-wc)	0.06	0.05	0.07	.02	0.04	0.03	0.05	0.02	
PT-801 SVE (-wc)	-47	-45	-40	-39	-44	-44	-37	-44	
PT-802 SVE (-wc)	56.6	59.4	59.2	57.1	57.1	57.0	58.1	56.6	
PT-2301 SPRG (psi)	2.9	3.2	3.1	4.2	2.9	3.8	3.7	6.5	
P-501 PUMP (cycles)	22	22	22	22	22	22	22	22	

DAILY DOCUMENTATION SHEET

BUILDINGS 1 - 2

Control Panel Touch Screen

DATE	2-13-14	2-14-14	2-15-14	2-16-14	2-17-14	2-18-14	2-19-14	2-20-14	2-21-14
TIME	2:26 Pm	8:16 Am	10:34 Am	10:40	8:17 Am	10:10 Am		12:27 Pm	1:29 Pm
OBSERVER'S INITIALS	RK	RK	RK	DL	RK	HC		RK	RK
HOURS METERS									
B-701 SVE (hrs)	464	482	508	534	554	580	603	630	AWNING
C-2201 SPRG (hrs)	464	482	508	534	554	580	603	630	GONE.
C-2202 SPRG (hrs)	464	482	508	534	554	580	603	630	TO
B-801 SVE (hrs)	464	482	508	534	554	580	603	630	BRIGHT
C-2301 SPRG (hrs)	464	482	508	534	554	580	603	630	TO
C-2302 SPRG (hrs)	464	482	503	534	554	580	603	630	READ.
SET POINTS									
PAL-701 SVE (wc)	-27	-27	-27	-27	-27	-27	-27	-27	
PAH-702 SVE (wc)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
PAL-702 SVE (wc)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
PAH-2201 SPRG (psi)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	
PAL-2201 SPRG (psi)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PAL-801 SVE (wc)	-25	-25	-25	-25	-25	-25	-25	-25	
PAH-802 SVE (wc)	100.0	100.0	100.0	100.0	100.	100.0	100.0	100.0	
PAL-802 SVE (wc)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	
PAH-2301 SPRG (psi)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	
PAL-2301 SPRG (psi)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SV-2801 SPRG (min)	40	40	40	40	40	40	40	40	
SV-2802 SPRG (min)	20	20	20	20	20	20	20	20	
SV-2901 SPRG (min)	20	20	20	20	20	20	20	20	
SV-2902 SPRG (min)	20	20	20	20	20	20	20	20	

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DAILY DOCUMENTATION SHEET

BUILDINGS 1 - 2

Control Panel Touch Screen

DATE	3-1-14	3-2-14	3-3-14	3-4-14	3-6-14	3-7-14	3-8-14	3-9-14	3-10-14
TIME	11:25 AM	11:35 AM	10:01 AM	9:55 AM	11:15 AM	8:22 AM	7:53 AM	1150 AM	10:28 AM
OBSERVER'S INITIALS	RK	DL	RK	RK	RK	RK	RK	KA	RK
WEATHER CONDITIONS									
Indoor Room Temp (°F), Outdoor Conditions: (Rain, Snow, Clear, Overcast, etc.)	CLOUDY 77°F	CLOUDY & SUNNY 76°F	SUNNY 77°F	CLOUDY 78°F	CLEAR 78°F	CLEAR 78°F	CLOUDY SNOW 80°F	CLOUDY 80°F	CLEAR 80°F
ALARMS									
Alarm Code	NA	NA	NA	NA	NA	NA	NA	NA	NA
P&ID									
PDT-701 SVE (-wc)	0.02	0.01	0.04	0.02	0.02	0.01	0.04	0.002	0.00
PT-701 SVE (-wc)	-83	-94	-81	-84	-82	-87	-84	-85	-90
PT-702 SVE (-wc)	52.2	49.1	51.4	50.7	50.4	49.8	49.5	50.2	47.5
PT-2201 SPRG (psi)	28.9	24.7	16.3	29.0	28.9	28.6	28.8	28.7	15.5
P-401 PUMP (cycles)	3	3	3	3	3	3	3	3	3
P&ID2									
PDT-801 SVE (-wc)	0.07	0.02	0.04	0.04	0.03	0.03	0.04	0.01	0.01
PT-801 SVE (-wc)	-37	-40	-35	-40	-37	-43	-34	-35	-40
PT-802 SVE (-wc)	59.8	58.7	60.2	59.3	57.7	57.4	59.1	58.4	57.5
PT-2301 SPRG (psi)	6.5	6.4	3.9	4.2	5.0	2.7	3.5	5.3	9.0
P-501 PUMP (cycles)	22	22	22	22	22	22	22	22	22

COMPUTER SCREEN DARK. AWNING IS GONE, ALMOST IMPOSSIBLE TO TAKE DAILY READINGS. NOTIFIED AERCOM.

DAILY DOCUMENTATION SHEET

BUILDINGS 1 - 2

Control Panel Touch Screen

DATE	3-1-14	3-2-14	3-3-14	3-4-14	3-6-14	3-7-14	3-8-14	3-9-14	3-10-14
TIME	11:25AM	11:35AM	10:01AM	9:55AM	11:15AM	8:22AM	7:53AM	11:50AM	10:28AM
OBSERVER'S INITIALS	TAL	DL	TAL	TAL	TAL	TAL	TAL	KA	TAL
HOURS METERS									
B-701 SVE (hrs)	674	698	720	744	793	815	838	865	888
C-2201 SPRG (hrs)	674	698	720	744	793	815	838	865	888
C-2202 SPRG (hrs)	674	698	720	744	793	815	838	865	888
B-801 SVE (hrs)	674	698	720	744	793	815	838	865	888
C-2301 SPRG (hrs)	674	698	720	744	793	815	838	865	888
C-2302 SPRG (hrs)	674	698	720	744	793	815	838	865	888
SET POINTS									
PAL-701 SVE (wc)	-27	-27	-27	-27	-27	-27	-27	-27	-27
PAH-702 SVE (wc)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PAL-702 SVE (wc)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
PAH-2201 SPRG (psi)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
PAL-2201 SPRG (psi)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PAL-801 SVE (wc)	-25	-25	-25	-25	-25	-25	-25	-25	-25
PAH-802 SVE (wc)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PAL-802 SVE (wc)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
PAH-2301 SPRG (psi)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0
PAL-2301 SPRG (psi)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SV-2801 SPRG (min)	40	40	40	40	40	40	40	40	40
SV-2802 SPRG (min)	20	20	20	20	20	20	20	20	20
SV-2901 SPRG (min)	20	20	20	20	20	20	20	20	20
SV-2902 SPRG (min)	20	20	20	20	20	20	20	20	20

DAILY DOCUMENTATION SHEET

BUILDINGS 1 - 2

Control Panel Touch Screen

DATE	3-11-14	3-12-14	3-13-14	3/14/14					
TIME	1:53 pm	1:09 pm	2:38 pm	0850					
OBSERVER'S INITIALS	RK	RK	RK	NDP					
WEATHER CONDITIONS									
Indoor Room Temp (°F), Outdoor Conditions: (Rain, Snow, Clear, Overcast, etc.)	CLOUDY 80°F	CLOUDY 80°F	CLEAR 78°F	CLEAR 79°					
ALARMS									
Alarm Code	NA	NA	NA	N/A					
P&ID									
PDT-701 SVE (-wc)	0.06	0.11	0.12	0.12					
PT-701 SVE (-wc)	-73	-70	-70	-77					
PT-702 SVE (-wc)	53.6	55.1	55.3	52.3					
PT-2201 SPRG (psi)	28.6	28.7	28.6	28.2					
P-401 PUMP (cycles)	3	3	3	3					
P&ID2									
PDT-801 SVE (-wc)	0.05	0.04	0.07	0.05					
PT-801 SVE (-wc)	-40	-37	-44	-45					
PT-802 SVE (-wc)	55.4	58.3	55.7	55.6					
PT-2301 SPRG (psi)	5.5	3.1	5.4	5.1					
P-501 PUMP (cycles)	22	22	22	22					

DAILY DOCUMENTATION SHEET

BUILDINGS 1 - 2

Control Panel Touch Screen

DATE	3-11-14	3-12-14	3-13-14						
TIME	1:53 pm	1:09 pm	2:38 pm						
OBSERVER'S INITIALS	RK	RK	RK						
HOURS METERS									
B-701 SVE (hrs)	915	938	964	983					
C-2201 SPRG (hrs)	915	938	964	983					
C-2202 SPRG (hrs)	915	938	964	983					
B-801 SVE (hrs)	915	938	964	983					
C-2301 SPRG (hrs)	915	938	964	983					
C-2302 SPRG (hrs)	915	938	964	983					
SET POINTS									
PAL-701 SVE (wc)	-27	-27	-27	-27					
PAH-702 SVE (wc)	100.0	100.0	100.0	100					
PAL-702 SVE (wc)	10.0	10.0	10.0	10					
PAH-2201 SPRG (psi)	30.0	30.0	30.0	30					
PAL-2201 SPRG (psi)	0.0	0.0	0.0	0.0					
PAL-801 SVE (wc)	-25	-25	-25	-25					
PAH-802 SVE (wc)	100.0	100.0	100.0	100					
PAL-802 SVE (wc)	10.0	10.0	10.0	10					
PAH-2301 SPRG (psi)	30.0	30.0	30.0	30					
PAL-2301 SPRG (psi)	0.0	0.0	0.0	0.0					
SV-2801 SPRG (min)	40	40	40	40					
SV-2802 SPRG (min)	20	20	20	20					
SV-2901 SPRG (min)	20	20	20	20					
SV-2902 SPRG (min)	20	20	20	20					

WEEKLY DOCUMENTATION SHEET
BUILDING 1
SYSTEM COMPONENTS

DATE	11-18-13	1-15-14							
TIME	9:05AM	1410							
OBSERVER'S INITIALS	TK	NJP							
SYSTEM LEAKS, EXCESSIVE OR UNFAMILAR NOISE; MOISTURE, ETC.									
Comments and Notes	NA	NA							
SOIL VAPOR EXTRACTION (SVE) BLOWER B-701									
Pre-Filter Vacuum (-wc)	59	59							
Post-Filter Vacuum (-wc)	80	82							
Inlet Magnehelic* (in H_2O)	0.4	0.4							
Inlet Vacuum (-wc)	100	100							
SOIL VAPOR EXTRACTION (SVE) HEAT EXCHANGER (H-XCH)									
Inlet Pressure (wc)	0	0							
Inlet Temperature (°F)	100	98							
Outlet Pressure (wc)	8	9							
Outlet Temperature (°F)	70	58							
Water Level Sight Glass (in)	3"	3"							
AIR SPARGE (SPRG) COMPRESSOR C-2201									
Upper Oil Sight Glass (half pt.)	OK	OK							
Lower Oil Sight Glass (half pt.)	OK	OK							
AIR SPARGE (SPRG) HEAT EXCHANGER (H-XCH)									
Inlet Pressure (psi)	30+	28							
Inlet Temperature (°F)	226	200							
Outlet Pressure (psi)	30+	29.5							
Outlet Temperature (°F)	90	64							

eep plastic pinch valves on tubing to magnehelic gauge closed except n taking a reading.

