SEVERN TRENT STL

STL Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921

Tel: 865 291 3000 Fax: 865 584 4315
www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. 142541

Focus/US Filter Westates 8260B

Lot #: H6D030205

William Anderson

STL Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947

SEVERN TRENT LABORATORIES, INC.

Kevin S. Woodcock
Project Manager

April 21, 2006

ANALYTICAL METHODS SUMMARY

H6D030205

PARAMETER	ANALYTICAL METHOD
Volatile Organics by GC/MS	SW846 8260B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

H6D030205

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
H2HN3	001	G-2889-R1-SPENT ACTIVATED CARBON	03/28/06	
H2HPA	002	G-2893-R1-SCRUBBER BLOWDOWN	03/28/06	
H2HPW	003	G-2897-R1-POTW DISCHARGE	03/28/06	
H2HP3	004	G-2901-R1-CAUSTIC FEED	03/28/06	
H2HQD	005	G-2905-R1-MAKE-UP WATER	03/28/06	
H2HQR	006	G-2987-R2-SPENT ACTIVATED CARBON	03/29/06	
H2HQT	007	G-2991-R2-SCRUBBER BLOWDOWN	03/29/06	
H2HQW	008	G-2995-R2-POTW DISCHARGE	03/29/06	
H2HQ0	009	G-3003-R2-MAKE-UP WATER	03/29/06	
H2HQ4	010	G-3070-R3-SPENT ACTIVATED CARBON	03/30/06	
H2HRA	011	G-3074-R3-SCRUBBER BLOWDOWN	03/30/06	
H2HRF	012	G-3078-R3-POTW DISCHARGE	03/30/06	
H2HRH	013	G-3086-R3-MAKE-UP WATER	03/30/06	

NOTE(S):

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

PROJECT NARRATIVE
H6D030205

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

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

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

Sample Receipt

Custody seals were not present upon sample receipt at STL Knoxville; however, the samples were hand delivered.

The "Relinquished by" field on the chain of custody documentation did not contain a signature.

The container label for sample G-2886 did not match the associated chain of custody documentation. The laboratory processed the sample using the information on the container label.

Quality Control

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

Waste Sample Preparation and Analysis

Waste samples were analyzed for the volatile organic target analytes by purge and trap GCMS using STL Knoxville standard operating procedure KNOX-MS-0015, based on the following method:

- SW-846 8260B, "Volatile Organic Compounds by Gas Chromatography/ Mass Spectrometry (GC/MS)"

Each sample is prepared by adding a known amount of sample to methanol and spiking with surrogates and matrix spike analytes (as needed). Volatile compounds are

STL Knoxville maintains the following certifications, approvals and accreditations: Arkansas DEQ Cert. #05-043-0, California DHS ELAP Cert. #2423, Colorado DPHE, Connecticut DPH Cert. #PH-0223, Florida DOH Cert. #E87177, Georgia DNR Cert. #906 (SDWA, expires 6/24/05), Hawaii DOH, Illinois EPA Cert. #000687, Indiana DOH Cert. #C-TN-02, Iowa DNR Cert. #375, Kansas DHE Cert. #E-10349, Kentucky DEP Lab ID #90101, Louisiana DEQ Cert. #03079, Louisiana DOHH Cert. #LA030024, Maryland DHMH Cert. #277, Massachusetts DEP Cert. #M-TN009, Michigan DEQ Lab ID #9933, New Jersey DEP Cert. #TN001, New York DOH Lab #10781, North Carolina DPH Lab ID #21705, North Carolina DEHNR Cert. #64, Ohio EPA VAP Cert. #CL0059, Oklahoma DEQ ID #9415, Pennsylvania DEP Cert. #68-00576, South Carolina DHEC Lab ID #84001001, Tennessee DOH Lab ID #02014, Utah DOH Cert. # QUAN3, Virginia DGS Lab ID #00165, Washington DOE Lab #C120, West Virginia DEP Cert. #345, Wisconsin DNR Lab ID #998044300, US Army Corps of Engineers, Naval Facilities Engineering Service Center and USDA Soil Permit #S-46424. This list of approvals is subject to change and does not imply that laboratory certification is available for all parameters reported in this environmental sample data report.

PROJECT NARRATIVE
H6D030205

introduced into the gas chromatograph by the purge and trap method. The components are separated using the chromatograph and detected using a mass spectrometer, which provides both qualitative and quantitative information.

Waste sample results were calculated using the following equation:

$$\text{Concentration, } \mu\text{g/g or mg/kg} = \frac{C \cdot DF \cdot Wd \cdot V_t}{V_a \cdot Ws}$$

Where:

C	= On column concentration, ug/L
DF	= Dilution factor
Wd	= Volume of water purged, L
Vt	= Final methanol extract volume, uL
Va	= Volume of extract analyzed, µL
Ws	= Weight of sample extracted, g

Neutralization of Westates CPT Caustic Solution Samples

There was one original grab sample only, and compositing was not required. Using a graduated pipette, 50 mL of the sample was transferred to a clean 250 mL volumetric flask. The flask and its contents were chilled in an ice bath. When all solutions were chilled to ice temperature, approximately 110 mL of cold HCl (CON) were added to the solution. There was some slight warming of the solution, but the neck of the volumetric remained cool, condensing vapors that were formed. The resulting pH was approximately 1. The diluted, neutralized samples were transferred into five pre-labeled vials.

The sample prepared is identified by copies of the label below:

H2HP3 H6D030205-004
Composite Sample, Neutralized with HCl
50 mL Original Sample to 250 mL Final Volume

The pH of many samples was greater than 2. The samples were analyzed within the normal 14 day holding time. EPA has indicated that some aromatic compounds in

STL Knoxville maintains the following certifications, approvals and accreditations: Arkansas DEQ Cert. #05-043-0, California DHS ELAP Cert. #2423, Colorado DPHE, Connecticut DPH Cert. #PH-0223, Florida DOH Cert. #E87177, Georgia DNR Cert. #906 (SDWA, expires 6/24/05), Hawaii DOH, Illinois EPA Cert. #000687, Indiana DOH Cert. #C-TN-02, Iowa DNR Cert. #375, Kansas DHE Cert. #E-10349, Kentucky DEP Lab ID #90101, Louisiana DEQ Cert. #03079, Louisiana DOHH Cert. #LA030024, Maryland DHMH Cert. #277, Massachusetts DEP Cert. #M-TN009, Michigan DEQ Lab ID #9933, New Jersey DEP Cert. #TN001, New York DOH Lab #10781, North Carolina DPH Lab ID #21705, North Carolina DEHNR Cert. #64, Ohio EPA VAP Cert. #CL0059, Oklahoma DEQ ID #9415, Pennsylvania DEP Cert. #68-00576, South Carolina DHEC Lab ID #84001001, Tennessee DOH Lab ID #02014, Utah DOH Cert. # QUAN3, Virginia DGS Lab ID #00165, Washington DOE Lab #C120, West Virginia DEP Cert. #345, Wisconsin DNR Lab ID #998044300, US Army Corps of Engineers, Naval Facilities Engineering Service Center and USDA Soil Permit #S-46424. This list of approvals is subject to change and does not imply that laboratory certification is available for all parameters reported in this environmental sample data report.

PROJECT NARRATIVE
H6D030205

wastewater samples, notably benzene, toluene, and ethyl benzene, may be susceptible to biological degradation if samples are not preserved to a pH of 2.

Surrogate recoveries for samples G-2889-R1-Spent Activated Carbon, G-2987-R2-Spent Activated Carbon and G-3070-R3-Spent Activated Carbon were outside QC limits. Since the matrix spike/matrix spike duplicate for this sample demonstrated similar surrogate recoveries and the matrix was the same for each sample analysis, the results are attributed to sample matrix effects.

Surrogate recoveries for sample G-2901-R1-Caustic Feed were outside QC limits. Since the matrix spike/matrix spike duplicate for this sample demonstrated similar surrogate recoveries, the results are attributed to sample matrix effects.

Samples G-2889-R1-Spent Activated Carbon, G-2987-R2- Spent Activated Carbon and G-3070-R3- Spent Activated Carbon were reported with elevated reporting limits for all analytes. Based on screening results, a dilution was necessary prior to analysis; the reporting limits were adjusted accordingly.

The matrix spike/matrix spike duplicate recoveries and RPD results for sample H2HN31AC/1AD were not acceptable for most analytes. The laboratory control sample showed acceptable results indicating that the analysis was in control. The matrix spike/matrix spike duplicate results are attributed to matrix effects and high analyte concentrations in the sample relative to the spike level.

The matrix spike/matrix spike duplicate recoveries for samples H2HPA1AC/1AD and H2HP31AC/1AD were not acceptable for several analytes. The laboratory control sample showed acceptable results indicating that the analysis was in control. The matrix spike/matrix spike duplicate results are attributed to matrix effects.

STL Knoxville maintains the following certifications, approvals and accreditations: Arkansas DEQ Cert. #05-043-0, California DHS ELAP Cert. #2423, Colorado DPHE, Connecticut DPH Cert. #PH-0223, Florida DOH Cert. #E87177, Georgia DNR Cert. #906 (SDWA, expires 6/24/05), Hawaii DOH, Illinois EPA Cert. #000687, Indiana DOH Cert. #C-TN-02, Iowa DNR Cert. #375, Kansas DHE Cert. #E-10349, Kentucky DEP Lab ID #90101, Louisiana DEQ Cert. #03079, Louisiana DOHH Cert. #LA030024, Maryland DHMH Cert. #277, Massachusetts DEP Cert. #M-TN009, Michigan DEQ Lab ID #9933, New Jersey DEP Cert. #TN001, New York DOH Lab #10781, North Carolina DPH Lab ID #21705, North Carolina DEHNR Cert. #64, Ohio EPA VAP Cert. #CL0059, Oklahoma DEQ ID #9415, Pennsylvania DEP Cert. #68-00576, South Carolina DHEC Lab ID #84001001, Tennessee DOH Lab ID #02014, Utah DOH Cert. # QUAN3, Virginia DGS Lab ID #00165, Washington DOE Lab #C120, West Virginia DEP Cert. #345, Wisconsin DNR Lab ID #998044300, US Army Corps of Engineers, Naval Facilities Engineering Service Center and USDA Soil Permit #S-46424. This list of approvals is subject to change and does not imply that laboratory certification is available for all parameters reported in this environmental sample data report.

