



EMSL Analytical, Inc.

200 Route 130 North, Cinnaminson, NJ 08077

Phone: (856) 303-2500 Fax: (856) 858-4571 Email: Env_Chemistry@emsl.com

Attn:

Don Wanamaker
Environmental Management, Ltd.
56 West Gate Road
Suffern, NY 10901

5/5/2014

Phone: (845) 429-1141

Fax: (845) 429-1166

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 4/22/2014. The results are tabulated on the attached data pages for the following client designated project:

Kings/EML

The reference number for these samples is EMSL Order #011401866. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Reviewed and Approved By:

Julie Smith - Laboratory Director



The test results contained within this report meet the requirements of NELAC and/or the specific certification program that is applicable, unless otherwise noted.

NELAP Certifications: NJ 03036, NY 10872, PA 68-00367

The LCS recovery for Tetrachloroethene was slightly outside of the method control limits (high), therefore the results may be biased high.

The samples associated with this report were received in good condition unless otherwise noted. This report relates only to those items tested as received by the laboratory. The QC data associated with the sample results meet the recovery and precision requirements established by the NELAP, unless specifically indicated. All results for soil samples are reported on a dry weight basis, unless otherwise noted. This report may not be reproduced except in full and without written approval by EMSL Analytical, Inc.

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 858-4571

<http://www.EMSL.com>Env_Chemistry@emsl.com

EMSL Order: 011401866

CustomerID: EML50

CustomerPO:

ProjectID:

Attn: **Don Wanamaker**
Environmental Management, Ltd.
56 West Gate Road
Suffern, NY 10901

Phone: (845) 429-1141
 Fax: (845) 429-1166
 Received: 04/22/14 9:20 AM

Project: **Kings/EML****Analytical Results**

Client Sample Description		MW-6S	Collected:		4/16/2014 1:15:00 PM	Lab ID:	0001	
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
8260C-Volatiles	See Attached		N/A		4/25/2014	WF	4/25/2014	WF
Client Sample Description		MW-9S	Collected:		4/16/2014 4:55:00 PM	Lab ID:	0002	
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
8260C-Volatiles	See Attached		N/A		4/25/2014	WF	4/25/2014	WF
Client Sample Description		MW-9S MS	Collected:		4/16/2014 4:50:00 PM	Lab ID:	0003	
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
8260C-Volatiles	See Attached		N/A		4/25/2014	WF	4/25/2014	WF
Client Sample Description		MW-9S MSD	Collected:		4/16/2014 4:50:00 PM	Lab ID:	0004	
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
8260C-Volatiles	See Attached		N/A		4/25/2014	WF	4/25/2014	WF
Client Sample Description		MW-9 Dup	Collected:		4/16/2014 4:55:00 PM	Lab ID:	0005	
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
8260C-Volatiles	See Attached		N/A		4/25/2014	WF	4/25/2014	WF
Client Sample Description		MW-13R	Collected:		4/16/2014 11:40:00 AM	Lab ID:	0006	
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
8260C-Volatiles	See Attached		N/A		4/25/2014	WF	4/25/2014	WF
Client Sample Description		DP-103R	Collected:		4/16/2014 3:35:00 PM	Lab ID:	0007	
Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
8260C-Volatiles	See Attached		N/A		4/25/2014	WF	4/25/2014	WF

**EMSL Analytical, Inc.**

200 Route 130 North, Cinnaminson, NJ 08077

Phone/Fax: (856) 303-2500 / (856) 858-4571

<http://www.EMSL.com>Env_Chemistry@emsl.com

EMSL Order: 011401866

CustomerID: EML50

CustomerPO:

ProjectID:

Attn: **Don Wanamaker**
Environmental Management, Ltd.
56 West Gate Road
Suffern, NY 10901

Phone: (845) 429-1141
Fax: (845) 429-1166
Received: 04/22/14 9:20 AM

Project: **Kings/EML****Analytical Results****Client Sample Description** FB**Collected:** 4/16/2014
1:30:00 PM **Lab ID:** 0008

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
8260C-Volatiles	See Attached		N/A		4/25/2014	WF	4/25/2014	WF

Client Sample Description TB**Collected:** 4/16/2014 **Lab ID:** 0009

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
8260C-Volatiles	See Attached		N/A		4/25/2014	WF	4/25/2014	WF

Definitions:

ND - indicates that the analyte was not detected at the reporting limit

RL - Reporting Limit

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-6S	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0001	Project:		
Lab File ID:	T4986.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 6:37:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-71-8	Dichlorodifluoromethane	1.0		U
74-87-3	Chloromethane	5.0		U
75-01-4	Vinyl chloride	5.0		U
74-83-9	Bromomethane	5.0		U
75-00-3	Chloroethane	5.0		U
75-69-4	Trichlorofluoromethane	1.0		U
107-02-8	Acrolein	20		U
76-13-1	Freon 113(1,1,2-Trichlorofluoroethane)	5.0		U
75-35-4	1,1-Dichloroethene	5.0		U
67-64-1	Acetone	10		U
75-15-0	Carbon disulfide	1.0		U
75-05-8	Acetonitrile	50		U
75-09-2	Methylene chloride	5.0		U
75-65-0	tert-Butyl Alcohol	20		U
156-60-5	trans-1,2-Dichloroethene	5.0		U
1634-04-4	Methyl-tert butyl ether	5.0		U
107-13-1	Acrylonitrile	10		U
75-34-3	1,1-Dichloroethane	1.0		U
108-05-4	Vinyl acetate	2.0		U
594-20-7	2,2-Dichloropropane	1.0		U
156-59-2	cis-1,2-Dichloroethene	5.0		U
78-93-3	2-Butanone	10		U
74-97-5	Bromochloromethane	5.0		U
109-99-9	Tetrahydrofuran	10		U
67-66-3	Chloroform	1.0		U
71-55-6	1,1,1-Trichloroethane	1.0	2.3	
56-23-5	Carbon tetrachloride	5.0		U
563-58-6	1,1-Dichloropropene	1.0		U
71-43-2	Benzene	1.0		U
107-06-2	1,2-Dichloroethane	1.0		U
79-01-6	Trichloroethene	1.0	30	
78-87-5	1,2-Dichloropropane	1.0		U
74-95-3	Dibromomethane	5.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-6S	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0001	Project:		
Lab File ID:	T4986.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 6:37:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-27-4	Bromodichloromethane	1.0		U
110-75-8	2-Chloroethyl vinyl ether	10		U
10061-01-5	cis-1,3-Dichloropropene	1.0		U
108-10-1	4-Methyl-2-pentanone	2.0		U
108-88-3	Toluene	1.0		U
10061-02-6	trans-1,3-Dichloropropene	1.0		U
79-00-5	1,1,2-Trichloroethane	5.0		U
127-18-4	Tetrachloroethene	1.0	5.1	
142-28-9	1,3-Dichloropropane	1.0		U
591-78-6	2-Hexanone	2.0		U
124-48-1	Dibromochloromethane	1.0		U
106-93-4	1,2-Dibromoethane	1.0		U
108-90-7	Chlorobenzene	1.0		U
630-20-6	1,1,1,2-Tetrachloroethane	1.0		U
100-41-4	Ethylbenzene	1.0		U
179601-23-1	Xylene (para & meta)	2.0		U
95-47-6	Xylene (Ortho)	1.0		U
100-42-5	Styrene	1.0		U
75-25-2	Bromoform	1.0		U
98-82-8	Isopropylbenzene	1.0		U
108-86-1	Bromobenzene	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	1.0		U
96-18-4	1,2,3-Trichloropropane	5.0		U
103-65-1	n-Propylbenzene	1.0		U
110-57-6	trans-1,4-Dichloro-2-butene	2.0		U
95-49-8	2-Chlorotoluene	1.0		U
106-43-4	4-Chlorotoluene	1.0		U
108-67-8	1,3,5-Trimethylbenzene	1.0		U
98-06-6	tert-Butylbenzene	1.0		U
95-63-6	1,2,4-Trimethylbenzene	1.0		U
135-98-8	sec-Butylbenzene	1.0		U
541-73-1	1,3-Dichlorobenzene	1.0		U
99-87-6	4-Isopropyltoluene	1.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-6S	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0001	Project:		
Lab File ID:	T4986.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 6:37:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
106-46-7	1,4-Dichlorobenzene	1.0		U
95-50-1	1,2-Dichlorobenzene	1.0		U
104-51-8	n-Butylbenzene	1.0		U
67-72-1	Hexachloroethane	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	5.0		U
98-95-3	Nitrobenzene	50		U
120-82-1	1,2,4-Trichlorobenzene	1.0		U
87-68-3	Hexachlorobutadiene	1.0		U
91-20-3	Naphthalene	1.0		U
87-61-6	1,2,3-Trichlorobenzene	1.0		U
Qualifier Definitions U = Undetected B = Compound detected in method blank E = Estimated value J = Estimated concentration. D = Dilution				