WEEKLY DOCUMENTATION SHEET
BUILDING 1
SYSTEM COMPONENTS

DATE	1-27-14	2-3-14	2-11-14	2-17-14	3-3-14	3-10-14	3/14/14		
TIME	10:37Am	8:25Am	1:26 Pm	8:14Am	10:08Am	0:25Am	0930		
OBSERVER'S INITIALS	RL	RL	RL	RL	RL	RL	NTP		
SYSTEM LEAKS, EXCESSIVE OR UNFAMILAR NOISE, MOISTURE, ETC.									
Comments and Notes	CLEAR 74°F	CLEAR 72°F	CLEAR 76°F	SNOW 78°F	CLEAR COLD. 77°F	CLEAR 80°F	CLEAR 80°		
SOIL VAPOR EXTRACTION (SVE) BLOWER B-701									
Pre-Filter Vacuum (-wc)	89	94	95	94	81	80	65		
Post-Filter Vacuum (-wc)	105	110	115	117	109	110	95		
Inlet Magnehelic* (in H_2O)	0	0	0	0	0	0	0		
Inlet Vacuum (-wc)	105	NEEDLE DROPPED OFF	→*	→*	→*	→*	→*		
SOIL VAPOR EXTRACTION (SVE) HEAT EXCHANGER (H-XCH)									
Inlet Pressure (wc)	0	0	0	0	0	0	0		
Inlet Temperature (°F)	95	95	105	115	100	125	125		
Outlet Pressure (wc)	8	7	7	7	8	7	8		
Outlet Temperature (°F)	80	64	80	92	80	90	88		
Water Level Sight Glass (in)	2"	0	0	0	0	0	0		
AIR SPARGE (SPRG) COMPRESSOR C-2201									
Upper Oil Sight Glass (half pt.)	OK	OK	OK	OK	OK	OK	OK		
Lower Oil Sight Glass (half pt.)	OK	OK	OK	OK	OK	OK	OK		
AIR SPARGE (SPRG) HEAT EXCHANGER (H-XCH)									
Inlet Pressure (psi)	13	13	15	27	14	14	26		
Inlet Temperature (°F)	175	165	175	248	190	230	230		
Outlet Pressure (psi)	15	14	16	28	16.5	16	28		
Outlet Temperature (°F)	124	105	104	110	111	111	117		

* Keep plastic pinch valves on tubing to magnehelic gauge closed except when taking a reading.

WEEKLY DOCUMENTATION SHEET
BUILDING 2
SYSTEM COMPONENTS

DATE	10-7-13	10-14-13	10-21-13	10-28-13	11-4-13	11-13-13	11-18-13	1-15-14	1-27-14
TIME	1:39 Pm	10:15 AM	12:40 Pm	10:34 Am	9:57 AM	10:14 Am	8:59 AM	1340	10:28 Am
OBSERVER'S INITIALS	RK	RK	RK	RK	RK	RK	RK	HJP	RK

SYSTEM LEAKS, EXCESSIVE OR UNFAMILAR NOISE, MOISTURE, ETC.

Comments and Notes	76°F CLEAR	CLEAR 64°F	CLEAR 58°F	CLOUDY 58°F	CLOUDY 60°F	CLEAR 44°F	CLEAR 46°F	CLEAR 20°	CLEAR 71°F

SOIL VAPOR EXTRACTION (SVE) BLOWER B-801

Pre-Filter Vacuum (-wc)	62	62	60	50	50	50	45	45	85
Post-Filter Vacuum (-wc)	68	68	65	54	55	55	55	50	88
Inlet Magnehelic* (in H_2O)	0.4	0.4	0.4	0.2.5	0.2	0.2	0.2	0.3	0.1
Inlet Vacuum (-wc)	120	120	120	120	120	120	120	120	120

SOIL VAPOR EXTRACTION (SVE) HEAT EXCHANGER (H-XCH)

Inlet Pressure (wc)	46	47	48	53	52	55	55	56	48
Inlet Temperature (°F)	126	124	120	110	110	98	99	75	80
Outlet Pressure (wc)	1	Ø	Ø	Ø	Ø	1	1	~~80~~ 1	82
Outlet Temperature (°F)	98	~~88~~	80	78	80	64	63	~~70~~ 50	1
Water Level Sight Glass (in)	1½ FT	1½ FT	Ø	6"	2 FT	1½ FT	1 FT	0	1 FT

AIR SPARGE (SPRG) COMPRESSOR C-2301

Upper Oil Sight Glass (half pt.)	OK	OK	OK	OK	OK	OK	OK	OK	OK
Lower Oil Sight Glass (half pt.)	OK	OK	OK	OK	OK	OK	OK	OK	OK

AIR SPARGE (SPRG) HEAT EXCHANGER (H-XCH)

Inlet Pressure (psi)	16.5	17	18	18	18	19	20	20	19
Inlet Temperature (°F)	215	202	190	195	200	176	175	160	176
Outlet Pressure (psi)	16	17	17.5	18	17.5	19	19.5	20	19
Outlet Temperature (°F)	116	102	98	98	98	82	88	70	119

*[illegible]p plastic pinch valves on tubing to magnehelic gauge closed except [illegible] taking a reading.

WEEKLY DOCUMENTATION SHEET
BUILDING 2
SYSTEM COMPONENTS

DATE	2-3-14	2-11-14	2-17-14	3-3-14	3-10-14	3/14/4			
TIME	8:32 AM	1:31 Am	8:06 Am	10:15 AM	10:00 Am	0850			
OBSERVER'S INITIALS	RL	TRL	TRL	TRL	TRL	NAP			
SYSTEM LEAKS, EXCESSIVE OR UNFAMILAR NOISE, MOISTURE, ETC.									
Comments and Notes	CLEAR 70°F	CLEAR 72°F	SNOW 72°F	CLEAR 76°F	CLEAR 79°F	CLEAR 79°			
SOIL VAPOR EXTRACTION (SVE) BLOWER B-801									
Pre-Filter Vacuum (-wc)	60	41	43	42	36	40			
Post-Filter Vacuum (-wc)	65	45	46	46	40	40			
Inlet Magnehelic* (in H_2O)	0.1	0.1	0.1	0.1	0.1	0.1			
Inlet Vacuum (-wc)	115	115	115	115	115	115			
SOIL VAPOR EXTRACTION (SVE) HEAT EXCHANGER (H-XCH)									
Inlet Pressure (wc)	56	60	58	60+	58	57			
Inlet Temperature (°F)	75	75	75	75	101	100			
Outlet Pressure (wc)	1	1	1	2	2	2			
Outlet Temperature (°F)	54	62	84	62	80	84			
Water Level Sight Glass (in)	2 FOOT	0	Ø	Ø	Ø	Ø			
AIR SPARGE (SPRG) COMPRESSOR C-2301									
Upper Oil Sight Glass (half pt.)	OK	OK	OK	OK	OK	OK			
Lower Oil Sight Glass (half pt.)	OK	OK	OK	OK	OK	OK			
AIR SPARGE (SPRG) HEAT EXCHANGER (H-XCH)									
Inlet Pressure (psi)	18.5	16.5	15.5	18.5	15.5	15.5			
Inlet Temperature (°F)	180	190	190	190	205	200			
Outlet Pressure (psi)	17	16.5	15.5	17.5	15.5	14			
Outlet Temperature (°F)	115	109	108	114	118	117			

* Keep plastic pinch valves on tubing to magnehelic gauge closed except when taking a reading.

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MONTHLY DOCUMENTATION SHEET
BUILDING 1
SVE MANIFOLD

DATE	4-11-13	~~4-12~~ 5-10-13	6-17-13	7-15-13	9-9-13	10-24-13	11-18-13	1-15-14	2-19-14	3/14/14
TIME	1315	1350	1425	1130	1415	1300	1230	1410	0900	0940
INITIALS	PA	PLH	ARH	PH	A.H.	A.H.	P.H.	NTP	A.H.	NTP

MAGNEHELIC GAUGE*

SVE-15 (in H_2O)	~~.35~~ 0.35	0.3	0.3	0.35	0.30	0.20	0.60	0.10	0.10	0.10
SVE-14 (in H_2O)	.3	0.4	0.35	0.35	0.40	0.55	0.40	0.20	0.10	0.20
SVE-13 (in H_2O)	0	0	0.0	0.0	0.0	0.65	0.90	0.0	0.0	0.0
SVE-11 (in H_2O)	.4	0.4	0.35	0.40	0.40	0.30	0.50	0.20	0.70	0.50
SVE-9 (in H_2O)	.6	0.6	0.60	0.60	0.60	0.50	0.60	0.45	0.10	0.70

VACUUM GAUGE

SVE-15 (-wc)	55	50	50	50	50	40	50	50	80	65
SVE-14 (-wc)	50	45	45	45	40	40	50	50	80	65
SVE-13 (-wc)	60	55	55	55	55	45	60	55	75	70
SVE-11 (-wc)	110	110	110	110	20	22	25	25	30	30
SVE-9 (-wc)	55	50	50	55	50	45	55	55	75	60

* Keep plastic pinch valves on tubing to magnehelic gauge closed except when taking a reading.

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MONTHLY DOCUMENTATION SHEET
BUILDING 1 UPPER CELL
AIR SPARGE MANIFOLD

DATE		4-11-13	5-10-13	6-12-13	7-15-13	9-9-13	10-24-13	11-14-13	1-15-14	2-19-14	
TIME		1300	1350	1425	1130	1415	1300	1230	1410	0900	
INITIALS		PEH	PEH	ARH.	PH	A.H.	A.H.	P.H.	NOP	A.H.	
						ROTOMETER					
UPPER CELL	AS-47 (scfm)	0	0	0	0	0	0	0	0	0	
	AS-38 (scfm)	0	0	15	12.5	13	14	5	6	7.5	
	AS-37 (scfm)	16	16	15	15	15	16	16	16	16	
	AS-23 (scfm)	17	16	24	24	16	17	17	16	17	
	AS-24 (scfm)	30	16	14	14	14	15	15	15	15.5	
	AS-39 (scfm)	17	17	16	16	16	17	18	17	18	
	AS-48 (scfm)	19	19	17	18	18	19	20	19	20	
	AS-52 (scfm)	16	17	15	15	15	16	17	16	17	
	AS-56 (scfm)	16	16	15	15	15	16	16	15.5	16	
	AS-54 (scfm)	17	17	15	15	15	16	17	16.5	17.5	
	AS-58 (scfm)	14	14	13	13	13	13	13.5	13.5	13.5	
						PRESSURE GAUGE					
UPPER CELL	AS-47 (psi)	28	28	0	0	0	0	0	0	0	
	AS-38 (psi)	3	3	13	18	18.5	20	12.5	15.5	13.5	
	AS-37 (psi)	10	9	8	9	9	8	8	9	12.5	
	AS-23 (psi)	13	13	12.5	14	13	12	12	13	12	
	AS-24 (psi)	13	13	12	14	14	12.5	12.5	13.5	12	
	AS-39 (psi)	11.5	12	11	12.5	13	11.5	11	12	11	
	AS-48 (psi)	12	12	11	12	13	11.0	11	12	11	
	AS-52 (psi)	11.5	12	10.5	12	12	11.0	11	11.5	10.5	
	AS-56 (psi)	10	11	10.5	12	12	10.5	11	11	10.5	
	AS-54 (psi)	14	14	11.5	13.5	13	14	14	15	12.5	
	AS-58 (psi)	11	11	10	10	10	12	12	13	10	

MONTHLY DOCUMENTATION SHEET
BUILDING 1 UPPER CELL
AIR SPARGE MANIFOLD

DATE	3/14/14									
TIME	0900									
INITIALS	MP									

ROTOMETER

UPPER CELL	AS-47 (scfm)	0									
	AS-38 (scfm)	10.5									
	AS-37 (scfm)	15.5									
	AS-23 (scfm)	16									
	AS-24 (scfm)	14.5									
	AS-39 (scfm)	17									
	AS-48 (scfm)	18.5									
	AS-52 (scfm)	16									
	AS-56 (scfm)	15									
	AS-54 (scfm)	16									
	AS-58 (scfm)	13									

PRESSURE GAUGE

UPPER CELL	AS-47 (psi)	0									
	AS-38 (psi)	15									
	AS-37 (psi)	9									
	AS-23 (psi)	13									
	AS-24 (psi)	13.5									
	AS-39 (psi)	12.5									
	AS-48 (psi)	12									
	AS-52 (psi)	11.5									
	AS-56 (psi)	11									
	AS-54 (psi)	14									
	AS-58 (psi)	11									

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MONTHLY DOCUMENTATION SHEET
BUILDING 1 LOWER CELL
AIR SPARGE MANIFOLD

DATE	11-15-12	4-11-13	5-10-13	6-17-13	7-15-13	9-9-13	10-24-13	11-18-13	1-15-14	2-19-14
TIME	2:40	1300	1350	1530	1130	1415	1300	1230	1400	0900
INITIALS	DV	PLH	PLH	ARA	PLH	A.H.	A.H.	P.H.	NSP	A.H.