Sample Data Summary

STL Knoxville - ACS

Client Sample ID: G-2889-R1-SPENT ACTIVATED CARBON

GC/MS Volatiles

Lot-Sample #...: H6D030205-001 **Work Order #...:** H2HN31AA **Matrix.....:** SOLID
Date Sampled...: 03/28/06 **Date Received..:** 04/02/06
Prep Date.....: 04/04/06 **Analysis Date..:** 04/04/06
Prep Batch #...: 6094386
Dilution Factor: 5 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**3500 J,B**	**5000**	**ug/kg**	**1200**
Acrylonitrile	ND	25000	ug/kg	3800
Benzene	**3800**	**1200**	**ug/kg**	**140**
Bromobenzene	ND	1200	ug/kg	260
Bromochloromethane	ND	1200	ug/kg	170
Bromodichloromethane	ND	1200	ug/kg	120
Bromoform	ND	1200	ug/kg	210
Bromomethane	**740 J,B**	**2500**	**ug/kg**	**700**
2-Butanone	**14000**	**5000**	**ug/kg**	**1000**
n-Butylbenzene	ND	1200	ug/kg	380
sec-Butylbenzene	ND	1200	ug/kg	380
tert-Butylbenzene	ND	1200	ug/kg	340
Carbon disulfide	ND	1200	ug/kg	150
Carbon tetrachloride	ND	1200	ug/kg	120
Chlorobenzene	ND	1200	ug/kg	130
Chlorodibromomethane	ND	1200	ug/kg	120
Chloroethane	ND	2500	ug/kg	280
Chloroform	**1900**	**1200**	**ug/kg**	**120**
Chloromethane	ND	2500	ug/kg	1000
2-Chlorotoluene	ND	1200	ug/kg	300
4-Chlorotoluene	ND	1200	ug/kg	300
1,2-Dibromo-3-chloro-propane	ND	2500	ug/kg	140
1,2-Dibromoethane	ND	1200	ug/kg	180
Dibromomethane	ND	1200	ug/kg	120
1,2-Dichlorobenzene	ND	1200	ug/kg	320
1,3-Dichlorobenzene	ND	1200	ug/kg	330
1,4-Dichlorobenzene	ND	1200	ug/kg	330
Dichlorodifluoromethane	ND	2500	ug/kg	160
1,1-Dichloroethane	**150 J**	**1200**	**ug/kg**	**120**
1,2-Dichloroethane	**600 J**	**1200**	**ug/kg**	**140**
cis-1,2-Dichloroethene	**320 J**	**1200**	**ug/kg**	**120**
trans-1,2-Dichloroethene	ND	1200	ug/kg	190
1,1-Dichloroethene	**500 J**	**1200**	**ug/kg**	**240**
1,2-Dichloropropane	ND	1200	ug/kg	180
1,3-Dichloropropane	ND	1200	ug/kg	220
2,2-Dichloropropane	ND	1200	ug/kg	120
cis-1,3-Dichloropropene	ND	1200	ug/kg	120
trans-1,3-Dichloropropene	ND	1200	ug/kg	150

(Continued on next page)

STL Knoxville - ACS

Client Sample ID: G-2889-R1-SPENT ACTIVATED CARBON

GC/MS Volatiles

Lot-Sample #...: H6D030205-001 **Work Order #...:** H2HN31AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1-Dichloropropene	ND	1200	ug/kg	120
Ethylbenzene	ND	1200	ug/kg	240
Hexachlorobutadiene	ND	1200	ug/kg	550
2-Hexanone	ND	5000	ug/kg	800
Iodomethane	**550 J,B**	**2500**	**ug/kg**	**490**
Isopropylbenzene	ND	1200	ug/kg	280
p-Isopropyltoluene	ND	1200	ug/kg	420
Methylene chloride	ND	1200	ug/kg	420
4-Methyl-2-pentanone	ND	5000	ug/kg	800
Naphthalene	ND	1200	ug/kg	240
n-Propylbenzene	ND	1200	ug/kg	360
Styrene	ND	1200	ug/kg	240
1,1,1,2-Tetrachloroethane	ND	1200	ug/kg	160
1,1,2,2-Tetrachloroethane	ND	1200	ug/kg	210
Tetrachloroethene	**1600**	**1200**	**ug/kg**	**210**
Tetrahydrofuran	**2700 J**	**5000**	**ug/kg**	**1000**
Toluene	**320 J**	**1200**	**ug/kg**	**180**
1,2,3-Trichlorobenzene	ND	1200	ug/kg	360
1,2,4-Trichloro-benzene	ND	1200	ug/kg	340
1,1,1-Trichloroethane	**5600**	**1200**	**ug/kg**	**120**
1,1,2-Trichloroethane	ND	1200	ug/kg	180
Trichloroethene	**43000**	**1200**	**ug/kg**	**140**
Trichlorofluoromethane	ND	2500	ug/kg	320
1,2,3-Trichloropropane	ND	1200	ug/kg	270
1,1,2-Trichloro-1,2,2-trifluoroethane	**1700**	**1200**	**ug/kg**	**200**
1,2,4-Trimethylbenzene	ND	1200	ug/kg	320
1,3,5-Trimethylbenzene	ND	1200	ug/kg	310
Vinyl acetate	ND	2500	ug/kg	600
Vinyl chloride	ND	1200	ug/kg	140
m-Xylene & p-Xylene	ND	1200	ug/kg	480
o-Xylene	ND	1200	ug/kg	210
Xylenes (total)	ND	1200	ug/kg	700

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	12 *	(42 - 138)
1,2-Dichloroethane-d4	11 *	(38 - 144)
Toluene-d8	0.99 *	(52 - 137)
Bromofluorobenzene	4.6 *	(54 - 151)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

STL Knoxville - ACS

G-2889-R1-SPENT ACTIVATED CARBON

GC/MS Volatiles

Lot-Sample #: H6D030205-001 **Work Order #:** H2HN31AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Propene	115-07-1	1300 NJ	M	0.8469	ug/kg
Isobutane	75-28-5	18000 NJ	M	0.9817	ug/kg
Unknown		3800 NJ	M	1.094	ug/kg
Unknown		1700 NJ	M	2.6054	ug/kg
Cyclopentane, methyl-	96-37-7	1500 NJ	M	3.3113	ug/kg
Cyclohexane	110-82-7	1600 NJ	M	3.8344	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

STL Knoxville - ACS

Client Sample ID: G-2893-R1-SCRUBBER BLOWDOWN

GC/MS Volatiles

Lot-Sample #...: H6D030205-002 **Work Order #...:** H2HPA1AA **Matrix.....:** WATER
Date Sampled...: 03/28/06 **Date Received..:** 04/02/06
Prep Date.....: 04/05/06 **Analysis Date..:** 04/05/06
Prep Batch #...: 6095253
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	ND	10	ug/L	1.4
Acrylonitrile	ND	20	ug/L	2.7
Benzene	ND	1.0	ug/L	0.10
Bromobenzene	ND	1.0	ug/L	0.11
Bromochloromethane	ND	1.0	ug/L	0.24
Bromodichloromethane	ND	1.0	ug/L	0.10
Bromoform	**0.99 J**	**1.0**	**ug/L**	**0.14**
Bromomethane	ND	2.0	ug/L	0.38
2-Butanone	ND	5.0	ug/L	0.75
n-Butylbenzene	ND	1.0	ug/L	0.10
sec-Butylbenzene	ND	1.0	ug/L	0.10
tert-Butylbenzene	ND	1.0	ug/L	0.24
Carbon disulfide	ND	1.0	ug/L	0.10
Carbon tetrachloride	ND	1.0	ug/L	0.12
Chlorobenzene	ND	1.0	ug/L	0.10
Chlorodibromomethane	**0.92 J**	**1.0**	**ug/L**	**0.20**
Chloroethane	ND	2.0	ug/L	0.24
Chloroform	ND	1.0	ug/L	0.10
Chloromethane	ND	2.0	ug/L	0.12
2-Chlorotoluene	ND	1.0	ug/L	0.24
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.45
1,2-Dibromoethane	ND	1.0	ug/L	0.24
Dibromomethane	ND	1.0	ug/L	0.21
1,2-Dichlorobenzene	ND	1.0	ug/L	0.10
1,3-Dichlorobenzene	ND	1.0	ug/L	0.10
1,4-Dichlorobenzene	ND	1.0	ug/L	0.12
Dichlorodifluoromethane	ND	2.0	ug/L	0.15
1,1-Dichloroethane	ND	1.0	ug/L	0.10
1,2-Dichloroethane	ND	1.0	ug/L	0.10
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.12
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.10
1,1-Dichloroethene	ND	1.0	ug/L	0.10
1,2-Dichloropropane	ND	1.0	ug/L	0.10
1,3-Dichloropropane	ND	1.0	ug/L	0.17
2,2-Dichloropropane	ND	1.0	ug/L	0.11
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.10
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.11

(Continued on next page)

STL Knoxville - ACS

Client Sample ID: G-2893-R1-SCRUBBER BLOWDOWN

GC/MS Volatiles

Lot-Sample #...: H6D030205-002 **Work Order #...:** H2HPA1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1-Dichloropropene	ND	1.0	ug/L	0.10
Ethylbenzene	ND	1.0	ug/L	0.10
Hexachlorobutadiene	ND	2.0	ug/L	0.12
2-Hexanone	ND	5.0	ug/L	0.76
Iodomethane	**0.55 J,B**	**2.0**	**ug/L**	**0.12**
Isopropylbenzene	ND	1.0	ug/L	0.10
p-Isopropyltoluene	ND	1.0	ug/L	0.10
Methylene chloride	ND	2.0	ug/L	0.23
4-Methyl-2-pentanone	ND	5.0	ug/L	0.40
Naphthalene	ND	1.0	ug/L	0.17
n-Propylbenzene	ND	1.0	ug/L	0.10
Styrene	ND	1.0	ug/L	0.10
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.12
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.15
Tetrachloroethene	ND	1.0	ug/L	0.10
Tetrahydrofuran	ND	4.0	ug/L	1.2
Toluene	ND	1.0	ug/L	0.10
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.23
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.10
1,1,2-Trichloroethane	ND	1.0	ug/L	0.25
Trichloroethene	ND	1.0	ug/L	0.10
Trichlorofluoromethane	ND	2.0	ug/L	0.12
1,2,3-Trichloropropane	ND	1.0	ug/L	0.36
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.13
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.11
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.10
Vinyl acetate	ND	2.0	ug/L	0.24
Vinyl chloride	ND	1.0	ug/L	0.24
m-Xylene & p-Xylene	ND	1.0	ug/L	0.20
o-Xylene	ND	1.0	ug/L	0.14
Xylenes (total)	ND	1.0	ug/L	0.30