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-9S	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0002	Project:		
Lab File ID:	T4987.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 7:11:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-71-8	Dichlorodifluoromethane	1.0		U
74-87-3	Chloromethane	5.0		U
75-01-4	Vinyl chloride	5.0		U
74-83-9	Bromomethane	5.0		U
75-00-3	Chloroethane	5.0		U
75-69-4	Trichlorofluoromethane	1.0		U
107-02-8	Acrolein	20		U
76-13-1	Freon 113(1,1,2-Trichlorofluoroethane)	5.0		U
75-35-4	1,1-Dichloroethene	5.0		U
67-64-1	Acetone	10		U
75-15-0	Carbon disulfide	1.0		U
75-05-8	Acetonitrile	50		U
75-09-2	Methylene chloride	5.0		U
75-65-0	tert-Butyl Alcohol	20		U
156-60-5	trans-1,2-Dichloroethene	5.0		U
1634-04-4	Methyl-tert butyl ether	5.0		U
107-13-1	Acrylonitrile	10		U
75-34-3	1,1-Dichloroethane	1.0		U
108-05-4	Vinyl acetate	2.0		U
594-20-7	2,2-Dichloropropane	1.0		U
156-59-2	cis-1,2-Dichloroethene	5.0		U
78-93-3	2-Butanone	10		U
74-97-5	Bromochloromethane	5.0		U
109-99-9	Tetrahydrofuran	10		U
67-66-3	Chloroform	1.0		U
71-55-6	1,1,1-Trichloroethane	1.0		U
56-23-5	Carbon tetrachloride	5.0		U
563-58-6	1,1-Dichloropropene	1.0		U
71-43-2	Benzene	1.0		U
107-06-2	1,2-Dichloroethane	1.0		U
79-01-6	Trichloroethene	1.0		U
78-87-5	1,2-Dichloropropane	1.0		U
74-95-3	Dibromomethane	5.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-9S	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0002	Project:		
Lab File ID:	T4987.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 7:11:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-27-4	Bromodichloromethane	1.0		U
110-75-8	2-Chloroethyl vinyl ether	10		U
10061-01-5	cis-1,3-Dichloropropene	1.0		U
108-10-1	4-Methyl-2-pentanone	2.0		U
108-88-3	Toluene	1.0		U
10061-02-6	trans-1,3-Dichloropropene	1.0		U
79-00-5	1,1,2-Trichloroethane	5.0		U
127-18-4	Tetrachloroethene	1.0		U
142-28-9	1,3-Dichloropropane	1.0		U
591-78-6	2-Hexanone	2.0		U
124-48-1	Dibromochloromethane	1.0		U
106-93-4	1,2-Dibromoethane	1.0		U
108-90-7	Chlorobenzene	1.0		U
630-20-6	1,1,1,2-Tetrachloroethane	1.0		U
100-41-4	Ethylbenzene	1.0		U
179601-23-1	Xylene (para & meta)	2.0		U
95-47-6	Xylene (Ortho)	1.0		U
100-42-5	Styrene	1.0		U
75-25-2	Bromoform	1.0		U
98-82-8	Isopropylbenzene	1.0		U
108-86-1	Bromobenzene	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	1.0		U
96-18-4	1,2,3-Trichloropropane	5.0		U
103-65-1	n-Propylbenzene	1.0		U
110-57-6	trans-1,4-Dichloro-2-butene	2.0		U
95-49-8	2-Chlorotoluene	1.0		U
106-43-4	4-Chlorotoluene	1.0		U
108-67-8	1,3,5-Trimethylbenzene	1.0		U
98-06-6	tert-Butylbenzene	1.0		U
95-63-6	1,2,4-Trimethylbenzene	1.0		U
135-98-8	sec-Butylbenzene	1.0		U
541-73-1	1,3-Dichlorobenzene	1.0		U
99-87-6	4-Isopropyltoluene	1.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-9S	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0002	Project:		
Lab File ID:	T4987.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 7:11:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
106-46-7	1,4-Dichlorobenzene	1.0		U
95-50-1	1,2-Dichlorobenzene	1.0		U
104-51-8	n-Butylbenzene	1.0		U
67-72-1	Hexachloroethane	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	5.0		U
98-95-3	Nitrobenzene	50		U
120-82-1	1,2,4-Trichlorobenzene	1.0		U
87-68-3	Hexachlorobutadiene	1.0		U
91-20-3	Naphthalene	1.0		U
87-61-6	1,2,3-Trichlorobenzene	1.0		U
Qualifier Definitions U = Undetected B = Compound detected in method blank E = Estimated value J = Estimated concentration. D = Dilution				

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-9S MS	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0003	Project:		
Lab File ID:	T4991.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 9:27:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-71-8	Dichlorodifluoromethane	1.0	57	
74-87-3	Chloromethane	5.0	49	
75-01-4	Vinyl chloride	5.0	28	
74-83-9	Bromomethane	5.0	38	
75-00-3	Chloroethane	5.0	54	
75-69-4	Trichlorofluoromethane	1.0	54	
107-02-8	Acrolein	20	180	
76-13-1	Freon 113(1,1,2-Trichlorofluoroethane)	5.0	52	
75-35-4	1,1-Dichloroethene	5.0	57	
67-64-1	Acetone	10	79	
75-15-0	Carbon disulfide	1.0	67	
75-05-8	Acetonitrile	50	370	
75-09-2	Methylene chloride	5.0	52	
75-65-0	tert-Butyl Alcohol	20	90	
156-60-5	trans-1,2-Dichloroethene	5.0	58	
1634-04-4	Methyl-tert butyl ether	5.0	51	
107-13-1	Acrylonitrile	10	90	
75-34-3	1,1-Dichloroethane	1.0	50	
108-05-4	Vinyl acetate	2.0	80	
594-20-7	2,2-Dichloropropane	1.0	53	
156-59-2	cis-1,2-Dichloroethene	5.0	56	
78-93-3	2-Butanone	10	76	
74-97-5	Bromochloromethane	5.0	54	
109-99-9	Tetrahydrofuran	10	78	
67-66-3	Chloroform	1.0	52	
71-55-6	1,1,1-Trichloroethane	1.0	55	
56-23-5	Carbon tetrachloride	5.0	63	
563-58-6	1,1-Dichloropropene	1.0	51	
71-43-2	Benzene	1.0	46	
107-06-2	1,2-Dichloroethane	1.0	55	
79-01-6	Trichloroethene	1.0	52	
78-87-5	1,2-Dichloropropane	1.0	45	
74-95-3	Dibromomethane	5.0	54	