ROTOMETER

LOWER CELL	AS-49 (scfm)	21	8	7	13	12	13	13	14	15	15.5
	AS-44 (scfm)	17	12	10	11	10	10	6	6	6	5.5
	AS-31 (scfm)	15	10	9	9	9	9	10	10.5	10.5	10.5
	AS-32 (scfm)	30	25	25	24	24	28	21	22	24	23
	AS-45 (scfm)	15	15	15	15	15	15	16	16.5	16.5	17
	AS-51 (scfm)	12	13	14	14	14	15	17	16	16.5	16
	AS-55 (scfm)	10	17	18	17	17	18	19	19	21	20
	AS-53 (scfm)	24	21	20	15	15	17	17	17	17	18
	AS-59 (scfm)	16	24	25	24	24	15	15	15	17	16
	AS-57 (scfm)	off	20	20	17	17	22	17	18	24	20.5
	AS-50 (scfm)	23	23	23	22	24	25	25	25	27	26

PRESSURE GAUGE

LOWER CELL	AS-49 (psi)	10.5	10	10	10.5	11	A.H. 13	←	10	11.5	11	11	10
	AS-44 (psi)	10	0	0	0	0	A.H. 10	←	10	11	10	11	10
	AS-31 (psi)	10	10	10	10	10	A.H. 9	←	10	11	13	12	10
	AS-32 (psi)	12	10	10.5	10	10.5	A.H. 12	←	10.5	13.5	12	12	10
	AS-45 (psi)	10.5	11	11	11.5	12	A.H. 15	←	12	12.5	11	11	11.5
	AS-51 (psi)	10	11	10	11	11	A.H. 15	←	11	11.5	11	11	10.5
	AS-55 (psi)	9.5	10.5	10	11	11	A.H. 18	←	11	11.5	11	11	10.5
	AS-53 (psi)	10	10	9.5	8.5	9	A.H. 17	←	9	13	12.5	12	8.5
	AS-59 (psi)	10	11	11	12	11	A.H. 15	←	11	11.5	11	12	10.5
	AS-57 (psi)	off	12	12	12.5	13	A.H. 22	←	13	14	13.5	13	12.5
	AS-50 (psi)	11.5	11	11	12.	12	A.H. 25	←	12	12.5	12.5	13	11.5

MONTHLY DOCUMENTATION SHEET
BUILDING 1 LOWER CELL
AIR SPARGE MANIFOLD

DATE		3/14/14									
TIME		0900									
INITIALS		NTP									
ROTOMETER											
LOWER CELL	AS-49 (scfm)	14.5									
	AS-44 (scfm)	12									
	AS-31 (scfm)	11									
	AS-32 (scfm)	23									
	AS-45 (scfm)	16.5									
	AS-51 (scfm)	16.5									
	AS-55 (scfm)	20									
	AS-53 (scfm)	17									
	AS-59 (scfm)	16									
	AS-57 (scfm)	19									
	AS-50 (scfm)	26									
PRESSURE GAUGE											
LOWER CELL	AS-49 (psi)	10									
	AS-44 (psi)	10.5									
	AS-31 (psi)	10									
	AS-32 (psi)	10									
	AS-45 (psi)	11.5									
	AS-51 (psi)	10.5									
	AS-55 (psi)	10.5									
	AS-53 (psi)	10									
	AS-59 (psi)	10.5									
	AS-57 (psi)	12.5									
	AS-50 (psi)	11.5									

MONTHLY DOCUMENTATION SHEET
BUILDING 1
PID MEASUREMENTS

DATE	9-9-13	10-24-13	11-18-13	1-15-14	2-19-14	3/14/14						
TIME	1415	1300	1230	1410 ~~1340~~	0900	0940						
INITIALS	A.H.	A.H.	P.H	NJP	A.H.	NJP						

SVE Effluent	1.5	52.1	3.6 ~~moisture~~	4.7	0.4	0.3						
SVE - 15	2.5	moisture	moisture	MOISTURE	1.6	MOISTURE						
SVE - 14	2.5				moisture							
SVE - 13	5.3				moisture							
SVE - 11	2.0				Moisture.							
SVE - 9	1.8				Moisture.							
Exhaust	1.9	~~1818~~ 52.1	1.36	4.7	0.4	0.3						

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MONTHLY DOCUMENTATION SHEET
BUILDING 2
SVE MANIFOLD

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DATE	11-13	5-10-13	6-17-13	7-15-13	9-9-13	10-24-13	11-18-13	1-15-14	2-19-14	3/14/14
TIME	1430	1330	1535	1100	1340	1320	1230	1340	0945	0900
INITIALS	PEH	PEH	ARH	PH	A.H.	A.H.	P.H.	NTP	A.H.	NTP
MAGNEHELIC GAUGE*										
SVE-10 (in H_2O)	0	0.5	0.4	0	0.50	0.2	0.0	0.0	0.0	0.0
SVE-12 (in H_2O)	72	0.85	0.80	0.80	0.80	0.35	0.0	0.0	0.0	0.0
SVE-8 (in H_2O)	0.95	0.5	0.65	0.70	0.70	0.40	0.60	0.10	0.40	0.50
SVE-7 (in H_2O)	0	0.5	0.5	0.45	0.50	0.20	0.50	0.15	0.10	0.10
VACUUM GAUGE										
SVE-10 (-wc)	65	65	60	60	55	38	50.0	40.0	40.0	40.0
SVE-12 (-wc)	60	60	60	60	55	35	50.0	40.0	20.0	30.0
SVE-8 (-wc)	60	60	60	60	55	40	50	45.0	40.0	40.0
SVE-7 (-wc)	60	60	60	60	60	85	80	95.0	68.0	65.0
ELECTRICAL USAGE										
Kilowatts (kwh)	95964.20	97566.60		238695.10	239635	334109.70	391853.70	401496.30	463678.90	499345.00

* Keep plastic pinch valves on tubing to magnehelic gauge closed except when taking a reading.

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MONTHLY DOCUMENTATION SHEET
BUILDING 2 UPPER CELL
AIR SPARGE MANIFOLD

	DATE	4-11-13	5-10-13	6-17-13	7-15-13	9-9-13	10-24-13	11-18-13	1-15-14	2-19-14	3/14/14
	TIME	1430	1330	1540	1100	1340	1320	1330	1340	0945	0845
	INITIALS	RCH	RCH	ARH.	RH	A.H	A.H.	R.H.	NJP	A.D.	NJP
	ROTOMETER										
UPPER CELL	AS-20 (scfm)	13	13	16	13	13	13	14	15	11	15
UPPER CELL	AS-26 (scfm)	13	13	13	11	11	12	12	13	21	13
UPPER CELL	AS-16 (scfm)	13	13	14	13.5	14	14	14.5	15	13	11.5
UPPER CELL	AS-18 (scfm)	13	14	Air line leak.	9	9	10	9.5	11	8.5	15
UPPER CELL	AS-22 (scfm)	14	14	20	11.5	11.5	12	12.5	13	11	24
UPPER CELL	AS-28 (scfm)	15	15	15	15	15	16	16	17	13	27
UPPER CELL	AS-30 (scfm)	17	18	18	17	17	19	19	20	15.5	12.5
UPPER CELL	AS-36 (scfm)	15	15	15	14.5	14.5	16	15	17	14	10
UPPER CELL	AS-42 (scfm)	14	14	15	14.5	14.5	15	15	16.5	13.5	16
UPPER CELL	AS-40 (scfm)	15	15	15	14.5	14.5	16	16	17	13.5	13
UPPER CELL	AS-34 (scfm)	16	16	15	15	15	16	16	18	14.5	12.5
	PRESSURE GAUGE										
UPPER CELL	AS-20 (psi)	10	10	7.5	10.5	10.5	10	10	10	10	11
UPPER CELL	AS-26 (psi)	11	11	11	11	11	10.5	11	10.5	0	10
UPPER CELL	AS-16 (psi)	10	10	10	10	10	10	10	9.5	10	10
UPPER CELL	AS-18 (psi)	16	16	Air line leak.	14	14	14	15	14	14	12
UPPER CELL	AS-22 (psi)	10.5	10	5.5	10	10	10	10	10	9.5	11
UPPER CELL	AS-28 (psi)	11	11	11	11.5	11.5	11	11	11	11	NP
UPPER CELL	AS-30 (psi)	10.5	10	11	11.5	11.5	10.5	11	10.5	11	
UPPER CELL	AS-36 (psi)	11	11.5	12	11.5	12.5	12	12.5	12	12	
UPPER CELL	AS-42 (psi)	11	11	11	11.5	11.5	11	11	10.5	11	
UPPER CELL	AS-40 (psi)	10	10	11	11.5	11.5	10.5	11	10.5	11	
UPPER CELL	AS-34 (psi)	10	10	11	11.5	11.5	10.5	11	10.5	11	

MONTHLY DOCUMENTATION SHEET
BUILDING 2 UPPER CELL
AIR SPARGE MANIFOLD

DATE		3/14/14									
TIME		0855									
INITIALS		NJP									
ROTOMETER											
UPPER CELL	AS-20 (scfm)	14									
	AS-26 (scfm)	0									
	AS-16 (scfm)	14									
	AS-18 (scfm)	13									
	AS-22 (scfm)	13									
	AS-28 (scfm)	16									
	AS-30 (scfm)	19									
	AS-36 (scfm)	15.5									
	AS-42 (scfm)	15									
	AS-40 (scfm)	16									
	AS-34 (scfm)	17									
PRESSURE GAUGE											
UPPER CELL	AS-20 (psi)	10									
	AS-26 (psi)	0									
	AS-16 (psi)	10									
	AS-18 (psi)	16.5									
	AS-22 (psi)	10									
	AS-28 (psi)	11									
	AS-30 (psi)	11									
	AS-36 (psi)	12.5									
	AS-42 (psi)	11.5									
	AS-40 (psi)	11									
	AS-34 (psi)	11									

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MONTHLY DOCUMENTATION SHEET
BUILDING 2 LOWER CELL
AIR SPARGE MANIFOLD