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	104	(79 - 120)
1,2-Dichloroethane-d4	103	(71 - 127)
Toluene-d8	100	(80 - 120)
Bromofluorobenzene	96	(69 - 126)

NOTE(S):

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

STL Knoxville - ACS

G-2893-R1-SCRUBBER BLOWDOWN

GC/MS Volatiles

Lot-Sample #: H6D030205-002 **Work Order #:** H2HPA1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

STL Knoxville - ACS

Client Sample ID: G-2897-R1-POTW DISCHARGE

GC/MS Volatiles

Lot-Sample #...: H6D030205-003 **Work Order #...:** H2HPW1AA **Matrix.....:** WATER
Date Sampled...: 03/28/06 **Date Received..:** 04/02/06
Prep Date.....: 04/06/06 **Analysis Date..:** 04/06/06
Prep Batch #...: 6096330
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**3.7 J**	**10**	**ug/L**	**1.4**
Acrylonitrile	ND	20	ug/L	2.7
Benzene	ND	1.0	ug/L	0.10
Bromobenzene	ND	1.0	ug/L	0.11
Bromochloromethane	ND	1.0	ug/L	0.24
Bromodichloromethane	ND	1.0	ug/L	0.10
Bromoform	**2.0**	**1.0**	**ug/L**	**0.14**
Bromomethane	ND	2.0	ug/L	0.38
2-Butanone	ND	5.0	ug/L	0.75
n-Butylbenzene	ND	1.0	ug/L	0.10
sec-Butylbenzene	ND	1.0	ug/L	0.10
tert-Butylbenzene	ND	1.0	ug/L	0.24
Carbon disulfide	ND	1.0	ug/L	0.10
Carbon tetrachloride	ND	1.0	ug/L	0.12
Chlorobenzene	ND	1.0	ug/L	0.10
Chlorodibromomethane	**1.4**	**1.0**	**ug/L**	**0.20**
Chloroethane	ND	2.0	ug/L	0.24
Chloroform	**0.14 J**	**1.0**	**ug/L**	**0.10**
Chloromethane	ND	2.0	ug/L	0.12
2-Chlorotoluene	ND	1.0	ug/L	0.24
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.45
1,2-Dibromoethane	ND	1.0	ug/L	0.24
Dibromomethane	ND	1.0	ug/L	0.21
1,2-Dichlorobenzene	ND	1.0	ug/L	0.10
1,3-Dichlorobenzene	ND	1.0	ug/L	0.10
1,4-Dichlorobenzene	ND	1.0	ug/L	0.12
Dichlorodifluoromethane	ND	2.0	ug/L	0.15
1,1-Dichloroethane	ND	1.0	ug/L	0.10
1,2-Dichloroethane	ND	1.0	ug/L	0.10
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.12
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.10
1,1-Dichloroethene	ND	1.0	ug/L	0.10
1,2-Dichloropropane	ND	1.0	ug/L	0.10
1,3-Dichloropropane	ND	1.0	ug/L	0.17
2,2-Dichloropropane	ND	1.0	ug/L	0.11
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.10
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.11

(Continued on next page)

STL Knoxville - ACS

Client Sample ID: G-2897-R1-POTW DISCHARGE

GC/MS Volatiles

Lot-Sample #...: H6D030205-003 **Work Order #...:** H2HPW1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1-Dichloropropene	ND	1.0	ug/L	0.10
Ethylbenzene	ND	1.0	ug/L	0.10
Hexachlorobutadiene	ND	2.0	ug/L	0.12
2-Hexanone	ND	5.0	ug/L	0.76
Iodomethane	ND	2.0	ug/L	0.12
Isopropylbenzene	ND	1.0	ug/L	0.10
p-Isopropyltoluene	ND	1.0	ug/L	0.10
Methylene chloride	**0.35 J**	**2.0**	**ug/L**	**0.23**
4-Methyl-2-pentanone	ND	5.0	ug/L	0.40
Naphthalene	ND	1.0	ug/L	0.17
n-Propylbenzene	ND	1.0	ug/L	0.10
Styrene	ND	1.0	ug/L	0.10
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.12
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.15
Tetrachloroethene	**0.13 J**	**1.0**	**ug/L**	**0.10**
Tetrahydrofuran	ND	4.0	ug/L	1.2
Toluene	ND	1.0	ug/L	0.10
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.23
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.10
1,1,2-Trichloroethane	ND	1.0	ug/L	0.25
Trichloroethene	ND	1.0	ug/L	0.10
Trichlorofluoromethane	ND	2.0	ug/L	0.12
1,2,3-Trichloropropane	ND	1.0	ug/L	0.36
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.13
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.11
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.10
Vinyl acetate	ND	2.0	ug/L	0.24
Vinyl chloride	ND	1.0	ug/L	0.24
m-Xylene & p-Xylene	ND	1.0	ug/L	0.20
o-Xylene	ND	1.0	ug/L	0.14
Xylenes (total)	ND	1.0	ug/L	0.30

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	105	(79 - 120)
1,2-Dichloroethane-d4	103	(71 - 127)
Toluene-d8	98	(80 - 120)
Bromofluorobenzene	89	(69 - 126)

NOTE(S):

J Estimated result. Result is less than RL.

STL Knoxville - ACS

G-2897-R1-POTW DISCHARGE

GC/MS Volatiles

Lot-Sample #: H6D030205-003 **Work Order #:** H2HPW1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

STL Knoxville - ACS

Client Sample ID: G-2901-R1-CAUSTIC FEED

GC/MS Volatiles

Lot-Sample #...: H6D030205-004 **Work Order #...:** H2HP31AA **Matrix.....:** WATER
Date Sampled...: 03/28/06 **Date Received..:** 04/02/06
Prep Date.....: 04/06/06 **Analysis Date..:** 04/06/06
Prep Batch #...: 6096330
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**4.5 J**	**10**	**ug/L**	**1.4**
Acrylonitrile	ND	20	ug/L	2.7
Benzene	ND	1.0	ug/L	0.10
Bromobenzene	**0.18 J**	**1.0**	**ug/L**	**0.11**
Bromochloromethane	ND	1.0	ug/L	0.24
Bromodichloromethane	**0.86 J**	**1.0**	**ug/L**	**0.10**
Bromoform	**2.8**	**1.0**	**ug/L**	**0.14**
Bromomethane	ND	2.0	ug/L	0.38
2-Butanone	ND	5.0	ug/L	0.75
n-Butylbenzene	ND	1.0	ug/L	0.10
sec-Butylbenzene	ND	1.0	ug/L	0.10
tert-Butylbenzene	ND	1.0	ug/L	0.24
Carbon disulfide	ND	1.0	ug/L	0.10
Carbon tetrachloride	ND	1.0	ug/L	0.12
Chlorobenzene	ND	1.0	ug/L	0.10
Chlorodibromomethane	**1.0**	**1.0**	**ug/L**	**0.20**
Chloroethane	ND	2.0	ug/L	0.24
Chloroform	**0.17 J**	**1.0**	**ug/L**	**0.10**
Chloromethane	ND	2.0	ug/L	0.12
2-Chlorotoluene	ND	1.0	ug/L	0.24
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.45
1,2-Dibromoethane	ND	1.0	ug/L	0.24
Dibromomethane	ND	1.0	ug/L	0.21
1,2-Dichlorobenzene	ND	1.0	ug/L	0.10
1,3-Dichlorobenzene	ND	1.0	ug/L	0.10
1,4-Dichlorobenzene	ND	1.0	ug/L	0.12
Dichlorodifluoromethane	ND	2.0	ug/L	0.15
1,1-Dichloroethane	ND	1.0	ug/L	0.10
1,2-Dichloroethane	**0.13 J**	**1.0**	**ug/L**	**0.10**
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.12
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.10
1,1-Dichloroethene	ND	1.0	ug/L	0.10
1,2-Dichloropropane	ND	1.0	ug/L	0.10
1,3-Dichloropropane	ND	1.0	ug/L	0.17
2,2-Dichloropropane	ND	1.0	ug/L	0.11
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.10
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.11

(Continued on next page)

STL Knoxville - ACS

Client Sample ID: G-2901-R1-CAUSTIC FEED

GC/MS Volatiles

Lot-Sample #...: H6D030205-004 **Work Order #...:** H2HP31AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1-Dichloropropene	ND	1.0	ug/L	0.10
Ethylbenzene	ND	1.0	ug/L	0.10
Hexachlorobutadiene	ND	2.0	ug/L	0.12
2-Hexanone	ND	5.0	ug/L	0.76
Iodomethane	ND	2.0	ug/L	0.12
Isopropylbenzene	ND	1.0	ug/L	0.10
p-Isopropyltoluene	ND	1.0	ug/L	0.10
Methylene chloride	**0.53 J**	**2.0**	**ug/L**	**0.23**
4-Methyl-2-pentanone	ND	5.0	ug/L	0.40
Naphthalene	ND	1.0	ug/L	0.17
n-Propylbenzene	ND	1.0	ug/L	0.10
Styrene	ND	1.0	ug/L	0.10
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.12
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.15
Tetrachloroethene	ND	1.0	ug/L	0.10
Tetrahydrofuran	ND	4.0	ug/L	1.2
Toluene	ND	1.0	ug/L	0.10
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.23
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.10
1,1,2-Trichloroethane	ND	1.0	ug/L	0.25
Trichloroethene	**0.24 J**	**1.0**	**ug/L**	**0.10**
Trichlorofluoromethane	ND	2.0	ug/L	0.12
1,2,3-Trichloropropane	ND	1.0	ug/L	0.36
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.13
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.11
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.10
Vinyl acetate	ND	2.0	ug/L	0.24
Vinyl chloride	ND	1.0	ug/L	0.24
m-Xylene & p-Xylene	ND	1.0	ug/L	0.20
o-Xylene	ND	1.0	ug/L	0.14
Xylenes (total)	ND	1.0	ug/L	0.30