Printed: 05/02/14 03:36:47 PM

FORM1--VOA

1 of 3

SampleList: 042514T8

ERM: K:\EMSL_ENV\ERMS\VOAERMS\8260ERMS\8260CURRENT.erm

Page 10 of 40

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-9S MS	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0003	Project:		
Lab File ID:	T4991.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 9:27:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-27-4	Bromodichloromethane	1.0	52	
110-75-8	2-Chloroethyl vinyl ether	10		U
10061-01-5	cis-1,3-Dichloropropene	1.0	43	
108-10-1	4-Methyl-2-pentanone	2.0	82	
108-88-3	Toluene	1.0	48	
10061-02-6	trans-1,3-Dichloropropene	1.0	48	
79-00-5	1,1,2-Trichloroethane	5.0	45	
127-18-4	Tetrachloroethene	1.0	56	
142-28-9	1,3-Dichloropropane	1.0	46	
591-78-6	2-Hexanone	2.0	80	
124-48-1	Dibromochloromethane	1.0	54	
106-93-4	1,2-Dibromoethane	1.0	52	
108-90-7	Chlorobenzene	1.0	48	
630-20-6	1,1,1,2-Tetrachloroethane	1.0	54	
100-41-4	Ethylbenzene	1.0	47	
179601-23-1	Xylene (para & meta)	2.0	96	
95-47-6	Xylene (Ortho)	1.0	50	
100-42-5	Styrene	1.0	45	
75-25-2	Bromoform	1.0	50	
98-82-8	Isopropylbenzene	1.0	48	
108-86-1	Bromobenzene	1.0	53	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	45	
96-18-4	1,2,3-Trichloropropane	5.0	52	
103-65-1	n-Propylbenzene	1.0	45	
110-57-6	trans-1,4-Dichloro-2-butene	2.0	44	
95-49-8	2-Chlorotoluene	1.0	46	
106-43-4	4-Chlorotoluene	1.0	47	
108-67-8	1,3,5-Trimethylbenzene	1.0	49	
98-06-6	tert-Butylbenzene	1.0	48	
95-63-6	1,2,4-Trimethylbenzene	1.0	49	
135-98-8	sec-Butylbenzene	1.0	47	
541-73-1	1,3-Dichlorobenzene	1.0	50	
99-87-6	4-Isopropyltoluene	1.0	47	

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-9S MS	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0003	Project:		
Lab File ID:	T4991.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 9:27:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
106-46-7	1,4-Dichlorobenzene	1.0	51	
95-50-1	1,2-Dichlorobenzene	1.0	50	
104-51-8	n-Butylbenzene	1.0	41	
67-72-1	Hexachloroethane	1.0	56	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	48	
98-95-3	Nitrobenzene	50	460	
120-82-1	1,2,4-Trichlorobenzene	1.0	50	
87-68-3	Hexachlorobutadiene	1.0	51	
91-20-3	Naphthalene	1.0	52	
87-61-6	1,2,3-Trichlorobenzene	1.0	51	
Qualifier Definitions U = Undetected B = Compound detected in method blank E = Estimated value J = Estimated concentration. D = Dilution				

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-9S MSD	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0004	Project:		
Lab File ID:	T4992.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 10:01:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-71-8	Dichlorodifluoromethane	1.0	58	
74-87-3	Chloromethane	5.0	51	
75-01-4	Vinyl chloride	5.0	31	
74-83-9	Bromomethane	5.0	41	
75-00-3	Chloroethane	5.0	54	
75-69-4	Trichlorofluoromethane	1.0	56	
107-02-8	Acrolein	20	210	
76-13-1	Freon 113(1,1,2-Trichlorofluoroethane)	5.0	57	
75-35-4	1,1-Dichloroethene	5.0	59	
67-64-1	Acetone	10	87	
75-15-0	Carbon disulfide	1.0	71	
75-05-8	Acetonitrile	50	390	
75-09-2	Methylene chloride	5.0	55	
75-65-0	tert-Butyl Alcohol	20	100	
156-60-5	trans-1,2-Dichloroethene	5.0	58	
1634-04-4	Methyl-tert butyl ether	5.0	57	
107-13-1	Acrylonitrile	10	93	
75-34-3	1,1-Dichloroethane	1.0	52	
108-05-4	Vinyl acetate	2.0	83	
594-20-7	2,2-Dichloropropane	1.0	55	
156-59-2	cis-1,2-Dichloroethene	5.0	57	
78-93-3	2-Butanone	10	82	
74-97-5	Bromochloromethane	5.0	57	
109-99-9	Tetrahydrofuran	10	83	
67-66-3	Chloroform	1.0	55	
71-55-6	1,1,1-Trichloroethane	1.0	58	
56-23-5	Carbon tetrachloride	5.0	65	
563-58-6	1,1-Dichloropropene	1.0	53	
71-43-2	Benzene	1.0	48	
107-06-2	1,2-Dichloroethane	1.0	59	
79-01-6	Trichloroethene	1.0	53	
78-87-5	1,2-Dichloropropane	1.0	45	
74-95-3	Dibromomethane	5.0	58	

Printed: 05/02/14 03:37:44 PM

FORM1--VOA

1 of 3

SampleList: 042514T8

ERM: K:\EMSL_ENV\ERMS\VOAERMS\8260ERMS\8260CURRENT.erm

Page 19 of 40

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-9S MSD	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0004	Project:		
Lab File ID:	T4992.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 10:01:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-27-4	Bromodichloromethane	1.0	58	
110-75-8	2-Chloroethyl vinyl ether	10		U
10061-01-5	cis-1,3-Dichloropropene	1.0	50	
108-10-1	4-Methyl-2-pentanone	2.0	85	
108-88-3	Toluene	1.0	51	
10061-02-6	trans-1,3-Dichloropropene	1.0	53	
79-00-5	1,1,2-Trichloroethane	5.0	51	
127-18-4	Tetrachloroethene	1.0	58	
142-28-9	1,3-Dichloropropane	1.0	52	
591-78-6	2-Hexanone	2.0	87	
124-48-1	Dibromochloromethane	1.0	61	
106-93-4	1,2-Dibromoethane	1.0	59	
108-90-7	Chlorobenzene	1.0	46	
630-20-6	1,1,1,2-Tetrachloroethane	1.0	53	
100-41-4	Ethylbenzene	1.0	45	
179601-23-1	Xylene (para & meta)	2.0	91	
95-47-6	Xylene (Ortho)	1.0	47	
100-42-5	Styrene	1.0	43	
75-25-2	Bromoform	1.0	54	
98-82-8	Isopropylbenzene	1.0	47	
108-86-1	Bromobenzene	1.0	52	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	46	
96-18-4	1,2,3-Trichloropropane	5.0	54	
103-65-1	n-Propylbenzene	1.0	44	
110-57-6	trans-1,4-Dichloro-2-butene	2.0	46	
95-49-8	2-Chlorotoluene	1.0	44	
106-43-4	4-Chlorotoluene	1.0	44	
108-67-8	1,3,5-Trimethylbenzene	1.0	46	
98-06-6	tert-Butylbenzene	1.0	47	
95-63-6	1,2,4-Trimethylbenzene	1.0	46	
135-98-8	sec-Butylbenzene	1.0	45	
541-73-1	1,3-Dichlorobenzene	1.0	50	
99-87-6	4-Isopropyltoluene	1.0	45	

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-9S MSD	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0004	Project:		
Lab File ID:	T4992.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 10:01:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
106-46-7	1,4-Dichlorobenzene	1.0	50	
95-50-1	1,2-Dichlorobenzene	1.0	50	
104-51-8	n-Butylbenzene	1.0	42	
67-72-1	Hexachloroethane	1.0	57	
96-12-8	1,2-Dibromo-3-chloropropane	5.0	51	
98-95-3	Nitrobenzene	50	510	
120-82-1	1,2,4-Trichlorobenzene	1.0	51	
87-68-3	Hexachlorobutadiene	1.0	52	
91-20-3	Naphthalene	1.0	55	
87-61-6	1,2,3-Trichlorobenzene	1.0	54	
Qualifier Definitions U = Undetected B = Compound detected in method blank E = Estimated value J = Estimated concentration. D = Dilution				