Ph: (630) 792-1680
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DATE	11-15-12	4-11-13	5-10-13	6-17-13	7-15-13	9-9-13	10-24-13	11-18-13	1-15-14	2-29-14
TIME	1:30	1430	1330	1540	1100	1240	1320	1330	1340	0945
INITIALS	DV	PEH	PEH	ARH	PH	A.H.	A.H.	P.H.	NJP	A.H.
ROTOMETER										
LOWER CELL: AS-27 (scfm)	17	15	15	15	15	15	16	17	18	16.5
LOWER CELL: AS-25 (scfm)	17	13	13	13	12	12	15	13.5	15	13.5
LOWER CELL: AS-17 (scfm)	17	12	12	12	11	11	13	12	13	12
LOWER CELL: AS-19 (scfm)	17	14	14	14	14	14	16	16	16.5	15
LOWER CELL: AS-21 (scfm)	18	15	15	15	15	16	17	18	18	0
LOWER CELL: AS-29 (scfm)	off	23	23	23	22	23	24	28	30	30
LOWER CELL: AS-43 (scfm)	17	16	16	16	15	15	13	13	13.5	13
LOWER CELL: AS-46 (scfm)	18	15	15	15	15	15	7	9.5	10	9.5
LOWER CELL: AS-41 (scfm)	18	15	15	15	15	15	17	17	18	16.5
LOWER CELL: AS-33 (scfm)	18	13	+6 13	12	12	12	14	13	14	13
LOWER CELL: AS-35 (scfm)	18	12	12	11	11	11	13	13	14	12
PRESSURE GAUGE										
LOWER CELL: AS-27 (psi)	12	12	11.5	11.5	11.5	11	12	11	11	11
LOWER CELL: AS-25 (psi)	10.5	10.5	10.5	10.5	10.5	10.5	11	10	10	10
LOWER CELL: AS-17 (psi)	11	11	11	10.5	10.5	10.5	10.5	10	10	10
LOWER CELL: AS-19 (psi)	13	12	13	12.5	12.5	12	13	12	12	11.5
LOWER CELL: AS-21 (psi)	12	12	11.5	11.5	11.5	10.5	12	10	11	14.5
LOWER CELL: AS-29 (psi)	off	13	13	12.5	13	12.5	14	12.5	11	12
LOWER CELL: AS-43 (psi)	11	11	11	11	11	10.5	11	10	10	10
LOWER CELL: AS-46 (psi)	11.5	11.5	11.5	11	11.5	11	12	10	10	10
LOWER CELL: AS-41 (psi)	10.5	10.5	10.5	10.5	10.5	10.5	11	10	10	10
LOWER CELL: AS-33 (psi)	11	11	10.5	10.5	11	10.5	11	10	10	10
LOWER CELL: AS-35 (psi)	11	10.5	10.5	10.5	11	10.5	11	10	10	10

MONTHLY DOCUMENTATION SHEET
BUILDING 2 LOWER CELL
AIR SPARGE MANIFOLD

DATE		3/14/14									
TIME		0845									
INITIALS		NJP									
ROTOMETER											
LOWER CELL	AS-27 (scfm)	15									
	AS-25 (scfm)	13									
	AS-17 (scfm)	11.5									
	AS-19 (scfm)	15									
	AS-21 (scfm)	24									
	AS-29 (scfm)	27									
	AS-43 (scfm)	12.5									
	AS-46 (scfm)	10									
	AS-41 (scfm)	16									
	AS-33 (scfm)	13.5									
	AS-35 (scfm)	12.5									
PRESSURE GAUGE											
LOWER CELL	AS-27 (psi)	11									
	AS-25 (psi)	10									
	AS-17 (psi)	10									
	AS-19 (psi)	12									
	AS-21 (psi)	11									
	AS-29 (psi)	12									
	AS-43 (psi)	10									
	AS-46 (psi)	10									
	AS-41 (psi)	10									
	AS-33 (psi)	10									
	AS-35 (psi)	9.5									

MONTHLY DOCUMENTATION SHEET
BUILDING 2
PID MEASUREMENTS

DATE	9-9-13	10-24-13	11-18-13	1-15-14	2-19-14	3/14/14						
TIME	1340	1320	1330	1340	0945	0855						
INITIALS	A.H.	A.H.	A.H.	NJP	A.H.	NJP						

SVE Effluent	1.1	0.0	47	0.1	0.3	0.2						
SVE - 10	moisture	moisture	moisture	MOISTURE	moisture	MOISTURE						
SVE - 12	↓	↓	↓	↓	↓	↓						
SVE - 8	↓	↓	↓	↓	↓	↓						
SVE - 7	↓	↓	↓	↓	↓	↓						
Exhaust	1.9	0.0	47	0.1	0.3	0.2						

E

E

Appendix E

First Quarter 2014 Groundwater Sampling Data Sheets

AECOM

Well ID:	RAMW-01

Ground Water Sample Collection Record

Client: UTAS Plants 1/2 Facility
Date: 2-28-14
Time: Start 0840 (24hr) Finish 0945
Project No: 60312350-4212
Site Location: Rockford, Illinois
Weather: overcast 0-50F
Collector(s): P. Hollatz

1. WELL and WATER LEVEL DATA: (measured from Top of Casing)

Total well length (ft): 46.03
Screen interval(ft): 15
Approx. depth of pump intake(ft): 38
Water table depth (ft): 31.49
Casing type/diameter: 2" PVC
Minimum purge volume: 7.2 (gals)
Water column length (ft): 14.54
(calculations on reverse)

2. WELL PURGE DATA

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	13A 100068
	Lamotte	2020	2476-3312
	Lamotte	Smart 2 Colorimeter	0429-2402

Begin purge at 0840

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
0850	5000	13.29	7.04	790	175.4	5.62	11.28	500	31.55	clear
0855	7500	13.27	7.02	792	167.7	4.82	3.74	500	31.55	clear
0900	10000	12.54	7.01	776	166.6	4.85	2.23	500	31.55	clear
0905	12500	13.61	7.00	781	161.7	5.02	0.64	500	31.55	clear
0910	15000	13.73	7.00	780	157.1	5.07	0.01	500	31.55	clear
0915	17500	13.83	7.00	781	154.7	5.12	0.02	500	31.55	clear
0920	20000	13.61	7.00	778	152.2	5.20	0.00	500	31.55	clear
0925	22500	13.90	7.00	781	149.9	5.20	-0.14	500	31.55	clear
0930	25000	13.75	7.00	779	146.6	5.27	-0.04	500	31.55	clear
0935	30000	13.59	6.99	782	144.7	5.17	-0.09	500	31.55	clear
	* Turbidity not stable, 3 well volumes removed, sample collected.									

(continued on back)

Sample Collector(s): [signature]
Date: 2-28-14

SAMPLE COLLECTION DATA

Well ID: RAMW-01

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-RAMW01-022414	VOC's	3 - 40mL Clear Vials	0945	500	—
HSSER-FBLK02-022414	VOC's	3 - 40mL Clear Vials	0950	—	—
	Ferrous Iron	0.16 mg/L	0955	—	—

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	RAMW-02

Ground Water Sample Collection Record

Client:	UTAS Plants 1/2 Facility	Date: 2-28-14	Time:	Start	1030 (24hr)
Project No:	60312350-4212			Finish	1130
Site Location:	Rockford, Illinois				
Weather:	Sunny 5-10°F	Collector(s):	P. Hollatz		

1. WELL and WATER LEVEL DATA: (measured from Top of Casing)

Total well length (ft): 44.85 Screen interval(ft): 15 Approx. depth of pump intake(ft): 37
Water table depth (ft): 31.35 Casing type/diameter: 2" PVC Minimum purge volume: 6.6 (gals)
Water column length (ft): 13.50 (calculations on reverse)

2. WELL PURGE DATA

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	13A100468
	Lamotte	2020	2476-3312
	Lamotte	Smart 2 Colorimeter	0429-2402
Begin purge at 1030			

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1040	5000	12.67	7.12	1008	101.9	2.97	44.0	500	31.38	Clear
1045	7500	13.12	7.07	1049	107.6	2.81	13.6	500	31.38	Clear
1050	10000	13.26	7.05	1053	108.2	3.03	10.06	500	31.38	Clear
1055	12500	13.24	7.05	1052	108.5	3.08	5.52	500	31.38	Clear
1100	15000	13.17	7.05	1076	108.9	3.20	3.12	500	31.38	Clear
1105	17500	12.89	7.05	1035	109.1	3.37	1.56	500	31.38	Clear
1110	20000	11.92	7.05	1021	108.8	3.34	0.75	500	31.37	Clear
1115	22500	13.04	7.05	1056	109.8	3.32	0.43	500	31.38	Clear
1120	25000	14.14	7.05	1070	110.1	3.39	0.32	500	31.38	Clear
1125	27500	13.43	7.05	1055	110.3	3.40	0.47	500	31.38	Clear
	* Turbidity not stable, 3 well volumes removed, sample collected.									

(continued on back)

Sample Collector(s): [signature] Date: 2-28-14

SAMPLE COLLECTION DATA

Well ID: **RAMW-02**

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-RAMW02- 022814	VOC's	3 - 40mL Clear Vials	1130	500	—
HSSER-MS02- 022814	VOC's	3 - 40mL Clear Vials	1130	500	—
HESSER-MSD02- 022814	VOC's	3 - 40mL Clear Vials	1130	500	—
	Ferrous Iron	1.5 mg/L	1130	500	—

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	RAMW-03

Ground Water Sample Collection Record

Client: UTAS Plants 1/2 Facility Date: 2-28-14 Time: Start 1210 (24hr)
Project No: 60312350-4212 Finish 1310
Site Location: Rockford, Illinois
Weather: Overcast 5-10°F Collector(s): P. Hollatz

1. WELL and WATER LEVEL DATA: (measured from Top of Casing)

Total well length (ft): 45.34 Screen interval(ft): 15 Approx. depth of pump intake(ft): 38
Water table depth (ft): 31.15 Casing type/diameter: 2" PVC Minimum purge volume: 7.0 (gals)
Water column length (ft): 14.19 (calculations on reverse)

2. WELL PURGE DATA

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	13A100068
	Lamotte	2020	2476-3312
	Lamotte	Smart 2 Colorimeter	0429-2402
Begin purge at 1210			

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1220	5000	13.99	7.26	623	91.1	0.31	17.0	500	31.20	Clear
1225	7500	15.11	7.24	644	95.3	0.39	12.1	500	31.20	Clear
1230	10000	14.93	7.24	647	96.8	0.48	9.8	500	31.20	Clear
1235	12500	13.94	7.24	639	98.5	0.56	7.01	500	31.20	Clear
1240	15000	15.77	7.24	664	90.9	0.71	5.00	500	31.20	Clear
1245	17500	15.39	7.25	662	81.6	0.79	2.93	500	31.20	Clear
1250	20000	15.42	7.24	666	75.9	0.91	1.50	500	31.20	Clear
1255	22500	15.44	7.24	665	74.1	0.96	1.41	500	31.20	Clear
1300	25000	15.45	7.24	668	72.1	0.98	1.32	500	31.20	Clear
1305	27500	15.48	7.24	672	70.4	1.03	1.25	500	31.20	Clear
	*Turbidity not stable, 3 well volumes removed, sample collected.									