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	136 *	(79 - 120)
1,2-Dichloroethane-d4	182 *	(71 - 127)
Toluene-d8	77 *	(80 - 120)
Bromofluorobenzene	92	(69 - 126)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

STL Knoxville - ACS

G-2901-R1-CAUSTIC FEED

GC/MS Volatiles

Lot-Sample #: H6D030205-004 **Work Order #:** H2HP31AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

STL Knoxville - ACS

Client Sample ID: G-2905-R1-MAKE-UP WATER

GC/MS Volatiles

Lot-Sample #...: H6D030205-005 **Work Order #...:** H2HQD1AA **Matrix.....:** WATER
Date Sampled...: 03/28/06 **Date Received..:** 04/02/06
Prep Date.....: 04/06/06 **Analysis Date..:** 04/06/06
Prep Batch #...: 6096330
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**4.4 J**	**10**	**ug/L**	**1.4**
Acrylonitrile	ND	20	ug/L	2.7
Benzene	ND	1.0	ug/L	0.10
Bromobenzene	ND	1.0	ug/L	0.11
Bromochloromethane	ND	1.0	ug/L	0.24
Bromodichloromethane	**3.2**	**1.0**	**ug/L**	**0.10**
Bromoform	**40**	**1.0**	**ug/L**	**0.14**
Bromomethane	ND	2.0	ug/L	0.38
2-Butanone	ND	5.0	ug/L	0.75
n-Butylbenzene	ND	1.0	ug/L	0.10
sec-Butylbenzene	ND	1.0	ug/L	0.10
tert-Butylbenzene	ND	1.0	ug/L	0.24
Carbon disulfide	ND	1.0	ug/L	0.10
Carbon tetrachloride	ND	1.0	ug/L	0.12
Chlorobenzene	ND	1.0	ug/L	0.10
Chlorodibromomethane	**13**	**1.0**	**ug/L**	**0.20**
Chloroethane	ND	2.0	ug/L	0.24
Chloroform	**0.56 J**	**1.0**	**ug/L**	**0.10**
Chloromethane	ND	2.0	ug/L	0.12
2-Chlorotoluene	ND	1.0	ug/L	0.24
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.45
1,2-Dibromoethane	ND	1.0	ug/L	0.24
Dibromomethane	ND	1.0	ug/L	0.21
1,2-Dichlorobenzene	ND	1.0	ug/L	0.10
1,3-Dichlorobenzene	ND	1.0	ug/L	0.10
1,4-Dichlorobenzene	ND	1.0	ug/L	0.12
Dichlorodifluoromethane	ND	2.0	ug/L	0.15
1,1-Dichloroethane	ND	1.0	ug/L	0.10
1,2-Dichloroethane	ND	1.0	ug/L	0.10
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.12
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.10
1,1-Dichloroethene	ND	1.0	ug/L	0.10
1,2-Dichloropropane	ND	1.0	ug/L	0.10
1,3-Dichloropropane	ND	1.0	ug/L	0.17
2,2-Dichloropropane	ND	1.0	ug/L	0.11
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.10
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.11

(Continued on next page)

STL Knoxville - ACS

Client Sample ID: G-2905-R1-MAKE-UP WATER

GC/MS Volatiles

Lot-Sample #...: H6D030205-005 **Work Order #...:** H2HQD1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1-Dichloropropene	ND	1.0	ug/L	0.10
Ethylbenzene	ND	1.0	ug/L	0.10
Hexachlorobutadiene	ND	2.0	ug/L	0.12
2-Hexanone	ND	5.0	ug/L	0.76
Iodomethane	ND	2.0	ug/L	0.12
Isopropylbenzene	ND	1.0	ug/L	0.10
p-Isopropyltoluene	ND	1.0	ug/L	0.10
Methylene chloride	**0.55 J**	**2.0**	**ug/L**	**0.23**
4-Methyl-2-pentanone	ND	5.0	ug/L	0.40
Naphthalene	ND	1.0	ug/L	0.17
n-Propylbenzene	ND	1.0	ug/L	0.10
Styrene	ND	1.0	ug/L	0.10
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.12
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.15
Tetrachloroethene	**0.33 J**	**1.0**	**ug/L**	**0.10**
Tetrahydrofuran	ND	4.0	ug/L	1.2
Toluene	ND	1.0	ug/L	0.10
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.23
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.10
1,1,2-Trichloroethane	ND	1.0	ug/L	0.25
Trichloroethene	ND	1.0	ug/L	0.10
Trichlorofluoromethane	ND	2.0	ug/L	0.12
1,2,3-Trichloropropane	ND	1.0	ug/L	0.36
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.13
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.11
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.10
Vinyl acetate	ND	2.0	ug/L	0.24
Vinyl chloride	ND	1.0	ug/L	0.24
m-Xylene & p-Xylene	ND	1.0	ug/L	0.20
o-Xylene	ND	1.0	ug/L	0.14
Xylenes (total)	ND	1.0	ug/L	0.30

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	110	(79 - 120)
1,2-Dichloroethane-d4	111	(71 - 127)
Toluene-d8	102	(80 - 120)
Bromofluorobenzene	92	(69 - 126)

NOTE(S):

J Estimated result. Result is less than RL.

STL Knoxville - ACS

G-2905-R1-MAKE-UP WATER

GC/MS Volatiles

Lot-Sample #: H6D030205-005 **Work Order #:** H2HQD1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

STL Knoxville - ACS

Client Sample ID: G-2987-R2-SPENT ACTIVATED CARBON

GC/MS Volatiles

Lot-Sample #...: H6D030205-006 **Work Order #...:** H2HQR1AA **Matrix.....:** SOLID
Date Sampled...: 03/29/06 **Date Received..:** 04/02/06
Prep Date.....: 04/04/06 **Analysis Date..:** 04/04/06
Prep Batch #...: 6094386
Dilution Factor: 5 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**3600 J,B**	**5000**	**ug/kg**	**1200**
Acrylonitrile	ND	25000	ug/kg	3800
Benzene	**1700**	**1200**	**ug/kg**	**140**
Bromobenzene	ND	1200	ug/kg	260
Bromochloromethane	ND	1200	ug/kg	170
Bromodichloromethane	ND	1200	ug/kg	120
Bromoform	ND	1200	ug/kg	210
Bromomethane	**750 J,B**	**2500**	**ug/kg**	**700**
2-Butanone	**3200 J**	**5000**	**ug/kg**	**1000**
n-Butylbenzene	ND	1200	ug/kg	380
sec-Butylbenzene	ND	1200	ug/kg	380
tert-Butylbenzene	ND	1200	ug/kg	340
Carbon disulfide	ND	1200	ug/kg	150
Carbon tetrachloride	ND	1200	ug/kg	120
Chlorobenzene	ND	1200	ug/kg	130
Chlorodibromomethane	ND	1200	ug/kg	120
Chloroethane	ND	2500	ug/kg	280
Chloroform	**1300**	**1200**	**ug/kg**	**120**
Chloromethane	**2300 J**	**2500**	**ug/kg**	**1000**
2-Chlorotoluene	ND	1200	ug/kg	300
4-Chlorotoluene	ND	1200	ug/kg	300
1,2-Dibromo-3-chloro-propane	ND	2500	ug/kg	140
1,2-Dibromoethane	ND	1200	ug/kg	180
Dibromomethane	ND	1200	ug/kg	120
1,2-Dichlorobenzene	ND	1200	ug/kg	320
1,3-Dichlorobenzene	ND	1200	ug/kg	330
1,4-Dichlorobenzene	ND	1200	ug/kg	330
Dichlorodifluoromethane	ND	2500	ug/kg	160
1,1-Dichloroethane	**360 J**	**1200**	**ug/kg**	**120**
1,2-Dichloroethane	**150 J**	**1200**	**ug/kg**	**140**
cis-1,2-Dichloroethene	**170 J**	**1200**	**ug/kg**	**120**
trans-1,2-Dichloroethene	ND	1200	ug/kg	190
1,1-Dichloroethene	**670 J**	**1200**	**ug/kg**	**240**
1,2-Dichloropropane	ND	1200	ug/kg	180
1,3-Dichloropropane	ND	1200	ug/kg	220
2,2-Dichloropropane	ND	1200	ug/kg	120
cis-1,3-Dichloropropene	ND	1200	ug/kg	120
trans-1,3-Dichloropropene	ND	1200	ug/kg	150

(Continued on next page)

STL Knoxville - ACS

Client Sample ID: G-2987-R2-SPENT ACTIVATED CARBON

GC/MS Volatiles

Lot-Sample #...: H6D030205-006 **Work Order #...:** H2HQR1AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1-Dichloropropene	ND	1200	ug/kg	120
Ethylbenzene	ND	1200	ug/kg	240
Hexachlorobutadiene	ND	1200	ug/kg	550
2-Hexanone	ND	5000	ug/kg	800
Iodomethane	ND	2500	ug/kg	490
Isopropylbenzene	ND	1200	ug/kg	280
p-Isopropyltoluene	ND	1200	ug/kg	420
Methylene chloride	ND	1200	ug/kg	420
4-Methyl-2-pentanone	ND	5000	ug/kg	800
Naphthalene	ND	1200	ug/kg	240
n-Propylbenzene	ND	1200	ug/kg	360
Styrene	ND	1200	ug/kg	240
1,1,1,2-Tetrachloroethane	ND	1200	ug/kg	160
1,1,2,2-Tetrachloroethane	ND	1200	ug/kg	210
Tetrachloroethene	**2300**	**1200**	**ug/kg**	**210**
Tetrahydrofuran	**1100 J**	**5000**	**ug/kg**	**1000**
Toluene	**770 J**	**1200**	**ug/kg**	**180**
1,2,3-Trichlorobenzene	ND	1200	ug/kg	360
1,2,4-Trichloro-benzene	ND	1200	ug/kg	340
1,1,1-Trichloroethane	**14000**	**1200**	**ug/kg**	**120**
1,1,2-Trichloroethane	ND	1200	ug/kg	180
Trichloroethene	**32000**	**1200**	**ug/kg**	**140**
Trichlorofluoromethane	ND	2500	ug/kg	320
1,2,3-Trichloropropane	ND	1200	ug/kg	270
1,1,2-Trichloro-1,2,2-trifluoroethane	**1600**	**1200**	**ug/kg**	**200**
1,2,4-Trimethylbenzene	ND	1200	ug/kg	320
1,3,5-Trimethylbenzene	ND	1200	ug/kg	310
Vinyl acetate	ND	2500	ug/kg	600
Vinyl chloride	ND	1200	ug/kg	140
m-Xylene & p-Xylene	ND	1200	ug/kg	480
o-Xylene	ND	1200	ug/kg	210
Xylenes (total)	ND	1200	ug/kg	700