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-9 Dup	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0005	Project:		
Lab File ID:	T4988.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 7:45:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-71-8	Dichlorodifluoromethane	1.0		U
74-87-3	Chloromethane	5.0		U
75-01-4	Vinyl chloride	5.0		U
74-83-9	Bromomethane	5.0		U
75-00-3	Chloroethane	5.0		U
75-69-4	Trichlorofluoromethane	1.0		U
107-02-8	Acrolein	20		U
76-13-1	Freon 113(1,1,2-Trichlorofluoroethane)	5.0		U
75-35-4	1,1-Dichloroethene	5.0		U
67-64-1	Acetone	10		U
75-15-0	Carbon disulfide	1.0		U
75-05-8	Acetonitrile	50		U
75-09-2	Methylene chloride	5.0		U
75-65-0	tert-Butyl Alcohol	20		U
156-60-5	trans-1,2-Dichloroethene	5.0		U
1634-04-4	Methyl-tert butyl ether	5.0		U
107-13-1	Acrylonitrile	10		U
75-34-3	1,1-Dichloroethane	1.0		U
108-05-4	Vinyl acetate	2.0		U
594-20-7	2,2-Dichloropropane	1.0		U
156-59-2	cis-1,2-Dichloroethene	5.0		U
78-93-3	2-Butanone	10		U
74-97-5	Bromochloromethane	5.0		U
109-99-9	Tetrahydrofuran	10		U
67-66-3	Chloroform	1.0		U
71-55-6	1,1,1-Trichloroethane	1.0		U
56-23-5	Carbon tetrachloride	5.0		U
563-58-6	1,1-Dichloropropene	1.0		U
71-43-2	Benzene	1.0		U
107-06-2	1,2-Dichloroethane	1.0		U
79-01-6	Trichloroethene	1.0		U
78-87-5	1,2-Dichloropropane	1.0		U
74-95-3	Dibromomethane	5.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-9 Dup	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0005	Project:		
Lab File ID:	T4988.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 7:45:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-27-4	Bromodichloromethane	1.0		U
110-75-8	2-Chloroethyl vinyl ether	10		U
10061-01-5	cis-1,3-Dichloropropene	1.0		U
108-10-1	4-Methyl-2-pentanone	2.0		U
108-88-3	Toluene	1.0		U
10061-02-6	trans-1,3-Dichloropropene	1.0		U
79-00-5	1,1,2-Trichloroethane	5.0		U
127-18-4	Tetrachloroethene	1.0		U
142-28-9	1,3-Dichloropropane	1.0		U
591-78-6	2-Hexanone	2.0		U
124-48-1	Dibromochloromethane	1.0		U
106-93-4	1,2-Dibromoethane	1.0		U
108-90-7	Chlorobenzene	1.0		U
630-20-6	1,1,1,2-Tetrachloroethane	1.0		U
100-41-4	Ethylbenzene	1.0		U
179601-23-1	Xylene (para & meta)	2.0		U
95-47-6	Xylene (Ortho)	1.0		U
100-42-5	Styrene	1.0		U
75-25-2	Bromoform	1.0		U
98-82-8	Isopropylbenzene	1.0		U
108-86-1	Bromobenzene	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	1.0		U
96-18-4	1,2,3-Trichloropropane	5.0		U
103-65-1	n-Propylbenzene	1.0		U
110-57-6	trans-1,4-Dichloro-2-butene	2.0		U
95-49-8	2-Chlorotoluene	1.0		U
106-43-4	4-Chlorotoluene	1.0		U
108-67-8	1,3,5-Trimethylbenzene	1.0		U
98-06-6	tert-Butylbenzene	1.0		U
95-63-6	1,2,4-Trimethylbenzene	1.0		U
135-98-8	sec-Butylbenzene	1.0		U
541-73-1	1,3-Dichlorobenzene	1.0		U
99-87-6	4-Isopropyltoluene	1.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-9 Dup	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0005	Project:		
Lab File ID:	T4988.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 7:45:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
106-46-7	1,4-Dichlorobenzene	1.0		U
95-50-1	1,2-Dichlorobenzene	1.0		U
104-51-8	n-Butylbenzene	1.0		U
67-72-1	Hexachloroethane	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	5.0		U
98-95-3	Nitrobenzene	50		U
120-82-1	1,2,4-Trichlorobenzene	1.0		U
87-68-3	Hexachlorobutadiene	1.0		U
91-20-3	Naphthalene	1.0		U
87-61-6	1,2,3-Trichlorobenzene	1.0		U
Qualifier Definitions U = Undetected B = Compound detected in method blank E = Estimated value J = Estimated concentration. D = Dilution				

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-13R	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0006	Project:		
Lab File ID:	T4989.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 8:19:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-71-8	Dichlorodifluoromethane	1.0		U
74-87-3	Chloromethane	5.0		U
75-01-4	Vinyl chloride	5.0		U
74-83-9	Bromomethane	5.0		U
75-00-3	Chloroethane	5.0		U
75-69-4	Trichlorofluoromethane	1.0		U
107-02-8	Acrolein	20		U
76-13-1	Freon 113(1,1,2-Trichlorofluoroethane)	5.0		U
75-35-4	1,1-Dichloroethene	5.0		U
67-64-1	Acetone	10		U
75-15-0	Carbon disulfide	1.0		U
75-05-8	Acetonitrile	50		U
75-09-2	Methylene chloride	5.0		U
75-65-0	tert-Butyl Alcohol	20		U
156-60-5	trans-1,2-Dichloroethene	5.0		U
1634-04-4	Methyl-tert butyl ether	5.0		U
107-13-1	Acrylonitrile	10		U
75-34-3	1,1-Dichloroethane	1.0		U
108-05-4	Vinyl acetate	2.0		U
594-20-7	2,2-Dichloropropane	1.0		U
156-59-2	cis-1,2-Dichloroethene	5.0		U
78-93-3	2-Butanone	10		U
74-97-5	Bromochloromethane	5.0		U
109-99-9	Tetrahydrofuran	10		U
67-66-3	Chloroform	1.0		U
71-55-6	1,1,1-Trichloroethane	1.0		U
56-23-5	Carbon tetrachloride	5.0		U
563-58-6	1,1-Dichloropropene	1.0		U
71-43-2	Benzene	1.0		U
107-06-2	1,2-Dichloroethane	1.0		U
79-01-6	Trichloroethene	1.0		U
78-87-5	1,2-Dichloropropane	1.0		U
74-95-3	Dibromomethane	5.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-13R	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0006	Project:		
Lab File ID:	T4989.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 8:19:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-27-4	Bromodichloromethane	1.0		U
110-75-8	2-Chloroethyl vinyl ether	10		U
10061-01-5	cis-1,3-Dichloropropene	1.0		U
108-10-1	4-Methyl-2-pentanone	2.0		U
108-88-3	Toluene	1.0		U
10061-02-6	trans-1,3-Dichloropropene	1.0		U
79-00-5	1,1,2-Trichloroethane	5.0		U
127-18-4	Tetrachloroethene	1.0		U
142-28-9	1,3-Dichloropropane	1.0		U
591-78-6	2-Hexanone	2.0		U
124-48-1	Dibromochloromethane	1.0		U
106-93-4	1,2-Dibromoethane	1.0		U
108-90-7	Chlorobenzene	1.0		U
630-20-6	1,1,1,2-Tetrachloroethane	1.0		U
100-41-4	Ethylbenzene	1.0		U
179601-23-1	Xylene (para & meta)	2.0		U
95-47-6	Xylene (Ortho)	1.0		U
100-42-5	Styrene	1.0		U
75-25-2	Bromoform	1.0		U
98-82-8	Isopropylbenzene	1.0		U
108-86-1	Bromobenzene	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	1.0		U
96-18-4	1,2,3-Trichloropropane	5.0		U
103-65-1	n-Propylbenzene	1.0		U
110-57-6	trans-1,4-Dichloro-2-butene	2.0		U
95-49-8	2-Chlorotoluene	1.0		U
106-43-4	4-Chlorotoluene	1.0		U
108-67-8	1,3,5-Trimethylbenzene	1.0		U
98-06-6	tert-Butylbenzene	1.0		U
95-63-6	1,2,4-Trimethylbenzene	1.0		U
135-98-8	sec-Butylbenzene	1.0		U
541-73-1	1,3-Dichlorobenzene	1.0		U
99-87-6	4-Isopropyltoluene	1.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	MW-13R	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0006	Project:		
Lab File ID:	T4989.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 8:19:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
106-46-7	1,4-Dichlorobenzene	1.0		U
95-50-1	1,2-Dichlorobenzene	1.0		U
104-51-8	n-Butylbenzene	1.0		U
67-72-1	Hexachloroethane	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	5.0		U
98-95-3	Nitrobenzene	50		U
120-82-1	1,2,4-Trichlorobenzene	1.0		U
87-68-3	Hexachlorobutadiene	1.0		U
91-20-3	Naphthalene	1.0		U
87-61-6	1,2,3-Trichlorobenzene	1.0		U
Qualifier Definitions U = Undetected B = Compound detected in method blank E = Estimated value J = Estimated concentration. D = Dilution				