(continued on back)

Sample Collector(s): Peter Hollatz Date: 2-28-14

SAMPLE COLLECTION DATA

Well ID: RAMW-03

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-RAMW03-022814	VOC's	3 - 40mL Clear Vials	1310	500	–
HSSER-Dup02-022814	VOC's	3 - 40mL Clear Vials	1310	500	–
	Ferrous Iron	0.73 mg/L	1310	500	–

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	RAMW-04

Ground Water Sample Collection Record

Client: UTAS Plants 1/2 Facility Date: 2-28-14 Time: Start 1030 (24hr)
Project No: 60312350-4212 Finish 1125
Site Location: Rockford, Illinois
Weather: Clear 5-15°F Collector(s): A. Hollatz

1. WELL and WATER LEVEL DATA: (measured from Top of Casing)

Total well length (ft): 44.98 Screen interval(ft): 15 Approx. depth of pump intake(ft): 41
Water table depth (ft): 30.99 Casing type/diameter: 2" PVC Minimum purge volume: 6.9 (gals)
Water column length (ft): 13.99 (calculations on reverse)

2. WELL PURGE DATA

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	05E1762 AG
	Lamotte	2020	2485-3312
	Lamotte	Smart 2 Colorimeter	7798-3510

Begin purge at 1040

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1050	5000	13.17	7.45	731	239.2	6.48	3.12	500	30.99	Clear/none
1055	7500	13.62	7.47	744	241.4	6.43	3.44	500	31.07	↓
1100	10000	13.45	7.48	749	244.0	6.54	3.68	500	31.07	↓
1105	12500	13.55	7.47	753	246.2	6.40	2.71	500	31.07	↓
1110	17500	13.94	7.47	760	248.2	6.26	2.61	500	31.07	↓

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Sample Collector(s): [signature] Date: 2-28-14

SAMPLE COLLECTION DATA

Well ID: RAMW-04

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-RAMW04- 022814	VOC's	3 - 40mL Clear Vials	1110	500	
HSSER-EBLK02- 022814	VOC's	3 - 40mL Clear Vials	1025	~~1025~~ mL	
	Ferrous Iron	0.00 mg/L	—	—	

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	RAMW-05

Ground Water Sample Collection Record

Client: UTAS Plants 1/2 Facility Date: 2-28-14 Time: Start 1135 (24hr)
Project No: 60312350-4212 Finish 1255
Site Location: Rockford, Illinois
Weather: Sunny 10 20°F Collector(s): A. Hollatz

1. WELL and WATER LEVEL DATA: (measured from Top of Casing)

Total well length (ft): 43.79 Screen interval(ft): 15 Approx. depth of pump intake(ft): 36
Water table depth (ft): 29.88 Casing type/diameter: 2" PVC Minimum purge volume: 6.8 (gals)
Water column length (ft): 13.91 (calculations on reverse)

2. WELL PURGE DATA
Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	05E1762 AG
	Lamotte	2020	2485-3312
	Lamotte	Smart 2 Colorimeter	2798-3510

Begin purge at 1145

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1155	5000	14.75	7.94	747	237.7	7.45	43.9	500	29.88	clear/none
1200	7500	15.17	7.96	757	232.6	7.59	15.6	500	29.95	
1205	10000	15.13	7.95	755	238.1	7.47	7.61	500	29.95	
1210	12500	15.01	7.94	752	238.5	7.43	3.81	500	29.95	
1215	15000	15.02	7.95	753	239.8	7.27	2.19	500	29.95	
1220	17500	15.01	7.95	752	241.0	7.30	1.53	500	29.95	
1225	20000	15.09	7.95	753	240.0	7.25	1.13	500	29.95	
1230	22500	15.28	7.96	756	238.9	7.31	0.74	500	29.95	
1235	25000	14.84	7.95	748	239.6	7.27	0.69	500	29.95	
1240	27500	15.03	7.95	750	238.7	7.25	0.56	500	29.95	

* Not all parameters stable. Three well volumes removed. Sample collected.

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Sample Collector(s): [signature] Date: 2-28-14

SAMPLE COLLECTION DATA

Well ID: **RAMW-05**

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-RAMW05-022814	VOC's	3 - 40mL Clear Vials	1240	500	
	Ferrous Iron	0.00 mg/L	—	—	

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	RAMW-06

Ground Water Sample Collection Record

Client: UTAS Plants 1/2 Facility Date: 2-28-14 Time: Start 1310 (24hr)
Project No: 60312350-4212 Finish 1405
Site Location: Rockford, Illinois
Weather: Overcast 10-20°F Collector(s): A. H- Hc, Fz

1. WELL and WATER LEVEL DATA: (measured from Top of Casing)

Total well length (ft): 44.30 Screen interval(ft): 15 Approx. depth of pump intake(ft): 37
Water table depth (ft): 29.91 Casing type/diameter: 2" PVC Minimum purge volume: 7.0 (gals)
Water column length (ft): 14.39 (calculations on reverse)

2. WELL PURGE DATA

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	05F 1762 AQ
	Lamotte	2020	2485-3312
	Lamotte	Smart 2 Colorimeter	7748-3510

Begin purge at 1315

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1325	5000	14.70	8.05	821	258.0	7.36	1.16	500	29.91	clear/none
1330	7500	14.11	8.07	806	261.9	7.48	0.50	500	29.96	
1335	10000	14.24	8.06	803	264.9	7.24	0.49	500	29.96	
1340	12500	14.29	8.07	800	266.8	7.11	0.31	500	29.96	
1345	15000	15.10	8.07	815	267.7	7.40	0.30	500	29.96	
1350	17500	14.89	8.08	811	268.9	7.14	0.29	500	29.96	

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Sample Collector(s): [illegible] Date: ~~10~~ 2-28-14

SAMPLE COLLECTION DATA

Well ID: **RAMW-06**

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-RAMW06-022814	VOC's	3 - 40mL Clear Vials	1350	500	
	Ferrous Iron	0.00 mg/L	—	—	

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	RAMW-07

Ground Water Sample Collection Record

Client:	UTAS Plants 1/2 Facility	Date: 2-28-14	Time:	Start	1525 (24hr)
Project No:	60312350-4212			Finish	1635
Site Location:	Rockford, Illinois				
Weather:	Cloudy 10-20°F	Collector(s):	A. Hellatz		

1. WELL and WATER LEVEL DATA: (measured from Top of Casing)

Total well length (ft): 48.65 Screen interval(ft): 15 Approx. depth of pump intake(ft): 41
Water table depth (ft): 34.35 Casing type/diameter: 2" PVC Minimum purge volume: 7.0 (gals)
Water column length (ft): 14.30 (calculations on reverse)

2. WELL PURGE DATA

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	05F 1762 A9
	Lamotte	2020	2485-3312
	Lamotte	Smart 2 Colorimeter	7748-3510

Begin purge at 1530

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1540	5000	15.31	7.11	1211	35.5	1.37	1.56	500	34.40	clear/none
1545	7500	14.58	7.11	1192	44.1	1.34	1.13	500	34.40	
1550	10000	14.00	7.11	1169	56.9	1.22	0.83	500	34.40	
1555	12500	14.43	7.11	1179	61.5	1.18	0.57	500	34.40	
1600	15000	14.31	7.11	1175	67.6	1.16	0.43	500	34.40	
1605	17500	15.08	7.11	1191	69.7	1.15	0.35	500	34.40	
1610	20000	15.58	7.11	1203	73.5	1.11	0.21	500	30.40	
1615	22500	15.45	7.12	1199	77.1	1.11	0.36	500	30.40	
1620	25000	15.48	7.12	1199	82.0	1.14	0.28	500	30.40	
1625	27500	15.83	7.11	1203	86.1	1.07	0.28	500	30.40	
	* Not all parameters stable. Three well volumes removed									
	Sample collected									

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Sample Collector(s): [signature] Date: 2-28-14

SAMPLE COLLECTION DATA

Well ID: **RAMW-07**

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-RAMW07-022814	VOC's	3 - 40mL Clear Vials	1625	500	
	Ferrous Iron	0.06 mg/L	—	—	

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	RAMW-08

Ground Water Sample Collection Record

Client: UTAS Plants 1/2 Facility Date: 2-28-14 Time: Start 1410 (24hr)
Project No: 60312350-4212 Finish 1520
Site Location: Rockford, Illinois
Weather: Cloudy 10-20°F Collector(s): A. Holland

1. WELL and WATER LEVEL DATA: (measured from Top of Casing)

Total well length (ft): 44.33 Screen interval(ft): 15 Approx. depth of pump intake(ft): 37
Water table depth (ft): 30.50 Casing type/diameter: 2" PVC Minimum purge volume: 6.7 (gals)
Water column length (ft): 13.83 (calculations on reverse)

2. WELL PURGE DATA

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	05E1762 AQ
	Lamotte	2020	2485-3312
	Lamotte	Smart 2 Colorimeter	7798-3510

Begin purge at 1415

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1425	5000	15.49	7.35	1018	-120.50	0.34	3.45	500	30.95	clear/none
1430	7500	15.45	7.32	100.5	-151.4	0.32	3.61	500	30.90	
1435	10000	15.08	7.29	975	-149.0	0.35	3.74	500	30.84	
1440	12500	14.92	7.27	951	-140.6	0.36	4.74	500	30.87	
1445	15000	15.57	7.25	958	-135.4	0.36	5.01	500	30.89	
1450	17500	15.56	7.23	951	-134.5	0.32	4.26	500	30.89	
1455	20000	15.80	7.21	951	-132.6	0.30	4.30	500	30.95	
1500	22500	15.71	7.20	952	-143.7	0.30	4.15	500	30.93	

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Sample Collector(s): [signature] Date: 2-28-14

SAMPLE COLLECTION DATA

Well ID: **RAMW-08**

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-RAMW08- 022819	VOC's	3 - 40mL Clear Vials	1500	500	
	Ferrous Iron	over range. mg/L	—	—	Instrument reads 0-6 mg/L
					Sample collect over 6mg/L
					of ferrous iron.

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	GMZ-01

Ground Water Sample Collection Record

Client: UTAS Plants 1/2 Facility Date: 2-25-14 Time: Start 1020 (24hr)
Project No: 60312350-4212 Finish 1135
Site Location: Rockford, Illinois
Weather: Clear 0.5°F Collector(s): A. Hollatz

1. WELL and WATER LEVEL DATA: (measured from Top of Casing)

Total well length (ft): 47.79 Screen interval(ft): 15 Approx. depth of pump intake(ft): 40
Water table depth (ft): 33.90 Casing type/diameter: 2" PVC Minimum purge volume: 6.8 (gals)
Water column length (ft): 13.89 (calculations on reverse)

2. WELL PURGE DATA

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	07M100171
	Lamotte	2020	2485-3212
	Lamotte	Smart 2 Colorimeter	7794-3510

Begin purge at 1020

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1040	0	11.98	7.94	2029	-81.3	6.26	965	500	33.90	Orange/none
1045	2500	10.94	7.85	2072	-1.7	6.48	809	500	33.92	↓
1050	5000	12.16	7.77	2042	-6.9	5.70	500	500	33.92	↓
1055	7500	11.86	7.74	2035	-2.7	5.71	113	500	33.92	cloudy/none
1100	10000	11.07	7.75	2065	3.3	6.92	98.1	500	33.92	↓
1105	12500	11.86	7.74	2073	3.1	5.50	95.6	500	33.92	↓
1110	15000	12.62	7.78	2051	-3.3	6.58	58.3	500	33.92	↓
1115	17500	12.13	7.80	2045	-3.4	6.43	55.4	500	33.92	↓
1120	20000	12.27	7.91	2055	-3.3	6.33	54.1	500	33.92	↓

(continued on back)

Sample Collector(s): [signature] Date: 2-25-14

SAMPLE COLLECTION DATA

Well ID: **GMZ-01**

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-GMZ01- 022514	VOC's	3 - 40mL Clear Vials	1120	500	
	Ferrous Iron	3.97 mg/L	–	–	