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	9.6 *	(42 - 138)
1,2-Dichloroethane-d4	12 *	(38 - 144)
Toluene-d8	1.3 *	(52 - 137)
Bromofluorobenzene	1.7 *	(54 - 151)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

STL Knoxville - ACS

G-2987-R2-SPENT ACTIVATED CARBON

GC/MS Volatiles

Lot-Sample #: H6D030205-006 **Work Order #:** H2HQR1AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Propene	115-07-1	1600 NJ	M	0.847	ug/kg
Isobutane	75-28-5	62000 NJ	M	0.9785	ug/kg
Unknown		19000 NJ	M	1.0941	ug/kg
Pentane	109-66-0	3200 NJ	M	1.6685	ug/kg
Unknown		2000 NJ	M	2.4514	ug/kg
Pentane, 3-methyl-	96-14-0	2200 NJ	M	2.6055	ug/kg
Hexane	110-54-3	1900 NJ	M	2.8237	ug/kg
Unknown		1300 NJ	M	3.244	ug/kg
Cyclopentane, methyl-	96-37-7	5900 NJ	M	3.3114	ug/kg
Cyclohexane	110-82-7	7300 NJ	M	3.8345	ug/kg
Unknown		9800 NJ	M	4.1425	ug/kg
Cyclohexane, methyl-	108-87-2	3900 NJ	M	4.7426	ug/kg
Pentane, 2,3,4-trimethyl-	565-75-3	2000 NJ	M	5.0827	ug/kg
Pentane, 2,3,3-trimethyl-	560-21-4	2800 NJ	M	5.179	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

STL Knoxville - ACS

Client Sample ID: G-2991-R2-SCRUBBER BLOWDOWN

GC/MS Volatiles

Lot-Sample #...: H6D030205-007 **Work Order #...:** H2HQT1AA **Matrix.....:** WATER
Date Sampled...: 03/29/06 **Date Received..:** 04/02/06
Prep Date.....: 04/05/06 **Analysis Date..:** 04/05/06
Prep Batch #...: 6095253
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**4.1 J**	**10**	**ug/L**	**1.4**
Acrylonitrile	ND	20	ug/L	2.7
Benzene	ND	1.0	ug/L	0.10
Bromobenzene	ND	1.0	ug/L	0.11
Bromochloromethane	ND	1.0	ug/L	0.24
Bromodichloromethane	ND	1.0	ug/L	0.10
Bromoform	**0.92 J**	**1.0**	**ug/L**	**0.14**
Bromomethane	ND	2.0	ug/L	0.38
2-Butanone	ND	5.0	ug/L	0.75
n-Butylbenzene	ND	1.0	ug/L	0.10
sec-Butylbenzene	ND	1.0	ug/L	0.10
tert-Butylbenzene	ND	1.0	ug/L	0.24
Carbon disulfide	ND	1.0	ug/L	0.10
Carbon tetrachloride	ND	1.0	ug/L	0.12
Chlorobenzene	ND	1.0	ug/L	0.10
Chlorodibromomethane	**0.87 J**	**1.0**	**ug/L**	**0.20**
Chloroethane	ND	2.0	ug/L	0.24
Chloroform	ND	1.0	ug/L	0.10
Chloromethane	ND	2.0	ug/L	0.12
2-Chlorotoluene	ND	1.0	ug/L	0.24
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.45
1,2-Dibromoethane	ND	1.0	ug/L	0.24
Dibromomethane	ND	1.0	ug/L	0.21
1,2-Dichlorobenzene	ND	1.0	ug/L	0.10
1,3-Dichlorobenzene	ND	1.0	ug/L	0.10
1,4-Dichlorobenzene	ND	1.0	ug/L	0.12
Dichlorodifluoromethane	ND	2.0	ug/L	0.15
1,1-Dichloroethane	ND	1.0	ug/L	0.10
1,2-Dichloroethane	ND	1.0	ug/L	0.10
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.12
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.10
1,1-Dichloroethene	ND	1.0	ug/L	0.10
1,2-Dichloropropane	ND	1.0	ug/L	0.10
1,3-Dichloropropane	ND	1.0	ug/L	0.17
2,2-Dichloropropane	ND	1.0	ug/L	0.11
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.10
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.11

(Continued on next page)

STL Knoxville - ACS

Client Sample ID: G-2991-R2-SCRUBBER BLOWDOWN

GC/MS Volatiles

Lot-Sample #...: H6D030205-007 **Work Order #...:** H2HQT1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1-Dichloropropene	ND	1.0	ug/L	0.10
Ethylbenzene	ND	1.0	ug/L	0.10
Hexachlorobutadiene	ND	2.0	ug/L	0.12
2-Hexanone	ND	5.0	ug/L	0.76
Iodomethane	ND	2.0	ug/L	0.12
Isopropylbenzene	ND	1.0	ug/L	0.10
p-Isopropyltoluene	ND	1.0	ug/L	0.10
Methylene chloride	**2.3**	**2.0**	**ug/L**	**0.23**
4-Methyl-2-pentanone	ND	5.0	ug/L	0.40
Naphthalene	ND	1.0	ug/L	0.17
n-Propylbenzene	ND	1.0	ug/L	0.10
Styrene	ND	1.0	ug/L	0.10
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.12
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.15
Tetrachloroethene	ND	1.0	ug/L	0.10
Tetrahydrofuran	ND	4.0	ug/L	1.2
Toluene	**0.41 J**	**1.0**	**ug/L**	**0.10**
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.23
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.10
1,1,2-Trichloroethane	ND	1.0	ug/L	0.25
Trichloroethene	ND	1.0	ug/L	0.10
Trichlorofluoromethane	ND	2.0	ug/L	0.12
1,2,3-Trichloropropane	ND	1.0	ug/L	0.36
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.13
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.11
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.10
Vinyl acetate	ND	2.0	ug/L	0.24
Vinyl chloride	ND	1.0	ug/L	0.24
m-Xylene & p-Xylene	ND	1.0	ug/L	0.20
o-Xylene	ND	1.0	ug/L	0.14
Xylenes (total)	ND	1.0	ug/L	0.30

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	113	(79 - 120)
1,2-Dichloroethane-d4	113	(71 - 127)
Toluene-d8	101	(80 - 120)
Bromofluorobenzene	97	(69 - 126)

NOTE(S):

J Estimated result. Result is less than RL.

STL Knoxville - ACS

G-2991-R2-SCRUBBER BLOWDOWN

GC/MS Volatiles

Lot-Sample #: H6D030205-007 **Work Order #:** H2HQT1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

STL Knoxville - ACS

Client Sample ID: G-2995-R2-POTW DISCHARGE

GC/MS Volatiles

Lot-Sample #...: H6D030205-008 **Work Order #...:** H2HQW1AA **Matrix.....:** WATER
Date Sampled...: 03/29/06 **Date Received..:** 04/02/06
Prep Date.....: 04/05/06 **Analysis Date..:** 04/05/06
Prep Batch #...: 6095253
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**3.7 J**	**10**	**ug/L**	**1.4**
Acrylonitrile	ND	20	ug/L	2.7
Benzene	ND	1.0	ug/L	0.10
Bromobenzene	ND	1.0	ug/L	0.11
Bromochloromethane	ND	1.0	ug/L	0.24
Bromodichloromethane	**0.89 J**	**1.0**	**ug/L**	**0.10**
Bromoform	**2.0**	**1.0**	**ug/L**	**0.14**
Bromomethane	ND	2.0	ug/L	0.38
2-Butanone	ND	5.0	ug/L	0.75
n-Butylbenzene	ND	1.0	ug/L	0.10
sec-Butylbenzene	ND	1.0	ug/L	0.10
tert-Butylbenzene	ND	1.0	ug/L	0.24
Carbon disulfide	ND	1.0	ug/L	0.10
Carbon tetrachloride	ND	1.0	ug/L	0.12
Chlorobenzene	ND	1.0	ug/L	0.10
Chlorodibromomethane	**1.3**	**1.0**	**ug/L**	**0.20**
Chloroethane	ND	2.0	ug/L	0.24
Chloroform	**0.15 J**	**1.0**	**ug/L**	**0.10**
Chloromethane	ND	2.0	ug/L	0.12
2-Chlorotoluene	ND	1.0	ug/L	0.24
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.45
1,2-Dibromoethane	ND	1.0	ug/L	0.24
Dibromomethane	ND	1.0	ug/L	0.21
1,2-Dichlorobenzene	ND	1.0	ug/L	0.10
1,3-Dichlorobenzene	ND	1.0	ug/L	0.10
1,4-Dichlorobenzene	ND	1.0	ug/L	0.12
Dichlorodifluoromethane	ND	2.0	ug/L	0.15
1,1-Dichloroethane	ND	1.0	ug/L	0.10
1,2-Dichloroethane	ND	1.0	ug/L	0.10
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.12
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.10
1,1-Dichloroethene	ND	1.0	ug/L	0.10
1,2-Dichloropropane	ND	1.0	ug/L	0.10
1,3-Dichloropropane	ND	1.0	ug/L	0.17
2,2-Dichloropropane	ND	1.0	ug/L	0.11
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.10
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.11