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	DP-103R	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0007	Project:		
Lab File ID:	T4990.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 8:53:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-71-8	Dichlorodifluoromethane	1.0		U
74-87-3	Chloromethane	5.0		U
75-01-4	Vinyl chloride	5.0		U
74-83-9	Bromomethane	5.0		U
75-00-3	Chloroethane	5.0		U
75-69-4	Trichlorofluoromethane	1.0		U
107-02-8	Acrolein	20		U
76-13-1	Freon 113(1,1,2-Trichlorofluoroethane)	5.0		U
75-35-4	1,1-Dichloroethene	5.0		U
67-64-1	Acetone	10	11	
75-15-0	Carbon disulfide	1.0		U
75-05-8	Acetonitrile	50		U
75-09-2	Methylene chloride	5.0		U
75-65-0	tert-Butyl Alcohol	20		U
156-60-5	trans-1,2-Dichloroethene	5.0		U
1634-04-4	Methyl-tert butyl ether	5.0		U
107-13-1	Acrylonitrile	10		U
75-34-3	1,1-Dichloroethane	1.0		U
108-05-4	Vinyl acetate	2.0		U
594-20-7	2,2-Dichloropropane	1.0		U
156-59-2	cis-1,2-Dichloroethene	5.0	11	
78-93-3	2-Butanone	10		U
74-97-5	Bromochloromethane	5.0		U
109-99-9	Tetrahydrofuran	10		U
67-66-3	Chloroform	1.0		U
71-55-6	1,1,1-Trichloroethane	1.0		U
56-23-5	Carbon tetrachloride	5.0		U
563-58-6	1,1-Dichloropropene	1.0		U
71-43-2	Benzene	1.0		U
107-06-2	1,2-Dichloroethane	1.0		U
79-01-6	Trichloroethene	1.0	3.1	
78-87-5	1,2-Dichloropropane	1.0		U
74-95-3	Dibromomethane	5.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	DP-103R	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0007	Project:		
Lab File ID:	T4990.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 8:53:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-27-4	Bromodichloromethane	1.0		U
110-75-8	2-Chloroethyl vinyl ether	10		U
10061-01-5	cis-1,3-Dichloropropene	1.0		U
108-10-1	4-Methyl-2-pentanone	2.0		U
108-88-3	Toluene	1.0		U
10061-02-6	trans-1,3-Dichloropropene	1.0		U
79-00-5	1,1,2-Trichloroethane	5.0		U
127-18-4	Tetrachloroethene	1.0		U
142-28-9	1,3-Dichloropropane	1.0		U
591-78-6	2-Hexanone	2.0		U
124-48-1	Dibromochloromethane	1.0		U
106-93-4	1,2-Dibromoethane	1.0		U
108-90-7	Chlorobenzene	1.0		U
630-20-6	1,1,1,2-Tetrachloroethane	1.0		U
100-41-4	Ethylbenzene	1.0		U
179601-23-1	Xylene (para & meta)	2.0		U
95-47-6	Xylene (Ortho)	1.0		U
100-42-5	Styrene	1.0		U
75-25-2	Bromoform	1.0		U
98-82-8	Isopropylbenzene	1.0		U
108-86-1	Bromobenzene	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	1.0		U
96-18-4	1,2,3-Trichloropropane	5.0		U
103-65-1	n-Propylbenzene	1.0		U
110-57-6	trans-1,4-Dichloro-2-butene	2.0		U
95-49-8	2-Chlorotoluene	1.0		U
106-43-4	4-Chlorotoluene	1.0		U
108-67-8	1,3,5-Trimethylbenzene	1.0		U
98-06-6	tert-Butylbenzene	1.0		U
95-63-6	1,2,4-Trimethylbenzene	1.0		U
135-98-8	sec-Butylbenzene	1.0		U
541-73-1	1,3-Dichlorobenzene	1.0		U
99-87-6	4-Isopropyltoluene	1.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	DP-103R	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0007	Project:		
Lab File ID:	T4990.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 8:53:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
106-46-7	1,4-Dichlorobenzene	1.0		U
95-50-1	1,2-Dichlorobenzene	1.0		U
104-51-8	n-Butylbenzene	1.0		U
67-72-1	Hexachloroethane	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	5.0		U
98-95-3	Nitrobenzene	50		U
120-82-1	1,2,4-Trichlorobenzene	1.0		U
87-68-3	Hexachlorobutadiene	1.0		U
91-20-3	Naphthalene	1.0		U
87-61-6	1,2,3-Trichlorobenzene	1.0		U
Qualifier Definitions U = Undetected B = Compound detected in method blank E = Estimated value J = Estimated concentration. D = Dilution				

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	FB	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0008	Project:		
Lab File ID:	T4985.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 6:03:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-71-8	Dichlorodifluoromethane	1.0		U
74-87-3	Chloromethane	5.0		U
75-01-4	Vinyl chloride	5.0		U
74-83-9	Bromomethane	5.0		U
75-00-3	Chloroethane	5.0		U
75-69-4	Trichlorofluoromethane	1.0		U
107-02-8	Acrolein	20		U
76-13-1	Freon 113(1,1,2-Trichlorofluoroethane)	5.0		U
75-35-4	1,1-Dichloroethene	5.0		U
67-64-1	Acetone	10		U
75-15-0	Carbon disulfide	1.0		U
75-05-8	Acetonitrile	50		U
75-09-2	Methylene chloride	5.0		U
75-65-0	tert-Butyl Alcohol	20		U
156-60-5	trans-1,2-Dichloroethene	5.0		U
1634-04-4	Methyl-tert butyl ether	5.0		U
107-13-1	Acrylonitrile	10		U
75-34-3	1,1-Dichloroethane	1.0		U
108-05-4	Vinyl acetate	2.0		U
594-20-7	2,2-Dichloropropane	1.0		U
156-59-2	cis-1,2-Dichloroethene	5.0		U
78-93-3	2-Butanone	10		U
74-97-5	Bromochloromethane	5.0		U
109-99-9	Tetrahydrofuran	10		U
67-66-3	Chloroform	1.0		U
71-55-6	1,1,1-Trichloroethane	1.0		U
56-23-5	Carbon tetrachloride	5.0		U
563-58-6	1,1-Dichloropropene	1.0		U
71-43-2	Benzene	1.0		U
107-06-2	1,2-Dichloroethane	1.0		U
79-01-6	Trichloroethene	1.0		U
78-87-5	1,2-Dichloropropane	1.0		U
74-95-3	Dibromomethane	5.0		U