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	GMZ-02

Ground Water Sample Collection Record

Client:	UTAS Plants 1/2 Facility	Date:	2-26-14	Time: Start	1430 (24hr)
Project No:	60312350-4212			Finish	1600
Site Location:	Rockford, Illinois				
Weather:	clear, windy -10-0	Collector(s):	A. Hollatz		

1. WELL and WATER LEVEL DATA: (measured from Top of Casing)

Total well length (ft):	46.83	Screen interval(ft):	15	Approx. depth of pump intake(ft):	37
Water table depth (ft):	31.48	Casing type/diameter:	2" PVC	Minimum purge volume:	6.6 (gals)
Water column length (ft):	13.35				(calculations on reverse)

2. WELL PURGE DATA

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	07410017
	Lamotte	2020	2485-3312
	Lamotte	Smart 2 Colorimeter	7798-3510

Begin purge at 1410

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1450	0	9.03	7.99	963	188.7	9.89	31.4	500	31.48	clear/none
1455	2,500	10.83	7.97	963	178.4	9.96	11.7	500	31.48	
1500	5000	9.56	7.95	965	177.3	9.74	9.92	500	31.48	
1505	7500	9.36	7.90	972	114.3	9.66	5.29	500	31.48	
1510	10000	8.96	7.84	962	117.7	9.63	2.23	500	31.48	
1515	12500	10.36	7.97	967	118.4	9.57	1.79	500	31.48	
1520	15000	10.67	8.05	966	122.8	9.59	1.12	500	31.48	
1525	17500	9.58	8.07	973	128.7	9.74	0.80	500	31.48	
1530	20000	10.49	7.98	963	135.9	9.71	0.75	500	31.48	
1535	22500	11.86	8.06	960	128.5	9.49	2.10	500	31.48	
1540	2500	11.86	8.06	960	128.5	9.49	0.91	500	31.48	

* Not all parameters stable. Three well volumes removed. Sample collected.

(continued on back)

Sample Collector(s): Allan [illegible] Date: 2-26-14

SAMPLE COLLECTION DATA

Well ID: GMZ-02

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-GMZ02-022614	VOC's	3 - 40mL Clear Vials	1540	500	
HSSER_MS01- 022614	VOC's	3 - 40mL Clear Vials	1540	500	
HSSER-MSD01- 022614	VOC's	3 - 40mL Clear Vials	1540	500	
	Ferrous Iron	0.21 mg/L	—	—	

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	GMZ-03

Ground Water Sample Collection Record

Client:	UTAS Plants 1/2 Facility	Date:	2-26-14	Time: Start	1240 (24hr)
Project No:	60312350-4212			Finish	1405
Site Location:	Rockford, Illinois				
Weather:	Sunny -10-0°F	Collector(s):	A. Hollatz		

1. **WELL and WATER LEVEL DATA: (measured from Top of Casing)**

Total well length (ft): 44.65 Screen interval(ft): 15 Approx. depth of pump intake(ft): 37
Water table depth (ft): 30.87 Casing type/diameter: 2" PVC Minimum purge volume: 6.8 (gals)
Water column length (ft): 13.78 (calculations on reverse)

2. **WELL PURGE DATA**

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	07M100171
	Lamotte	2020	2485-3312
	Lamotte	Smart 2 Colorimeter	2798-3510
Begin purge at 1250			

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1300	0	10.64	8.29	848	205.7	9.72	20.8	500	30.87	clear/none
1305	2500	9.74	8.24	844	203.9	9.59	10.99	500	30.87	
1310	5000	9.88	8.13	837	210.7	9.45	4.88	500	30.87	
1315	7500	10.73	8.12	831	211.3	9.22	2.85	500	30.87	
1320	10000	10.92	8.16	830	206.9	9.06	1.88	500	30.87	
1325	12500	10.58	8.13	827	212.1	9.15	1.40	500	30.87	
1330	15000	9.52	8.14	833	214.1	9.35	1.07	500	30.87	
1335	17500	9.29	7.98	830	225.8	9.21	0.98	500	30.87	
1340	20000	12.22	8.19	826	218.9	8.97	0.81	500	30.87	
1345	22500	12.24	8.17	831	222.4	9.32	0.93	500	30.87	
1350	25000	10.11	8.15	835	225.8	9.36	0.63	500	30.87	
1355	27500	10.16	8.01	826	237.4	9.17	0.84	500	30.87	
	☆ Not all parameters are stable. Three well volumes removed and sample collected.									

(continued on back)

Sample Collector(s): [signature] Date: 2-26-14

SAMPLE COLLECTION DATA

Well ID: GMZ-03

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-GMZ03-022614	VOC's	3 - 40mL Clear Vials	1355	500	
HSSER-Dup01-022614	VOC's	3 - 40mL Clear Vials	0000	500	
	Ferrous Iron	0.00 mg/L	~	—	

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	GMZ-04

Ground Water Sample Collection Record

Client:	UTAS Plants 1/2 Facility	Date:	2-26-14	Time: Start	0735 (24hr)
Project No:	60312350-4212			Finish	0845
Site Location:	Rockford, Illinois				
Weather:	Clear -10-0	Collector(s):	A. Hollatz		

1. **WELL and WATER LEVEL DATA: (measured from Top of Casing)**

Total well length (ft): 45.33 Screen interval(ft): 15 Approx. depth of pump intake(ft): 38
Water table depth (ft): 29.13 Casing type/diameter: 2" PVC Minimum purge volume: 7.9 (gals)
Water column length (ft): 16 (calculations on reverse)

2. **WELL PURGE DATA**

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	07A100171
	Lamotte	2020	2485-3312
	Lamotte	Smart 2 Colorimeter	7798-3510
Begin purge at 0750			

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
0755	0	8.79	7.61	1524	153.4	9.87	40.8	500	29.13	cloudy/none
0800	2500	9.01	7.76	1524	+149.5	9.43	28.2	500	29.15	clear/none
0805	5000	8.77	7.87	1514	150.2	9.72	13.5	500	29.15	
0810	7500	10.10	8.00	1515	143.3	9.41	8.0	500	29.15	
0815	10000	10.62	8.07	1511	139.9	9.45	4.88	500	29.15	
0820	12500	11.11	8.12	1515	137.0	9.51	3.54	500	29.15	
0825	15000	11.14	8.17	1506	135.3	9.56	2.49	500	29.15	
0830	17500	11.19	8.21	1523	133.2	9.33	2.30	500	29.15	
0835	20000	11.15	8.22	1517	135.6	9.46	2.34	500	29.15	

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Sample Collector(s): [signature] Date: 2-26-14

SAMPLE COLLECTION DATA

Well ID: GMZ-04

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-GMZ04-022614	VOC's	3 - 40mL Clear Vials	0835	500	
	Ferrous Iron	0.36 mg/L			

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	MW07FGA

Ground Water Sample Collection Record

Client:	UTAS Plants 1/2 Facility	Date:	2-25-14	Time: Start	1620 (24hr)
Project No:	60312350-4212			Finish	1720
Site Location:	Rockford, Illinois				
Weather:	Clear -5-5°F	Collector(s):	H.H. Ralz		

1. WELL and WATER LEVEL DATA: (measured from Top of Casing)

Total well length (ft): 46.75 Screen interval(ft): 15 Approx. depth of pump intake(ft): 39
Water table depth (ft): 29.15 Casing type/diameter: 4 2" SS Minimum purge volume: 34.5 (gals)
Water column length (ft): 17.60 (calculations on reverse)

2. WELL PURGE DATA

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	07M100171
	Lamotte	2020	2485-3312
	Lamotte	Smart 2 Colorimeter	7798-3510
Begin purge at 1625			

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1635	0	7.98	7.82	2287	42.1	0.67	27.5	500	29.15	clear/none
1640	2500	8.21	7.84	2333	32.0	0.56	28.0	500	29.15	
1645	5000	6.71	7.78	2291	32.4	0.55	25.0	500	29.15	
1650	7500	9.38	7.81	2262	27.5	0.50	23.3	500	29.15	
1655	10000	9.71	7.75	2253	27.6	0.50	19.7	500	29.15	
1700	12500	8.36	7.74	2224	30.1	0.53	16.8	500	29.15	
1705	15000	7.89	7.79	2237	29.7	0.56	15.3	500	29.15	
1710	17500	7.61	7.75	2195	31.0	0.57	15.4	500	29.15	

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Sample Collector(s): [signature] Date: 2-25-14

SAMPLE COLLECTION DATA Well ID: **MW-07FGA**

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-MW07FGA-0225/4	VOC's	3 - 40mL Clear Vials	1710	500	
	Ferrous Iron	0.84 mg/L	–	–	

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	MW-203

Ground Water Sample Collection Record

Client: UTAS Plants 1/2 Facility Date: 2-25-14 Time: Start 1500 (24hr)
Project No: 60312350-4212 Finish 1610
Site Location: Rockford, Illinois
Weather: Clear 0-5°F Collector(s): [illegible]

1. WELL and WATER LEVEL DATA: (measured from Top of Casing)

Total well length (ft): 48.93 Screen interval(ft): 15 Approx. depth of pump intake(ft): 40
Water table depth (ft): 29.91 Casing type/diameter: 2" SS Minimum purge volume: 9.83 (gals)
Water column length (ft): 19.02 (calculations on reverse)

2. WELL PURGE DATA
Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	07M700171
	Lamotte	2020	2485-3312
	Lamotte	Smart 2 Colorimeter	7798-3510

Begin purge at 1505

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1515	0	9.33	7.85	1144	-30.7	0.64	9.54	500	29.91	Clear/none
1520	2500	7.89	7.99	1181	-29.0	0.58	8.07	500	29.91	
1525	5000	4.36	8.00	1191	-20.5	0.54	5.60	500	29.91	
1530	7500	4.14	8.02	1206	-15.8	0.65	5.82	500	29.91	
1535	10000	6.84	7.97	1179	-12.3	1.06	4.27	500	29.91	
1540	12500	7.35	7.90	1204	-9.5	1.03	3.92	500	29.91	
1545	15000	6.24	7.86	1197	-3.8	0.81	4.33	500	29.91	
1550	17500	6.08	7.84	1203	-3.8	0.86	3.63	500	29.91	
1555	20000	6.27	7.84	1187	-4.1	0.90	3.64	500	29.91	
1600	22500	6.54	7.77	1186	-4.0	0.92	3.51	500	29.91	

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Sample Collector(s): [illegible] Date: 2-25-14

SAMPLE COLLECTION DATA

Well ID: MW-203

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-MW203-022514	VOC's	3 - 40mL Clear Vials	1600	500	
	Ferrous Iron	0.47 mg/L	—	—	

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	PMW-01

Ground Water Sample Collection Record

Client: UTAS Plants 1/2 Facility
Date: 2-28-14
Time: Start 0710 (24hr) Finish 0805
Project No: 60312350-4212
Site Location: Rockford, Illinois
Weather: Overcast 0-5°F
Collector(s): P. Hollatz

1. WELL and WATER LEVEL DATA: (measured from Top of Casing)

Total well length (ft): 44.73
Screen interval(ft): 25
Approx. depth of pump intake(ft): 37
Water table depth (ft): 31.60
Casing type/diameter: 2" PVC
Minimum purge volume: 10.5 (gals)
(calculations on reverse)
Water column length (ft): 13.13

2. WELL PURGE DATA

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	13A100068
	Lamotte	2020	2476-3312
	Lamotte	Smart 2 Colorimeter	0429-2402