(Continued on next page)

STL Knoxville - ACS

Client Sample ID: G-2995-R2-POTW DISCHARGE

GC/MS Volatiles

Lot-Sample #...: H6D030205-008 **Work Order #...:** H2HQW1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1-Dichloropropene	ND	1.0	ug/L	0.10
Ethylbenzene	ND	1.0	ug/L	0.10
Hexachlorobutadiene	ND	2.0	ug/L	0.12
2-Hexanone	ND	5.0	ug/L	0.76
Iodomethane	ND	2.0	ug/L	0.12
Isopropylbenzene	ND	1.0	ug/L	0.10
p-Isopropyltoluene	ND	1.0	ug/L	0.10
Methylene chloride	**2.0**	**2.0**	**ug/L**	**0.23**
4-Methyl-2-pentanone	ND	5.0	ug/L	0.40
Naphthalene	ND	1.0	ug/L	0.17
n-Propylbenzene	ND	1.0	ug/L	0.10
Styrene	ND	1.0	ug/L	0.10
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.12
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.15
Tetrachloroethene	ND	1.0	ug/L	0.10
Tetrahydrofuran	ND	4.0	ug/L	1.2
Toluene	**0.43 J**	**1.0**	**ug/L**	**0.10**
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.23
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.10
1,1,2-Trichloroethane	ND	1.0	ug/L	0.25
Trichloroethene	ND	1.0	ug/L	0.10
Trichlorofluoromethane	ND	2.0	ug/L	0.12
1,2,3-Trichloropropane	ND	1.0	ug/L	0.36
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.13
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.11
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.10
Vinyl acetate	ND	2.0	ug/L	0.24
Vinyl chloride	ND	1.0	ug/L	0.24
m-Xylene & p-Xylene	ND	1.0	ug/L	0.20
o-Xylene	ND	1.0	ug/L	0.14
Xylenes (total)	ND	1.0	ug/L	0.30

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	109	(79 - 120)
1,2-Dichloroethane-d4	110	(71 - 127)
Toluene-d8	101	(80 - 120)
Bromofluorobenzene	93	(69 - 126)

NOTE(S):

J Estimated result. Result is less than RL.

STL Knoxville - ACS

G-2995-R2-POTW DISCHARGE

GC/MS Volatiles

Lot-Sample #: H6D030205-008 **Work Order #:** H2HQW1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

STL Knoxville - ACS

Client Sample ID: G-3003-R2-MAKE-UP WATER

GC/MS Volatiles

Lot-Sample #...: H6D030205-009 **Work Order #...:** H2HQ01AA **Matrix.....:** WATER
Date Sampled...: 03/29/06 **Date Received..:** 04/02/06
Prep Date.....: 04/05/06 **Analysis Date..:** 04/05/06
Prep Batch #...: 6095253
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**3.8 J**	**10**	**ug/L**	**1.4**
Acrylonitrile	ND	20	ug/L	2.7
Benzene	ND	1.0	ug/L	0.10
Bromobenzene	ND	1.0	ug/L	0.11
Bromochloromethane	ND	1.0	ug/L	0.24
Bromodichloromethane	**4.1**	**1.0**	**ug/L**	**0.10**
Bromoform	**32**	**1.0**	**ug/L**	**0.14**
Bromomethane	ND	2.0	ug/L	0.38
2-Butanone	ND	5.0	ug/L	0.75
n-Butylbenzene	ND	1.0	ug/L	0.10
sec-Butylbenzene	ND	1.0	ug/L	0.10
tert-Butylbenzene	ND	1.0	ug/L	0.24
Carbon disulfide	ND	1.0	ug/L	0.10
Carbon tetrachloride	ND	1.0	ug/L	0.12
Chlorobenzene	ND	1.0	ug/L	0.10
Chlorodibromomethane	**13**	**1.0**	**ug/L**	**0.20**
Chloroethane	ND	2.0	ug/L	0.24
Chloroform	**0.64 J**	**1.0**	**ug/L**	**0.10**
Chloromethane	ND	2.0	ug/L	0.12
2-Chlorotoluene	ND	1.0	ug/L	0.24
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.45
1,2-Dibromoethane	ND	1.0	ug/L	0.24
Dibromomethane	ND	1.0	ug/L	0.21
1,2-Dichlorobenzene	ND	1.0	ug/L	0.10
1,3-Dichlorobenzene	ND	1.0	ug/L	0.10
1,4-Dichlorobenzene	ND	1.0	ug/L	0.12
Dichlorodifluoromethane	ND	2.0	ug/L	0.15
1,1-Dichloroethane	ND	1.0	ug/L	0.10
1,2-Dichloroethane	**0.13 J**	**1.0**	**ug/L**	**0.10**
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.12
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.10
1,1-Dichloroethene	ND	1.0	ug/L	0.10
1,2-Dichloropropane	ND	1.0	ug/L	0.10
1,3-Dichloropropane	ND	1.0	ug/L	0.17
2,2-Dichloropropane	ND	1.0	ug/L	0.11
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.10
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.11

(Continued on next page)

STL Knoxville - ACS

Client Sample ID: G-3003-R2-MAKE-UP WATER

GC/MS Volatiles

Lot-Sample #...: H6D030205-009 **Work Order #...:** H2HQ01AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1-Dichloropropene	ND	1.0	ug/L	0.10
Ethylbenzene	ND	1.0	ug/L	0.10
Hexachlorobutadiene	ND	2.0	ug/L	0.12
2-Hexanone	ND	5.0	ug/L	0.76
Iodomethane	ND	2.0	ug/L	0.12
Isopropylbenzene	ND	1.0	ug/L	0.10
p-Isopropyltoluene	ND	1.0	ug/L	0.10
Methylene chloride	**2.4**	**2.0**	**ug/L**	**0.23**
4-Methyl-2-pentanone	ND	5.0	ug/L	0.40
Naphthalene	ND	1.0	ug/L	0.17
n-Propylbenzene	ND	1.0	ug/L	0.10
Styrene	ND	1.0	ug/L	0.10
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.12
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.15
Tetrachloroethene	**0.31 J**	**1.0**	**ug/L**	**0.10**
Tetrahydrofuran	ND	4.0	ug/L	1.2
Toluene	**0.41 J**	**1.0**	**ug/L**	**0.10**
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.23
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.10
1,1,2-Trichloroethane	ND	1.0	ug/L	0.25
Trichloroethene	ND	1.0	ug/L	0.10
Trichlorofluoromethane	ND	2.0	ug/L	0.12
1,2,3-Trichloropropane	ND	1.0	ug/L	0.36
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.13
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.11
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.10
Vinyl acetate	ND	2.0	ug/L	0.24
Vinyl chloride	ND	1.0	ug/L	0.24
m-Xylene & p-Xylene	ND	1.0	ug/L	0.20
o-Xylene	ND	1.0	ug/L	0.14
Xylenes (total)	ND	1.0	ug/L	0.30

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	112	(79 - 120)
1,2-Dichloroethane-d4	113	(71 - 127)
Toluene-d8	101	(80 - 120)
Bromofluorobenzene	94	(69 - 126)

NOTE(S):

J Estimated result. Result is less than RL.

STL Knoxville - ACS

G-3003-R2-MAKE-UP WATER

GC/MS Volatiles

Lot-Sample #: H6D030205-009 **Work Order #:** H2HQ01AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

STL Knoxville - ACS

Client Sample ID: G-3070-R3-SPENT ACTIVATED CARBON

GC/MS Volatiles

Lot-Sample #...: H6D030205-010 **Work Order #...:** H2HQ41AA **Matrix.....:** SOLID
Date Sampled...: 03/30/06 **Date Received..:** 04/02/06
Prep Date.....: 04/04/06 **Analysis Date..:** 04/04/06
Prep Batch #...: 6094386
Dilution Factor: 5 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**2400 J,B**	**5000**	**ug/kg**	**1200**
Acrylonitrile	ND	25000	ug/kg	3800
Benzene	**1000 J**	**1200**	**ug/kg**	**140**
Bromobenzene	ND	1200	ug/kg	260
Bromochloromethane	ND	1200	ug/kg	170
Bromodichloromethane	ND	1200	ug/kg	120
Bromoform	ND	1200	ug/kg	210
Bromomethane	ND	2500	ug/kg	700
2-Butanone	**1200 J**	**5000**	**ug/kg**	**1000**
n-Butylbenzene	ND	1200	ug/kg	380
sec-Butylbenzene	ND	1200	ug/kg	380
tert-Butylbenzene	ND	1200	ug/kg	340
Carbon disulfide	ND	1200	ug/kg	150
Carbon tetrachloride	ND	1200	ug/kg	120
Chlorobenzene	ND	1200	ug/kg	130
Chlorodibromomethane	ND	1200	ug/kg	120
Chloroethane	ND	2500	ug/kg	280
Chloroform	**1100 J**	**1200**	**ug/kg**	**120**
Chloromethane	ND	2500	ug/kg	1000
2-Chlorotoluene	ND	1200	ug/kg	300
4-Chlorotoluene	ND	1200	ug/kg	300
1,2-Dibromo-3-chloro-propane	ND	2500	ug/kg	140
1,2-Dibromoethane	ND	1200	ug/kg	180
Dibromomethane	ND	1200	ug/kg	120
1,2-Dichlorobenzene	ND	1200	ug/kg	320
1,3-Dichlorobenzene	ND	1200	ug/kg	330
1,4-Dichlorobenzene	ND	1200	ug/kg	330
Dichlorodifluoromethane	ND	2500	ug/kg	160
1,1-Dichloroethane	**260 J**	**1200**	**ug/kg**	**120**
1,2-Dichloroethane	**210 J**	**1200**	**ug/kg**	**140**
cis-1,2-Dichloroethene	**150 J**	**1200**	**ug/kg**	**120**
trans-1,2-Dichloroethene	ND	1200	ug/kg	190
1,1-Dichloroethene	**840 J**	**1200**	**ug/kg**	**240**
1,2-Dichloropropane	ND	1200	ug/kg	180
1,3-Dichloropropane	ND	1200	ug/kg	220
2,2-Dichloropropane	ND	1200	ug/kg	120
cis-1,3-Dichloropropene	ND	1200	ug/kg	120
trans-1,3-Dichloropropene	ND	1200	ug/kg	150