Printed: 04/29/14 02:14:13 PM

FORM1--VOA

1 of 3

SampleList: 042514T8

ERM: K:\EMSL_ENV\ERMS\VOA\ERMS\8260\ERMS\8260CURRENT.erm

Page 29 of 40

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	FB	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0008	Project:		
Lab File ID:	T4985.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 6:03:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-27-4	Bromodichloromethane	1.0		U
110-75-8	2-Chloroethyl vinyl ether	10		U
10061-01-5	cis-1,3-Dichloropropene	1.0		U
108-10-1	4-Methyl-2-pentanone	2.0		U
108-88-3	Toluene	1.0		U
10061-02-6	trans-1,3-Dichloropropene	1.0		U
79-00-5	1,1,2-Trichloroethane	5.0		U
127-18-4	Tetrachloroethene	1.0		U
142-28-9	1,3-Dichloropropane	1.0		U
591-78-6	2-Hexanone	2.0		U
124-48-1	Dibromochloromethane	1.0		U
106-93-4	1,2-Dibromoethane	1.0		U
108-90-7	Chlorobenzene	1.0		U
630-20-6	1,1,1,2-Tetrachloroethane	1.0		U
100-41-4	Ethylbenzene	1.0		U
179601-23-1	Xylene (para & meta)	2.0		U
95-47-6	Xylene (Ortho)	1.0		U
100-42-5	Styrene	1.0		U
75-25-2	Bromoform	1.0		U
98-82-8	Isopropylbenzene	1.0		U
108-86-1	Bromobenzene	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	1.0		U
96-18-4	1,2,3-Trichloropropane	5.0		U
103-65-1	n-Propylbenzene	1.0		U
110-57-6	trans-1,4-Dichloro-2-butene	2.0		U
95-49-8	2-Chlorotoluene	1.0		U
106-43-4	4-Chlorotoluene	1.0		U
108-67-8	1,3,5-Trimethylbenzene	1.0		U
98-06-6	tert-Butylbenzene	1.0		U
95-63-6	1,2,4-Trimethylbenzene	1.0		U
135-98-8	sec-Butylbenzene	1.0		U
541-73-1	1,3-Dichlorobenzene	1.0		U
99-87-6	4-Isopropyltoluene	1.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	FB	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0008	Project:		
Lab File ID:	T4985.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 6:03:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
106-46-7	1,4-Dichlorobenzene	1.0		U
95-50-1	1,2-Dichlorobenzene	1.0		U
104-51-8	n-Butylbenzene	1.0		U
67-72-1	Hexachloroethane	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	5.0		U
98-95-3	Nitrobenzene	50		U
120-82-1	1,2,4-Trichlorobenzene	1.0		U
87-68-3	Hexachlorobutadiene	1.0		U
91-20-3	Naphthalene	1.0		U
87-61-6	1,2,3-Trichlorobenzene	1.0		U
Qualifier Definitions U = Undetected B = Compound detected in method blank E = Estimated value J = Estimated concentration. D = Dilution				

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	TB	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0009	Project:		
Lab File ID:	T4984.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 5:29:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-71-8	Dichlorodifluoromethane	1.0		U
74-87-3	Chloromethane	5.0		U
75-01-4	Vinyl chloride	5.0		U
74-83-9	Bromomethane	5.0		U
75-00-3	Chloroethane	5.0		U
75-69-4	Trichlorofluoromethane	1.0		U
107-02-8	Acrolein	20		U
76-13-1	Freon 113(1,1,2-Trichlorofluoroethane)	5.0		U
75-35-4	1,1-Dichloroethene	5.0		U
67-64-1	Acetone	10		U
75-15-0	Carbon disulfide	1.0		U
75-05-8	Acetonitrile	50		U
75-09-2	Methylene chloride	5.0		U
75-65-0	tert-Butyl Alcohol	20		U
156-60-5	trans-1,2-Dichloroethene	5.0		U
1634-04-4	Methyl-tert butyl ether	5.0		U
107-13-1	Acrylonitrile	10		U
75-34-3	1,1-Dichloroethane	1.0		U
108-05-4	Vinyl acetate	2.0		U
594-20-7	2,2-Dichloropropane	1.0		U
156-59-2	cis-1,2-Dichloroethene	5.0		U
78-93-3	2-Butanone	10		U
74-97-5	Bromochloromethane	5.0		U
109-99-9	Tetrahydrofuran	10		U
67-66-3	Chloroform	1.0		U
71-55-6	1,1,1-Trichloroethane	1.0		U
56-23-5	Carbon tetrachloride	5.0		U
563-58-6	1,1-Dichloropropene	1.0		U
71-43-2	Benzene	1.0		U
107-06-2	1,2-Dichloroethane	1.0		U
79-01-6	Trichloroethene	1.0		U
78-87-5	1,2-Dichloropropane	1.0		U
74-95-3	Dibromomethane	5.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	TB	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0009	Project:		
Lab File ID:	T4984.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 5:29:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-27-4	Bromodichloromethane	1.0		U
110-75-8	2-Chloroethyl vinyl ether	10		U
10061-01-5	cis-1,3-Dichloropropene	1.0		U
108-10-1	4-Methyl-2-pentanone	2.0		U
108-88-3	Toluene	1.0		U
10061-02-6	trans-1,3-Dichloropropene	1.0		U
79-00-5	1,1,2-Trichloroethane	5.0		U
127-18-4	Tetrachloroethene	1.0		U
142-28-9	1,3-Dichloropropane	1.0		U
591-78-6	2-Hexanone	2.0		U
124-48-1	Dibromochloromethane	1.0		U
106-93-4	1,2-Dibromoethane	1.0		U
108-90-7	Chlorobenzene	1.0		U
630-20-6	1,1,1,2-Tetrachloroethane	1.0		U
100-41-4	Ethylbenzene	1.0		U
179601-23-1	Xylene (para & meta)	2.0		U
95-47-6	Xylene (Ortho)	1.0		U
100-42-5	Styrene	1.0		U
75-25-2	Bromoform	1.0		U
98-82-8	Isopropylbenzene	1.0		U
108-86-1	Bromobenzene	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	1.0		U
96-18-4	1,2,3-Trichloropropane	5.0		U
103-65-1	n-Propylbenzene	1.0		U
110-57-6	trans-1,4-Dichloro-2-butene	2.0		U
95-49-8	2-Chlorotoluene	1.0		U
106-43-4	4-Chlorotoluene	1.0		U
108-67-8	1,3,5-Trimethylbenzene	1.0		U
98-06-6	tert-Butylbenzene	1.0		U
95-63-6	1,2,4-Trimethylbenzene	1.0		U
135-98-8	sec-Butylbenzene	1.0		U
541-73-1	1,3-Dichlorobenzene	1.0		U
99-87-6	4-Isopropyltoluene	1.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	TB	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	011401866-0009	Project:		
Lab File ID:	T4984.D	Sample Matrix:	Waste Water	
Instrument ID:	VOA MSD-T	Sampling Date:	4/16/2014	
Analyst:	WRF	Analysis Date	4/25/2014 5:29:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
106-46-7	1,4-Dichlorobenzene	1.0		U
95-50-1	1,2-Dichlorobenzene	1.0		U
104-51-8	n-Butylbenzene	1.0		U
67-72-1	Hexachloroethane	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	5.0		U
98-95-3	Nitrobenzene	50		U
120-82-1	1,2,4-Trichlorobenzene	1.0		U
87-68-3	Hexachlorobutadiene	1.0		U
91-20-3	Naphthalene	1.0		U
87-61-6	1,2,3-Trichlorobenzene	1.0		U
Qualifier Definitions U = Undetected B = Compound detected in method blank E = Estimated value J = Estimated concentration. D = Dilution				