Begin purge at 0710

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
0710	5000	11.34	6.87	747	201.9	4.29	47.9	500	31.65	Clear
0715	7500	12.01	6.87	708	191.5	5.01	25.4	500	31.65	clear
0720	10000	12.21	6.87	698	194.0	5.14	14.9	500	31.65	clear
0725	12500	12.49	6.86	702	192.2	5.30	8.05	500	31.65	clear
0730	15000	12.17	6.86	697	190.9	5.39	5.06	500	31.65	clear
0735	17500	11.98	6.86	693	192.0	5.32	3.10	500	31.65	clear
0740	20000	11.73	6.86	687	191.9	5.36	3.00	500	31.65	clear
0745	22500	11.90	6.86	691	188.0	5.37	2.39	500	31.65	clear
0800	25000	11.13	6.87	680	186.6	5.42	1.93	500	31.65	clear

* Turbidity not stable, 3 well volumes purged, sample collected

(continued on back)

Sample Collector(s): [signature]
Date: 2-28-14

SAMPLE COLLECTION DATA

Well ID: **PMW-01**

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-PMW01-022414	VOC's	3 - 40mL Clear Vials	0805	500	—
	Ferrous Iron	0.0 mg/L	0805	—	—

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	PMW-02

Ground Water Sample Collection Record

Client: UTAS Plants 1/2 Facility
Date: 2-28-14
Time: Start 0725 (24hr) Finish 0825
Project No: 60312350-4212
Site Location: Rockford, Illinois
Weather: Clear 0-10°F
Collector(s): A. Nelson

1. WELL and WATER LEVEL DATA: (measured from Top of Casing)

Total well length (ft): 45.02
Screen interval(ft): 25
Approx. depth of pump intake(ft): 37
Water table depth (ft): 31.55
Casing type/diameter: 2" PVC
Minimum purge volume: 6.6 (gals)
Water column length (ft): 13.47
(calculations on reverse)

2. WELL PURGE DATA

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	05E1762 A8
	Lamotte	2020	2475-3312
	Lamotte	Smart 2 Colorimeter	7798-3510

Begin purge at 0730

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
0740	5000	12.75	6.83	1098	147.3	4.24	41.2	500	31.55	Clear/none
0745	7500	13.35	6.83	1134	151.3	3.41	18.1	500	31.63	
0750	10000	13.46	6.82	1125	155.6	3.10	6.22	500	31.63	
0755	12500	13.14	6.82	1111	205.2	2.75	4.16	500	31.63	
0800	17500	12.31	6.82	1086	210.3	2.75	2.59	500	31.63	
0805	20000	11.70	6.81	1054	217.1	2.64	2.21	500	31.63	
0810	22500	12.96	6.81	1103	223.8	2.56	2.33	500	31.63	
0815	25000	13.13	6.81	1110	232.6	2.58	1.52	500	31.63	
	* Not all parameters stable. Three well volumes removed. Sample collected.									

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Sample Collector(s): [signature]
Date: 2-28-14

SAMPLE COLLECTION DATA

Well ID: **PMW-02**

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-PMW02-022814	VOC's	3 - 40mL Clear Vials	0515	500	
HSSER-EBLK01- 022814	VOC's	3 - 40mL Clear Vials	0720	500	
	Ferrous Iron	0.04 mg/L	—	—	

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	SMW-01

Ground Water Sample Collection Record

Client:	UTAS Plants 1/2 Facility	Date:	2-25-14	Time: Start	1215 (24hr)
Project No:	60312350-4212			Finish	1320
Site Location:	Rockford, Illinois				
Weather:	Clear 0-50°F	Collector(s):	A. Hollatz		

1. WELL and WATER LEVEL DATA: (measured from Top of Casing)

Total well length (ft): 39.31 Screen interval(ft): 15 Approx. depth of pump intake(ft): 32
Water table depth (ft): 31.91 Casing type/diameter: 2" PVC Minimum purge volume: 3.7 (gals)
Water column length (ft): 7.40 (calculations on reverse)

2. WELL PURGE DATA

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	07M 100171
	Lamotte	2020	2485-3312
	Lamotte	Smart 2 Colorimeter	7798-3510

Begin purge at 1225

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1240	0	10.48	7.98	1017	61.0	8.02	12.3	500	31.91	clear/none
1245	2500	9.00	7.90	1017	63.2	8.30	7.74	500	31.91	
1250	5000	10.77	7.82	980	61.0	8.00	6.34	500	31.91	
1255	7500	10.49	7.87	1009	51.1	8.00	3.16	500	31.91	
1300	10000	8.29	7.86	1014	59.1	8.51	2.31	500	31.91	
1305	12500	7.80	7.81	994	69.7	8.28	2.37	500	31.91	
1310	15000	9.63	7.88	978	62.9	8.01	2.46	500	31.91	

* Parameters Temp, ORP not stable. Three well volumes purged. Sample collected.

(continued on back)

Sample Collector(s): [signature] Date: 2-25-14

SAMPLE COLLECTION DATA

Well ID: **SMW-01**

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-SMW01-022514	VOC's	3 - 40mL Clear Vials	1310	500	
	Ferrous Iron	0.62 mg/L	—	—	

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	SMW-02

Ground Water Sample Collection Record

Client:	UTAS Plants 1/2 Facility	Date:	2-25-14	Time: Start	1325 (24hr)
Project No:	60312350-4212			Finish	1435
Site Location:	Rockford, Illinois				
Weather:	Overcast 0.5°F	Collector(s):	A. Hellatz		

1. WELL and WATER LEVEL DATA: (measured from Top of Casing)

Total well length (ft): 39.91 Screen interval(ft): 15 Approx. depth of pump intake(ft): 32

Water table depth (ft): 28.43 Casing type/diameter: 2" PVC Minimum purge volume: 5.7 (gals)

Water column length (ft): 11.48 (calculations on reverse)

2. WELL PURGE DATA

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals. If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	07M10071
	Lamotte	2020	2485-3312
	Lamotte	Smart 2 Colorimeter	7798-3510
Begin purge at 1335			

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1340	0	8.37	7.97	1861	53.7	8.74	99.5	500	28.43	cloudy/none
1345	2500	8.73	7.90	1894	52.6	8.33	62.5	500	28.45	↓
1350	5000	8.06	7.89	1931	56.4	8.58	35.4	500	28.45	↓
1355	7500	7.37	7.85	1914	63.7	8.20	17.1	500	28.45	clear/none
1400	10000	7.90	7.85	1901	63.2	8.14	11.26	500	28.45	↓
1405	12500	8.53	7.82	1885	64.0	7.84	6.57	500	28.45	↓
1410	15000	9.27	7.83	1882	61.9	7.68	3.58	500	28.45	↓
1415	17500	9.49	7.78	1872	63.4	7.65	2.86	500	28.45	↓
1420	20000	9.28	7.77	1871	64.6	7.73	2.17	500	28.45	↓
1425	22500	8.75	7.77	1876	68.4	7.60	1.91	500	28.45	↓

* Turbidity and temp not reached. Three well volumes removed. Sample collected.

(continued on back)

Sample Collector(s): [illegible] Date: 2-25-14

SAMPLE COLLECTION DATA

Well ID: SMW-02

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-SMW02-122514	VOC's	3 - 40mL Clear Vials	1425	500	
	Ferrous Iron	0.49 mg/L	–	–	

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	SMW-04

Ground Water Sample Collection Record

Client:	UTAS Plants 1/2 Facility	Date: 2-28-14	Time:	Start	0850 (24hr)
Project No:	60312350-4212			Finish	1000
Site Location:	Rockford, Illinois				
Weather:	cloudy 5-10°F	Collector(s):	R. Hellatz		

1. WELL and WATER LEVEL DATA: (measured from Top of Casing)

Total well length (ft): 42.35 Screen interval(ft): 15 Approx. depth of pump intake(ft): 35

Water table depth (ft): 31.13 Casing type/diameter: 2" PVC Minimum purge volume: 8.9 (gals)

Water column length (ft): 11.22 (calculations on reverse)

2. WELL PURGE DATA

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	05E 1762 AQ
	Lamotte	2020	2485-3312
	Lamotte	Smart 2 Colorimeter	7798-3510
Begin purge at 0905			

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
0915	5000	10.27	6.99	991	264.0	0.88	1.84	500	31.13	Clear/none
0920	7500	9.97	6.99	985	275.0	0.79	0.95	500	31.17	↓
0925	10000	11.16	6.99	1019	282.5	0.69	0.74	500	31.17	↓
0930	12500	10.56	6.98	1001	288.2	0.68	0.66	500	31.17	↓
0935	15000	11.12	6.99	1033	292.8	0.64	0.58	500	31.17	↓
0940	17500	11.48	6.99	1024	295.3	0.65	0.56	500	31.17	↓
0945	20000	11.49	6.99	1030	296.3	0.64	0.55	500	31.17	↓

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Sample Collector(s): [signature] Date: 2-28-14

SAMPLE COLLECTION DATA

Well ID: **SMW-04**

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-SMW04-122814	VOC's	3 - 40mL Clear Vials	0945	500	
	Ferrous Iron	0.0 mg/L	—	—	

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	SMW-08

Ground Water Sample Collection Record

Client: UTAS Plants 1/2 Facility Date: 2-25-14 Time: Start 0730 (24hr)
Project No: 60312350-4212 Finish 0935
Site Location: Rockford, Illinois
Weather: Clear 0-5°F Collector(s): A. Hellatz

1. WELL and WATER LEVEL DATA: (measured from Top of Casing)

Total well length (ft): 41.89 Screen interval(ft): 15 Approx. depth of pump intake(ft): 34
Water table depth (ft): 31.34 Casing type/diameter: 2" PVC Minimum purge volume: 8.4 (gals)
Water column length (ft): 10.55 (calculations on reverse)

2. WELL PURGE DATA

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	07M200171
	Lamotte	2020	2485-3312
	Lamotte	Smart 2 Colorimeter	7798-3510

Begin purge at 0830

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
0840	0	11.15	7.21	1861	173.5	2.30	13.8	500	31.34	Clear/none
0845	2500	9.66	7.17	1857	162.3	1.89	10.92	500	31.36	
0850	5000	4.89	7.21	1858	149.1	2.10	5.80	500	31.36	
0855	7500	12.06	7.26	1816	109.6	2.03	2.18	500	31.36	
0900	10000	10.10	7.41	1834	99.4	2.04	1.42	500	31.36	
0905	12500	10.23	7.34	1802	104.3	1.86	1.49	500	31.36	
0910	15000	11.99	7.49	1809	82.7	1.99	0.67	500	31.36	
0915	17500	11.89	7.51	1812	74.7	2.02	0.70	500	31.36	
0920	20000	11.91	7.46	1807	74.8	1.91	0.71	500	31.36	
0925	22500	12.07	7.43	1814	72.2	2.01	0.69	500	31.36	

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Sample Collector(s): [signature] Date: 2-25-14

SAMPLE COLLECTION DATA

Well ID: **SMW-08**

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-SMW08-0225/14	VOC's	3 - 40mL Clear Vials	0825	500	
HSSER-FBLK01- 0825/14	VOC's	3 - 40mL Clear Vials	0825	—	
	Ferrous Iron	1.86 mg/L	—	—	

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	SMW-19

Ground Water Sample Collection Record

Client: UTAS Plants 1/2 Facility
Date: 2-28-14
Time: Start 1415 (24hr) Finish 1510
Project No: 60312350-4212
Site Location: Rockford, Illinois
Weather: Overcast 5-10°F
Collector(s): P. Holtz

1. **WELL and WATER LEVEL DATA: (measured from Top of Casing)**

Total well length (ft): 41.23
Screen interval(ft): 15
Approx. depth of pump intake(ft): 35
Water table depth (ft): 30.11
Casing type/diameter: 2" SS
Minimum purge volume: 600 (gals)
Water column length (ft): 12.12
(calculations on reverse)