(Continued on next page)

STL Knoxville - ACS

Client Sample ID: G-3070-R3-SPENT ACTIVATED CARBON

GC/MS Volatiles

Lot-Sample #...: H6D030205-010 **Work Order #...:** H2HQ41AA **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1-Dichloropropene	ND	1200	ug/kg	120
Ethylbenzene	ND	1200	ug/kg	240
Hexachlorobutadiene	ND	1200	ug/kg	550
2-Hexanone	ND	5000	ug/kg	800
Iodomethane	ND	2500	ug/kg	490
Isopropylbenzene	ND	1200	ug/kg	280
p-Isopropyltoluene	ND	1200	ug/kg	420
Methylene chloride	ND	1200	ug/kg	420
4-Methyl-2-pentanone	ND	5000	ug/kg	800
Naphthalene	**600 J**	**1200**	**ug/kg**	**240**
n-Propylbenzene	ND	1200	ug/kg	360
Styrene	ND	1200	ug/kg	240
1,1,1,2-Tetrachloroethane	ND	1200	ug/kg	160
1,1,2,2-Tetrachloroethane	ND	1200	ug/kg	210
Tetrachloroethene	**1100 J**	**1200**	**ug/kg**	**210**
Tetrahydrofuran	ND	5000	ug/kg	1000
Toluene	**210 J**	**1200**	**ug/kg**	**180**
1,2,3-Trichlorobenzene	ND	1200	ug/kg	360
1,2,4-Trichloro-benzene	ND	1200	ug/kg	340
1,1,1-Trichloroethane	**11000**	**1200**	**ug/kg**	**120**
1,1,2-Trichloroethane	ND	1200	ug/kg	180
Trichloroethene	**20000**	**1200**	**ug/kg**	**140**
Trichlorofluoromethane	ND	2500	ug/kg	320
1,2,3-Trichloropropane	ND	1200	ug/kg	270
1,1,2-Trichloro-1,2,2-trifluoroethane	**1100 J**	**1200**	**ug/kg**	**200**
1,2,4-Trimethylbenzene	ND	1200	ug/kg	320
1,3,5-Trimethylbenzene	ND	1200	ug/kg	310
Vinyl acetate	ND	2500	ug/kg	600
Vinyl chloride	ND	1200	ug/kg	140
m-Xylene & p-Xylene	ND	1200	ug/kg	480
o-Xylene	ND	1200	ug/kg	210
Xylenes (total)	ND	1200	ug/kg	700

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	9.3 *	(42 - 138)
1,2-Dichloroethane-d4	10 *	(38 - 144)
Toluene-d8	0.75 *	(52 - 137)
Bromofluorobenzene	2.2 *	(54 - 151)

NOTE(S):

* Surrogate recovery is outside stated control limits.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

STL Knoxville - ACS

G-3070-R3-SPENT ACTIVATED CARBON

GC/MS Volatiles

Lot-Sample #: H6D030205-010 **Work Order #:** H2HQ41AA **Matrix:** SOLID

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT		RETENTION TIME	UNITS
Isobutane	75-28-5	6500 NJ	M	0.9784	ug/kg
Unknown		1500 NJ	M	1.094	ug/kg
Naphthalene, 1,3-dimethyl-	575-41-7	2200 NJ	M	10.05	ug/kg
Naphthalene, 2,6-dimethyl-	581-42-0	1600 NJ	M	10.245	ug/kg
Naphthalene, 1,2,3,4-tetrahydr	3877-19-8	1300 NJ	M	12.167	ug/kg
Naphthalene, 1,2,3,4-tetrahydr	2809-64-5	3500 NJ	M	12.626	ug/kg
Naphthalene, 1,2,3,4-tetrahydr	2809-64-5	2300 NJ	M	12.918	ug/kg
Naphthalene, 1-methyl-	90-12-0	11000 NJ	M	13.085	ug/kg
Naphthalene, 1-methyl-	90-12-0	5400 NJ	M	13.252	ug/kg

NOTE(S):

M: Result was measured against nearest internal standard assuming a response factor of 1.

STL Knoxville - ACS

Client Sample ID: G-3074-R3-SCRUBBER BLOWDOWN

GC/MS Volatiles

Lot-Sample #...: H6D030205-011 **Work Order #...:** H2HRA1AA **Matrix.....:** WATER
Date Sampled...: 03/30/06 **Date Received..:** 04/02/06
Prep Date.....: 04/05/06 **Analysis Date..:** 04/05/06
Prep Batch #...: 6095253
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**3.6 J**	**10**	**ug/L**	**1.4**
Acrylonitrile	ND	20	ug/L	2.7
Benzene	ND	1.0	ug/L	0.10
Bromobenzene	ND	1.0	ug/L	0.11
Bromochloromethane	ND	1.0	ug/L	0.24
Bromodichloromethane	ND	1.0	ug/L	0.10
Bromoform	**1.0**	**1.0**	**ug/L**	**0.14**
Bromomethane	ND	2.0	ug/L	0.38
2-Butanone	ND	5.0	ug/L	0.75
n-Butylbenzene	ND	1.0	ug/L	0.10
sec-Butylbenzene	ND	1.0	ug/L	0.10
tert-Butylbenzene	ND	1.0	ug/L	0.24
Carbon disulfide	ND	1.0	ug/L	0.10
Carbon tetrachloride	ND	1.0	ug/L	0.12
Chlorobenzene	ND	1.0	ug/L	0.10
Chlorodibromomethane	**0.89 J**	**1.0**	**ug/L**	**0.20**
Chloroethane	ND	2.0	ug/L	0.24
Chloroform	ND	1.0	ug/L	0.10
Chloromethane	ND	2.0	ug/L	0.12
2-Chlorotoluene	ND	1.0	ug/L	0.24
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.45
1,2-Dibromoethane	ND	1.0	ug/L	0.24
Dibromomethane	ND	1.0	ug/L	0.21
1,2-Dichlorobenzene	ND	1.0	ug/L	0.10
1,3-Dichlorobenzene	ND	1.0	ug/L	0.10
1,4-Dichlorobenzene	ND	1.0	ug/L	0.12
Dichlorodifluoromethane	ND	2.0	ug/L	0.15
1,1-Dichloroethane	ND	1.0	ug/L	0.10
1,2-Dichloroethane	ND	1.0	ug/L	0.10
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.12
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.10
1,1-Dichloroethene	ND	1.0	ug/L	0.10
1,2-Dichloropropane	ND	1.0	ug/L	0.10
1,3-Dichloropropane	ND	1.0	ug/L	0.17
2,2-Dichloropropane	ND	1.0	ug/L	0.11
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.10
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.11

(Continued on next page)

STL Knoxville - ACS

Client Sample ID: G-3074-R3-SCRUBBER BLOWDOWN

GC/MS Volatiles

Lot-Sample #...: H6D030205-011 **Work Order #...:** H2HRA1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1-Dichloropropene	ND	1.0	ug/L	0.10
Ethylbenzene	ND	1.0	ug/L	0.10
Hexachlorobutadiene	ND	2.0	ug/L	0.12
2-Hexanone	ND	5.0	ug/L	0.76
Iodomethane	ND	2.0	ug/L	0.12
Isopropylbenzene	ND	1.0	ug/L	0.10
p-Isopropyltoluene	ND	1.0	ug/L	0.10
Methylene chloride	**0.84 J**	**2.0**	**ug/L**	**0.23**
4-Methyl-2-pentanone	ND	5.0	ug/L	0.40
Naphthalene	ND	1.0	ug/L	0.17
n-Propylbenzene	ND	1.0	ug/L	0.10
Styrene	ND	1.0	ug/L	0.10
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.12
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.15
Tetrachloroethene	ND	1.0	ug/L	0.10
Tetrahydrofuran	ND	4.0	ug/L	1.2
Toluene	ND	1.0	ug/L	0.10
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.23
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.10
1,1,2-Trichloroethane	ND	1.0	ug/L	0.25
Trichloroethene	ND	1.0	ug/L	0.10
Trichlorofluoromethane	ND	2.0	ug/L	0.12
1,2,3-Trichloropropane	ND	1.0	ug/L	0.36
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.13
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.11
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.10
Vinyl acetate	ND	2.0	ug/L	0.24
Vinyl chloride	ND	1.0	ug/L	0.24
m-Xylene & p-Xylene	ND	1.0	ug/L	0.20
o-Xylene	ND	1.0	ug/L	0.14
Xylenes (total)	ND	1.0	ug/L	0.30

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	110	(79 - 120)
1,2-Dichloroethane-d4	115	(71 - 127)
Toluene-d8	100	(80 - 120)
Bromofluorobenzene	93	(69 - 126)

NOTE(S):

J Estimated result. Result is less than RL.