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	VBLK01	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	Project:			
Lab File ID:	T4983.D	Sample Matrix:	Water	
Instrument ID:	VOA MSD-T	Sampling Date:	12:00:00 AM	
Analyst:	WRF	Analysis Date	4/25/2014 4:55:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
75-71-8	Dichlorodifluoromethane	1.0		U
74-87-3	Chloromethane	1.0		U
75-01-4	Vinyl chloride	1.0		U
74-83-9	Bromomethane	5.0		U
75-00-3	Chloroethane	5.0		U
75-69-4	Trichlorofluoromethane	1.0		U
107-02-8	Acrolein	20		U
76-13-1	Freon 113(1,1,2-Trichlorofluoroethane)	1.0		U
75-35-4	1,1-Dichloroethene	5.0		U
67-64-1	Acetone	10		U
75-15-0	Carbon disulfide	1.0		U
75-05-8	Acetonitrile	10		U
75-09-2	Methylene chloride	2.0		U
75-65-0	tert-Butyl Alcohol	10		U
156-60-5	trans-1,2-Dichloroethene	1.0		U
1634-04-4	Methyl-tert butyl ether	1.0		U
107-13-1	Acrylonitrile	2.0		U
75-34-3	1,1-Dichloroethane	1.0		U
108-05-4	Vinyl acetate	1.0		U
594-20-7	2,2-Dichloropropane	1.0		U
156-59-2	cis-1,2-Dichloroethene	1.0		U
78-93-3	2-Butanone	10		U
74-97-5	Bromochloromethane	1.0		U
67-66-3	Chloroform	1.0		U
71-55-6	1,1,1-Trichloroethane	1.0		U
56-23-5	Carbon tetrachloride	1.0		U
563-58-6	1,1-Dichloropropene	1.0		U
71-43-2	Benzene	1.0		U
107-06-2	1,2-Dichloroethane	1.0		U
79-01-6	Trichloroethene	1.0		U
78-87-5	1,2-Dichloropropane	1.0		U
74-95-3	Dibromomethane	1.0		U
75-27-4	Bromodichloromethane	1.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	VBLK01	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:		Project:		
Lab File ID:	T4983.D	Sample Matrix:	Water	
Instrument ID:	VOA MSD-T	Sampling Date:	12:00:00 AM	
Analyst:	WRF	Analysis Date	4/25/2014 4:55:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
110-75-8	2-Chloroethyl vinyl ether	2.0		U
10061-01-5	cis-1,3-Dichloropropene	1.0		U
108-10-1	4-Methyl-2-pentanone	10		U
108-88-3	Toluene	1.0		U
10061-02-6	trans-1,3-Dichloropropene	1.0		U
79-00-5	1,1,2-Trichloroethane	1.0		U
127-18-4	Tetrachloroethene	1.0		U
142-28-9	1,3-Dichloropropane	1.0		U
591-78-6	2-Hexanone	10		U
124-48-1	Dibromochloromethane	1.0		U
106-93-4	1,2-Dibromoethane	1.0		U
108-90-7	Chlorobenzene	1.0		U
630-20-6	1,1,1,2-Tetrachloroethane	1.0		U
100-41-4	Ethylbenzene	1.0		U
179601-23-1	Xylene (para & meta)	2.0		U
95-47-6	Xylene (Ortho)	1.0		U
100-42-5	Styrene	1.0		U
75-25-2	Bromoform	1.0		U
98-82-8	Isopropylbenzene	1.0		U
108-86-1	Bromobenzene	1.0		U
79-34-5	1,1,2,2-Tetrachloroethane	1.0		U
96-18-4	1,2,3-Trichloropropane	5.0		U
103-65-1	n-Propylbenzene	1.0		U
110-57-6	trans-1,4-Dichloro-2-butene	2.0		U
95-49-8	2-Chlorotoluene	1.0		U
106-43-4	4-Chlorotoluene	1.0		U
108-67-8	1,3,5-Trimethylbenzene	1.0		U
98-06-6	tert-Butylbenzene	1.0		U
95-63-6	1,2,4-Trimethylbenzene	1.0		U
135-98-8	sec-Butylbenzene	1.0		U
541-73-1	1,3-Dichlorobenzene	1.0		U
99-87-6	4-Isopropyltoluene	1.0		U
106-46-7	1,4-Dichlorobenzene	1.0		U

EMSL Analytical Inc.

VOLATILE ORGANICS ANALYSIS DATA SHEET

		Customer Sample#:	VBLK01	
Lab Name:	EMSL ANALYTICAL			
EMSL Sample ID:	Project:			
Lab File ID:	T4983.D	Sample Matrix:	Water	
Instrument ID:	VOA MSD-T	Sampling Date:	12:00:00 AM	
Analyst:	WRF	Analysis Date	4/25/2014 4:55:00 PM	
GC Column:	RTX-VMS (0.25 mm)	Level (low/med):	LOW	
Sample wt/vol:	5 ML	Nominal Amount:	5 ML	
Dilution Factor:	1	Method:	SW846 8260C	
Heated Purge (Y/N):	N			
CAS NO	COMPOUND	Report Limit (µg/L)	CONC. (µg/L)	Q
95-50-1	1,2-Dichlorobenzene	1.0		U
104-51-8	n-Butylbenzene	1.0		U
67-72-1	Hexachloroethane	1.0		U
96-12-8	1,2-Dibromo-3-chloropropane	5.0		U
98-95-3	Nitrobenzene	10		U
120-82-1	1,2,4-Trichlorobenzene	1.0		U
87-68-3	Hexachlorobutadiene	1.0		U
91-20-3	Naphthalene	1.0		U
87-61-6	1,2,3-Trichlorobenzene	1.0		U
79-20-9	Methyl Acetate	2.0		U
Qualifier Definitions U = Undetected B = Compound detected in method blank E = Estimated value J = Estimated concentration. D = Dilution				

VOLATILE METHOD BLANK SUMMARY

Sample List Name	042514T8				
Lab Name:	EMSL ANALYTICAL	Lab FileID:	T4983.D		
EMSL Sample:	METHOD BLANK	Analysis Date	4/25/2014 4:55:00 PM		
Heated Purge (Y/N):	N	Sample Matrix:	Water		
THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:					
	Lab Sample ID	Customer Sample No	LAB FILE ID	Analysis Time	Sample Type
1	VSTD050	LCS001	T4981.D	04/25/14 15:47	Lab Control Sample
2	401866-9 8260C	TB	T4984.D	04/25/14 17:29	Sample
3	401866-8 8260C	FB	T4985.D	04/25/14 18:03	Sample
4	401866-1 8260C	MW-6S	T4986.D	04/25/14 18:37	Sample
5	401866-2 8260C	MW-9S	T4987.D	04/25/14 19:11	Sample
6	401866-5 8260C	MW-9 Dup	T4988.D	04/25/14 19:45	Sample
7	401866-6 8260C	MW-13R	T4989.D	04/25/14 20:19	Sample
8	401866-7 8260C	DP-103R	T4990.D	04/25/14 20:53	Sample
9	401866-3MS	MW-9S MS	T4991.D	04/25/14 21:27	Matrix Spike
10	401866-4MSD	MW-9S MSD	T4992.D	04/25/14 22:01	Matrix Spike Duplicate

EMSL Analytical Inc.

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name:		EMSL ANALYTICAL				
* : Values outside of QC limits						
D: System Monitoring Compound diluted out						
Compound Name:		DBFM	DCE	TLD8	BFB	Total Out
CAS #:						
QC Limits:		(77-120)	(58-127)	(68-125)	(49-140)	
401866-4MSD	04/25/14 22:01	112	118	107	98	0
METHOD BLANK	04/25/14 16:55	101	97	100	91	0
401866-9 8260C	04/25/14 17:29	98	98	94	93	0
401866-8 8260C	04/25/14 18:03	98	99	99	93	0
401866-1 8260C	04/25/14 18:37	95	81	101	87	0
401866-2 8260C	04/25/14 19:11	103	103	99	91	0
401866-5 8260C	04/25/14 19:45	103	101	100	90	0
401866-6 8260C	04/25/14 20:19	114	127	106	94	0
401866-7 8260C	04/25/14 20:53	106	106	99	90	0
401866-3MS	04/25/14 21:27	106	108	101	98	0
DBFM=Dibromofluoromethane DCE=1,2-Dichloroethane-d4 TLD8=Toluene-d8 BFB=4-Bromofluorobenzene						

EMSL Analytical Inc.