2. **WELL PURGE DATA**

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals. If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	13A100068
	Lamotte	2020	2476-3312
	Lamotte	Smart 2 Colorimeter	0429-2402

Begin purge at 1415

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1425	5000	10.55	7.01	958	56.4	6.48	109.7	500	30.11	Orange
1430	7500	10.42	7.02	919	62.8	6.86	45.0	500	30.11	clear
1435	10000	11.72	7.03	908	93.5	7.17	18.0	500	30.11	clear
1440	12500	11.55	7.02	901	87.5	7.05	23.5	500	30.11	clear
1445	15000	11.30	7.02	889	94.5	7.13	12.3	500	30.11	clear
1450	17500	11.54	7.02	886	97.3	7.02	16.2	500	30.11	clear
1455	20000	12.35	7.01	911	100.6	7.01	24.9	500	30.11	clear
1500	22500	12.01	7.00	904	98.9	7.00	13.5	500	30.11	clear
1505	25000	10.61	7.00	886	98.8	7.00	8.42	500	30.11	clear
	* Temp / Turbidity not stable, 3 well volumes removed, sample collected									

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Sample Collector(s): Peter Holtz
Date: 2-28-14

SAMPLE COLLECTION DATA

Well ID: SMW-19

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-SMW19-0228/14	VOC's	3 - 40mL Clear Vials	1510	500	—
	Ferrous Iron	0.54 mg/L	1510	500	—

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	SMW-20

Ground Water Sample Collection Record

Client: UTAS Plants 1/2 Facility Date: 2-26-14 Time: Start 1040 (24hr)
Project No: 60312350-4212 Finish 1145
Site Location: Rockford, Illinois
Weather: Sunny -5-0°F Collector(s): A. Hellatz

1. WELL and WATER LEVEL DATA: (measured from Top of Casing)

Total well length (ft): 40.13 Screen interval(ft): 15 Approx. depth of pump intake(ft): 33
Water table depth (ft): 30.27 Casing type/diameter: 2" PVC Minimum purge volume: 4.9 (gals)
Water column length (ft): 9.86 (calculations on reverse)

2. WELL PURGE DATA

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	07M100171
	Lamotte	2020	2485-3312
	Lamotte	Smart 2 Colorimeter	7798-3510
Begin purge at 1055			

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
1105	0	9.05	7.83	730	133.4	9.27	13.5	500	30.27	clear/none
1110	2500	9.51	7.95	730	127.0	9.72	6.08	500	30.29	↓
1115	5000	9.78	7.95	729	127.2	9.49	3.09	500	30.29	↓
1120	7500	10.62	7.96	727	125.9	9.33	2.23	500	30.29	↓
1125	10000	9.23	7.97	734	125.7	9.44	1.41	500	30.29	↓
1130	12500	9.52	7.96	728	126.0	9.24	1.41	500	30.29	↓
1135	15000	9.73	8.01	730	121.8	9.18	1.45	500	30.29	↓

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Sample Collector(s): [signature] Date: 2-26-14

SAMPLE COLLECTION DATA

Well ID: **SMW-20**

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-SMW20-022614	VOC's	3 - 40mL Clear Vials	1135	500	
	Ferrous Iron	0.47 mg/L			

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

AECOM

Well ID:	SMW-21

Ground Water Sample Collection Record

Client: UTAS Plants 1/2 Facility Date: 2-26-14 Time: Start 0910 (24hr)
Project No: 60312350-4212 Finish 1020
Site Location: Rockford, Illinois
Weather: Clear -10-0°F Collector(s): A. Hilatz

1. **WELL and WATER LEVEL DATA: (measured from Top of Casing)**

Total well length (ft): 41.45 Screen interval(ft): 15 Approx. depth of pump intake(ft): 34
Water table depth (ft): 29.70 Casing type/diameter: 2" PVC Minimum purge volume: 5.8 (gals)
Water column length (ft): 11.75 (calculations on reverse)

2. **WELL PURGE DATA**

Purge/Sample Method: Proactive SS Monsoon Pump

Well is stable when readings stabilize to +/- 10% over three (3) consecutive readings collected at 5-minute intervals.
If three (3) well volumes have been removed, and the readings have not stabilized, a sample shall be collected.

Field Testing Equipment Used:	Make	Model	Serial Number(s)
	YSI	556 MPS	07M100171
	Lamotte	2020	2485-3312
	Lamotte	Smart 2 Colorimeter	3798-3510
Begin purge at 0915			

Time (24hr)	Purge Vol. (ml)	Temp. (°C)	pH	Spec. Cond. (µS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Flow Rate (ml/min)	Drawdown (feet)	Color/Odor
0925	0	10.43	8.24	912	132.3	9.27	31.6	500	29.70	clear/none
0930	2500	11.30	8.21	913	137.6	9.09	14.8	500	29.71	
0935	5000	11.60	8.21	917	133.3	9.00	7.21	500	29.71	
0940	7500	10.36	8.25	918	135.7	9.16	4.35	500	29.71	
0945	10000	11.16	8.20	911	136.7	9.02	2.55	500	29.71	
0950	12500	11.06	8.22	903	137.5	9.23	1.69	500	29.71	
0955	15000	12.38	8.27	906	134.1	9.02	1.28	500	29.71	
1000	17500	11.92	8.23	907	135.8	9.06	1.61	500	29.71	
1005	20000	11.29	8.16	907	139.2	9.18	2.27	500	29.71	
1010	22500	11.90	8.15	909	138.4	9.11	2.14	500	29.71	

*All parameters not stable. Three well volumes removed. Sample collected.

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Sample Collector(s): [signature] Date: 2-26-14

SAMPLE COLLECTION DATA

Well ID: **SMW-21**

Sample ID	Parameters	Bottles/Preservatives	Time (24 hr)	Flow Rate (ml/min)	Comments
HSSER-SMW21-022614	VOC's	3 - 40mL Clear Vials	1010	500	
	Ferrous Iron	0.16 mg/L			

VOCs - Volatile organic compounds

G - Glass
HCl - Hydrchloric acid

F

F

Appendix F

Second Quarter 2014 Progress Report

AECOM

Submitted to:
UTC Aerospace Systems
Rockford, IL

Submitted by:
AECOM
Warrenville, IL
60312350
June 2014

QUARTERLY PROGRESS REPORT – Second Quarter 2014 (March 2014 – May 2014)

UTC Aerospace Systems Plants 1/2 Facility
Southeast Rockford Groundwater Contamination
Superfund Site
2421 11th Street
Rockford, Illinois 61104
ILD981000417, ILD010219665
AECOM Project No. 60312350

This Quarterly Progress Report has been prepared on behalf of UTC Aerospace Systems (UTAS, fka Hamilton Sundstrand or HS) by AECOM Technical Services Inc. (AECOM). This report summarizes activities that occurred during the months of March, April, and May of the Second Quarter of 2014 at the above-referenced facility.

Progress Report- Reporting Quarters			
Q1	December	January	February
Q2	March	April	May
Q3	June	July	August
Q4	September	October	November

This report is the twenty-third in the series of Quarterly Progress Reports and consistent with United States Environmental Protection Agency (USEPA) approval of combining project reporting documents from a letter dated April 15, 2011. Quarterly Progress Reports are included as attachments to the Groundwater Management Zone (GMZ) Monitoring and System Performances Reports.

This Quarterly Progress Report follows the requirements outlined in Section X of the Consent Decree (CD) and includes the following:

Actions taken during the prior quarter to maintain compliance with the CD:

- Summaries of sampling results and tests;
- An identification of work plans and other deliverables completed in accordance with the CD;
- Actions scheduled for the next quarter;
- Information on the progress, percentage of completion, delays, and efforts to mitigate delays;
- Modifications to Work Plans and/or schedules; and
- Activities undertaken in support of the Community Relations Plan.

Each of these sections is described in more detail below.

Actions Taken During the Second Quarter to Achieve Compliance with the Consent Decree

The following actions were taken during March, April, and May of the Second Quarter of 2014:

- On March 14, 2014, AECOM submitted to the USEPA the 2013 Annual GMZ Monitoring and System Performance Report;
- Phase 1 and Phase 2 AS/SVE system air sampling of the SVE system effluent prior to the system being deactivated (switched to the pulse-off mode). SVE process air effluent sampling was conducted on March 14, 2014;
- Phase 1 SVE system water sample was collected from the moisture separator. The moisture separator water sample was collected on March 14, 2014;
- On April 4, 2014, AECOM submitted final signatures on the approved Quality Assurance Project Plan (QAPP) addendum;

- On May 5, 2014, AECOM received Quality Management Plan (QMP) approval memorandum from USEPA;
- On May 7, 2014, USEPA provided comments via email on the 2013 Annual GMZ Monitoring and System Performance Report;
- AECOM completed GMZ and performance well quarterly monitoring (2nd quarter 2014) well network sampling between May 5 and May 7, 2014. The following wells were sampled for volatile organic compounds (VOCs): GMZ wells (which include the Phase 1 AS/SVE performance monitoring network) SMW01, SMW02, SMW04, SMW08, SMW19, SMW20, SMW21, MW07FG, MW203, GMZ01, GMZ02, GMZ03, GMZ04, PMW01 and PMW02; and performance monitoring wells RAMW01 RAMW02, RAMW03, RAMW04, RAMW05, RAMW06, RAMW07, and RAMW08; and,
- Phase 1 and Phase 2 AS/SVE system air sampling of the SVE system effluent after the system was reactivated (switched to the pulse-on mode). SVE process air effluent sampling was conducted on May 15, 2014.

Summary of Sampling and Tests

- Three process air samples were collected from the Phase 1 AS/SVE system effluent during the March 14, 2014 sampling event; and
- Two process air samples were collected from the Phase 2 AS/SVE system effluent during the March 14, 2014 sampling event.
- One water sample from the Phase 1 system moisture separator was collected on March 14, 2014.
- The 2nd quarter 2014 GMZ and performance well quarterly monitoring event was completed between May 5 and May 7, 2014.

Work Plans and Other Deliverables Completed In Accordance With the CD

- The *2013 Annual GMZ Monitoring and System Performance Report, Area 9/10 Remedial Action* (March 2014) was submitted in accordance with Section X, paragraph 30 of the CD and consistent with Section V of the Statement of Work (SOW).

Actions Scheduled for Next Quarter

The following actions are scheduled for the next quarter:

- Operation of the Phase 1 and Phase 2 AS/SVE systems will be in pulse-on mode (system in operational) to approximately July 15, 2014;
- Completion of the Third Quarter 2014 Groundwater Monitoring event in August 2014. The monitoring event will include the GMZ monitoring well network (which includes the Phase 1 AS/SVE performance monitoring network) and the Phase 2 AS/SVE performance monitoring network; and
- Operation of the Phase 1 and Phase 2 AS/SVE systems will be in pulse-off mode (system in shutdown mode) from approximately July 15, 2014 and approximately September 9, 2014.

Percentage of Completion/Anticipated Delays

There are 39 specific deliverables or activities required to be completed as part of the CD. Some of these are ongoing activities and others, such as submittal of documents, require approval by the USEPA/Illinois Environmental Protection Agency to fulfill the requirements of the CD. To date, UTAS has completed their current obligations for 28 of the 39 items or 69%. There are currently no anticipated delays to the schedule.

Modifications to Work Plans/Schedules Proposed

None

Activities Undertaken In Support of Community Relations Plan

No activities are required with regard to the Community Relations Plan at this time.