STL Knoxville - ACS

G-3074-R3-SCRUBBER BLOWDOWN

GC/MS Volatiles

Lot-Sample #: H6D030205-011 **Work Order #:** H2HRA1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

STL Knoxville - ACS

Client Sample ID: G-3078-R3-POTW DISCHARGE

GC/MS Volatiles

Lot-Sample #...: H6D030205-012 **Work Order #...:** H2HRF1AA **Matrix.....:** WATER
Date Sampled...: 03/30/06 **Date Received..:** 04/02/06
Prep Date.....: 04/05/06 **Analysis Date..:** 04/06/06
Prep Batch #...: 6095253
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**4.8 J**	**10**	**ug/L**	**1.4**
Acrylonitrile	ND	20	ug/L	2.7
Benzene	ND	1.0	ug/L	0.10
Bromobenzene	ND	1.0	ug/L	0.11
Bromochloromethane	ND	1.0	ug/L	0.24
Bromodichloromethane	**1.0**	**1.0**	**ug/L**	**0.10**
Bromoform	**2.1**	**1.0**	**ug/L**	**0.14**
Bromomethane	ND	2.0	ug/L	0.38
2-Butanone	ND	5.0	ug/L	0.75
n-Butylbenzene	ND	1.0	ug/L	0.10
sec-Butylbenzene	ND	1.0	ug/L	0.10
tert-Butylbenzene	ND	1.0	ug/L	0.24
Carbon disulfide	**0.16 J**	**1.0**	**ug/L**	**0.10**
Carbon tetrachloride	ND	1.0	ug/L	0.12
Chlorobenzene	ND	1.0	ug/L	0.10
Chlorodibromomethane	**1.4**	**1.0**	**ug/L**	**0.20**
Chloroethane	ND	2.0	ug/L	0.24
Chloroform	**0.14 J**	**1.0**	**ug/L**	**0.10**
Chloromethane	ND	2.0	ug/L	0.12
2-Chlorotoluene	ND	1.0	ug/L	0.24
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.45
1,2-Dibromoethane	ND	1.0	ug/L	0.24
Dibromomethane	ND	1.0	ug/L	0.21
1,2-Dichlorobenzene	ND	1.0	ug/L	0.10
1,3-Dichlorobenzene	ND	1.0	ug/L	0.10
1,4-Dichlorobenzene	ND	1.0	ug/L	0.12
Dichlorodifluoromethane	ND	2.0	ug/L	0.15
1,1-Dichloroethane	ND	1.0	ug/L	0.10
1,2-Dichloroethane	ND	1.0	ug/L	0.10
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.12
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.10
1,1-Dichloroethene	ND	1.0	ug/L	0.10
1,2-Dichloropropane	ND	1.0	ug/L	0.10
1,3-Dichloropropane	ND	1.0	ug/L	0.17
2,2-Dichloropropane	ND	1.0	ug/L	0.11
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.10
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.11

(Continued on next page)

STL Knoxville - ACS

Client Sample ID: G-3078-R3-POTW DISCHARGE

GC/MS Volatiles

Lot-Sample #...: H6D030205-012 **Work Order #...:** H2HRF1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1-Dichloropropene	ND	1.0	ug/L	0.10
Ethylbenzene	ND	1.0	ug/L	0.10
Hexachlorobutadiene	ND	2.0	ug/L	0.12
2-Hexanone	ND	5.0	ug/L	0.76
Iodomethane	ND	2.0	ug/L	0.12
Isopropylbenzene	ND	1.0	ug/L	0.10
p-Isopropyltoluene	ND	1.0	ug/L	0.10
Methylene chloride	**0.65 J**	**2.0**	**ug/L**	**0.23**
4-Methyl-2-pentanone	ND	5.0	ug/L	0.40
Naphthalene	ND	1.0	ug/L	0.17
n-Propylbenzene	ND	1.0	ug/L	0.10
Styrene	ND	1.0	ug/L	0.10
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.12
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.15
Tetrachloroethene	ND	1.0	ug/L	0.10
Tetrahydrofuran	ND	4.0	ug/L	1.2
Toluene	**0.12 J**	**1.0**	**ug/L**	**0.10**
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.23
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.10
1,1,2-Trichloroethane	ND	1.0	ug/L	0.25
Trichloroethene	ND	1.0	ug/L	0.10
Trichlorofluoromethane	ND	2.0	ug/L	0.12
1,2,3-Trichloropropane	ND	1.0	ug/L	0.36
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.13
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.11
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.10
Vinyl acetate	ND	2.0	ug/L	0.24
Vinyl chloride	ND	1.0	ug/L	0.24
m-Xylene & p-Xylene	ND	1.0	ug/L	0.20
o-Xylene	ND	1.0	ug/L	0.14
Xylenes (total)	ND	1.0	ug/L	0.30

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	107	(79 - 120)
1,2-Dichloroethane-d4	109	(71 - 127)
Toluene-d8	101	(80 - 120)
Bromofluorobenzene	95	(69 - 126)

NOTE(S):

J Estimated result. Result is less than RL.

STL Knoxville - ACS

G-3078-R3-POTW DISCHARGE

GC/MS Volatiles

Lot-Sample #: H6D030205-012 **Work Order #:** H2HRF1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L

STL Knoxville - ACS

Client Sample ID: G-3086-R3-MAKE-UP WATER

GC/MS Volatiles

Lot-Sample #...: H6D030205-013 **Work Order #...:** H2HRH1AA **Matrix.....:** WATER
Date Sampled...: 03/30/06 **Date Received..:** 04/02/06
Prep Date.....: 04/05/06 **Analysis Date..:** 04/06/06
Prep Batch #...: 6095253
Dilution Factor: 1 **Method.....:** SW846 8260B

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
Acetone	**4.5 J**	**10**	**ug/L**	**1.4**
Acrylonitrile	ND	20	ug/L	2.7
Benzene	ND	1.0	ug/L	0.10
Bromobenzene	ND	1.0	ug/L	0.11
Bromochloromethane	ND	1.0	ug/L	0.24
Bromodichloromethane	**2.5**	**1.0**	**ug/L**	**0.10**
Bromoform	**28**	**1.0**	**ug/L**	**0.14**
Bromomethane	ND	2.0	ug/L	0.38
2-Butanone	ND	5.0	ug/L	0.75
n-Butylbenzene	ND	1.0	ug/L	0.10
sec-Butylbenzene	ND	1.0	ug/L	0.10
tert-Butylbenzene	ND	1.0	ug/L	0.24
Carbon disulfide	ND	1.0	ug/L	0.10
Carbon tetrachloride	ND	1.0	ug/L	0.12
Chlorobenzene	ND	1.0	ug/L	0.10
Chlorodibromomethane	**8.9**	**1.0**	**ug/L**	**0.20**
Chloroethane	ND	2.0	ug/L	0.24
Chloroform	**0.62 J**	**1.0**	**ug/L**	**0.10**
Chloromethane	ND	2.0	ug/L	0.12
2-Chlorotoluene	ND	1.0	ug/L	0.24
4-Chlorotoluene	ND	1.0	ug/L	0.21
1,2-Dibromo-3-chloro-propane	ND	2.0	ug/L	0.45
1,2-Dibromoethane	ND	1.0	ug/L	0.24
Dibromomethane	ND	1.0	ug/L	0.21
1,2-Dichlorobenzene	ND	1.0	ug/L	0.10
1,3-Dichlorobenzene	ND	1.0	ug/L	0.10
1,4-Dichlorobenzene	ND	1.0	ug/L	0.12
Dichlorodifluoromethane	ND	2.0	ug/L	0.15
1,1-Dichloroethane	ND	1.0	ug/L	0.10
1,2-Dichloroethane	**0.12 J**	**1.0**	**ug/L**	**0.10**
cis-1,2-Dichloroethene	ND	1.0	ug/L	0.12
trans-1,2-Dichloroethene	ND	1.0	ug/L	0.10
1,1-Dichloroethene	ND	1.0	ug/L	0.10
1,2-Dichloropropane	ND	1.0	ug/L	0.10
1,3-Dichloropropane	ND	1.0	ug/L	0.17
2,2-Dichloropropane	ND	1.0	ug/L	0.11
cis-1,3-Dichloropropene	ND	1.0	ug/L	0.10
trans-1,3-Dichloropropene	ND	1.0	ug/L	0.11

(Continued on next page)

STL Knoxville - ACS

Client Sample ID: G-3086-R3-MAKE-UP WATER

GC/MS Volatiles

Lot-Sample #...: H6D030205-013 **Work Order #...:** H2HRH1AA **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	MDL
1,1-Dichloropropene	ND	1.0	ug/L	0.10
Ethylbenzene	ND	1.0	ug/L	0.10
Hexachlorobutadiene	ND	2.0	ug/L	0.12
2-Hexanone	ND	5.0	ug/L	0.76
Iodomethane	ND	2.0	ug/L	0.12
Isopropylbenzene	ND	1.0	ug/L	0.10
p-Isopropyltoluene	ND	1.0	ug/L	0.10
Methylene chloride	**2.0**	**2.0**	**ug/L**	**0.23**
4-Methyl-2-pentanone	ND	5.0	ug/L	0.40
Naphthalene	ND	1.0	ug/L	0.17
n-Propylbenzene	ND	1.0	ug/L	0.10
Styrene	ND	1.0	ug/L	0.10
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	0.12
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	0.15
Tetrachloroethene	**0.45 J**	**1.0**	**ug/L**	**0.10**
Tetrahydrofuran	ND	4.0	ug/L	1.2
Toluene	**0.31 J**	**1.0**	**ug/L**	**0.10**
1,2,3-Trichlorobenzene	ND	1.0	ug/L	0.23
1,2,4-Trichloro-benzene	ND	1.0	ug/L	0.15
1,1,1-Trichloroethane	ND	1.0	ug/L	0.10
1,1,2-Trichloroethane	ND	1.0	ug/L	0.25
Trichloroethene	ND	1.0	ug/L	0.10
Trichlorofluoromethane	ND	2.0	ug/L	0.12
1,2,3-Trichloropropane	ND	1.0	ug/L	0.36
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	1.0	ug/L	0.13
1,2,4-Trimethylbenzene	ND	1.0	ug/L	0.11
1,3,5-Trimethylbenzene	ND	1.0	ug/L	0.10
Vinyl acetate	ND	2.0	ug/L	0.24
Vinyl chloride	ND	1.0	ug/L	0.24
m-Xylene & p-Xylene	ND	1.0	ug/L	0.20
o-Xylene	ND	1.0	ug/L	0.14
Xylenes (total)	ND	1.0	ug/L	0.30

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
Dibromofluoromethane	110	(79 - 120)
1,2-Dichloroethane-d4	107	(71 - 127)
Toluene-d8	102	(80 - 120)
Bromofluorobenzene	96	(69 - 126)

NOTE(S):

J Estimated result. Result is less than RL.

STL Knoxville - ACS

G-3086-R3-MAKE-UP WATER

GC/MS Volatiles

Lot-Sample #: H6D030205-013 **Work Order #:** H2HRH1AA **Matrix:** WATER

MASS SPECTROMETER/DATA SYSTEM (MSDS) TENTATIVELY IDENTIFIED COMPOUNDS

PARAMETER	CAS #	ESTIMATED RESULT	RETENTION TIME	UNITS
None				ug/L