WATER VOLATILE LCS/QCS/ LFB RECOVERY

	Lab Name:	EMSL ANALYTICAL		Original	VSTD050		
				File ID:	T4983.D/T4981.D		
	* : Values outside of QC						
	COMPOUND	CAS NO	LOW LIMIT	HIGH LIMIT	SPIKE ADDED	LCS CONC.	LCS REC%
1	Dichlorodifluoromethane	75-71-8	48	152	54.000	64.340	119
2	Chloromethane	74-87-3	46	124	49.000	60.990	124 *
3	Vinyl chloride	75-01-4	78	122	52.000	50.210	97
4	Bromomethane	74-83-9	50	150	53.000	41.930	79
5	Chloroethane	75-00-3	61	139	52.000	56.650	109
6	Trichlorofluoromethane	75-69-4	79	121	52.000	56.650	109
7	Acrolein	107-02-8	69	131	208.00	186.67	90
8	1,1-Dichloroethene	75-35-4	64	136	52.000	59.160	114
9	Acetone	67-64-1	15	185	81.000	92.110	114
10	Carbon disulfide	75-15-0	64	136	51.000	70.910	139 *
11	Acetonitrile	75-05-8	77	123	490.00	429.35	88
12	Methylene chloride	75-09-2	64	136	49.000	56.320	115
13	tert-Butyl Alcohol	75-65-0	61	139	102.00	100.24	98
14	trans-1,2-Dichloroethene	156-60-5	74	126	51.000	58.320	114
15	Methyl-tert butyl ether	1634-04-4	84	116	48.000	51.720	108
16	Acrylonitrile	107-13-1	80	120	100.00	97.970	98
17	1,1-Dichloroethane	75-34-3	86	114	51.000	51.070	100
18	Vinyl acetate	108-05-4	90	110	97.000	91.230	94
19	2,2-Dichloropropane	594-20-7	83	117	52.000	53.040	102
20	cis-1,2-Dichloroethene	156-59-2	85	115	52.000	56.310	108
21	2-Butanone	78-93-3	76	124	96.000	86.850	90
22	Bromochloromethane	74-97-5	74	126	48.000	52.820	110
23	Chloroform	67-66-3	87	113	50.000	52.210	104
24	1,1,1-Trichloroethane	71-55-6	82	118	49.000	53.180	109
25	Carbon tetrachloride	56-23-5	80	120	50.000	53.100	106
26	1,1-Dichloropropene	563-58-6	78	122	49.000	53.160	108
27	Benzene	71-43-2	85	115	48.000	49.820	104
28	1,2-Dichloroethane	107-06-2	80	120	50.000	51.360	103
29	Trichloroethene	79-01-6	83	117	48.000	53.800	112
30	1,2-Dichloropropane	78-87-5	87	113	49.000	46.060	94
31	Dibromomethane	74-95-3	84	116	50.000	53.170	106
32	Bromodichloromethane	75-27-4	84	116	49.000	51.870	106
33	2-Chloroethyl vinyl ether	110-75-8	35	165	99.000	98.200	99
34	cis-1,3-Dichloropropene	10061-01-5	92	108	48.000	49.250	103
35	4-Methyl-2-pentanone	108-10-1	82	118	98.000	91.370	93
36	Toluene	108-88-3	82	118	48.000	51.950	108
37	trans-1,3-Dichloropropene	10061-02-6	82	118	49.000	48.760	100
38	1,1,2-Trichloroethane	79-00-5	88	112	49.000	49.390	101
39	Tetrachloroethene	127-18-4	83	117	50.000	58.800	118 *

Printed: 05/02/14 03:43:18 PM

FORM III VOA 1

1 of

SampleList: 042514T8

ERM: K:\EMSL_ENV\ERMS\VOAERMS\8260ERMS\AQQA2014.erm Page 36 of 40

Page 36 of 40

EMSL Analytical Inc.

WATER VOLATILE LCS/QCS/ LFB RECOVERY

	Lab Name:	EMSL ANALYTICAL		Original	VSTD050		
				File ID:	T4983.D/T4981.D		
* : Values outside of QC							
	COMPOUND	CAS NO	LOW LIMIT	HIGH LIMIT	SPIKE ADDED	LCS CONC.	LCS REC%
40	1,3-Dichloropropane	142-28-9	81	119	48.000	48.910	102
41	2-Hexanone	591-78-6	73	127	97.000	89.150	92
42	Dibromochloromethane	124-48-1	80	120	49.000	54.810	112
43	1,2-Dibromoethane	106-93-4	78	122	48.000	53.300	111
44	Chlorobenzene	108-90-7	86	114	49.000	49.890	102
45	1,1,1,2-Tetrachloroethane	630-20-6	80	120	49.000	51.200	104
46	Ethylbenzene	100-41-4	90	110	49.000	47.460	97
47	Xylene (para & meta)	179601-23-	88	112	98.000	99.680	102
48	Xylene (Ortho)	95-47-6	84	116	47.000	50.400	107
49	Styrene	100-42-5	86	114	49.000	49.620	101
50	Bromoform	75-25-2	87	113	49.000	50.990	104
51	Isopropylbenzene	98-82-8	84	116	49.000	48.130	98
52	Bromobenzene	108-86-1	77	123	47.000	52.430	112
53	1,1,2,2-Tetrachloroethane	79-34-5	83	117	47.000	45.560	97
54	1,2,3-Trichloropropane	96-18-4	82	118	48.000	49.870	104
55	n-Propylbenzene	103-65-1	88	112	49.000	48.030	98
56	trans-1,4-Dichloro-2-buten	110-57-6	86	114	51.000	46.020	90
57	2-Chlorotoluene	95-49-8	87	113	49.000	48.120	98
58	4-Chlorotoluene	106-43-4	85	115	49.000	47.150	96
59	1,3,5-Trimethylbenzene	108-67-8	89	111	49.000	48.690	99
60	tert-Butylbenzene	98-06-6	86	114	47.000	49.400	105
61	1,2,4-Trimethylbenzene	95-63-6	82	118	49.000	49.310	101
62	sec-Butylbenzene	135-98-8	90	110	49.000	48.320	99
63	1,3-Dichlorobenzene	541-73-1	87	113	48.000	53.010	110
64	4-Isopropyltoluene	99-87-6	89	111	49.000	49.120	100
65	1,4-Dichlorobenzene	106-46-7	80	120	49.000	52.370	107
66	1,2-Dichlorobenzene	95-50-1	76	124	48.000	50.490	105
67	n-Butylbenzene	104-51-8	85	115	51.000	45.870	90
68	Hexachloroethane	67-72-1	71	129	50.000	48.600	97
69	1,2-Dibromo-3-chloroprop	96-12-8	84	116	50.000	47.500	95
70	Nitrobenzene	98-95-3	71	129	475.00	472.13	99
71	1,2,4-Trichlorobenzene	120-82-1	75	125	49.000	55.190	113
72	Hexachlorobutadiene	87-68-3	78	122	50.000	51.370	103
73	Naphthalene	91-20-3	77	123	48.000	52.330	109
74	1,2,3-Trichlorobenzene	87-61-6	76	124	48.000	53.540	112
75	Methyl Acetate	79-20-9	73	127	102.00	81.890	80
Total Out							3 of 75

EMSL Analytical Inc.

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:		EMSL ANALYTICAL		Original		401866-3MS							
				File ID:		T4987.D/T4991.D/T4992.D							
* : Values outside of QC													
	COMPOUND	CAS NO	LOW LIMIT	HIGH LIMIT	RPD LIMIT	SAMPLE CONC.	MS SPIKE ADDED	MS CONC.	MS REC%	MSD SPIKE ADDED	MSD CONC.	MSD REC%	RPD %
1	Dichlorodifluoromethane	75-71-8	63	120	20	0.0000	54.000	56.870	105	54.000	57.520	107	1
2	Chloromethane	74-87-3	66	127	20	0.0000	49.000	49.440	101	49.000	50.790	104	3
3	Vinyl chloride	75-01-4	74	122	20	0.0000	52.000	28.120	54 *	52.000	30.580	59 *	8
4	Bromomethane	74-83-9	69	133	20	0.0000	53.000	37.610	71	53.000	41.430	78	10
5	Chloroethane	75-00-3	66	151	20	0.0000	52.000	54.200	104	52.000	54.130	104	0
6	Trichlorofluoromethane	75-69-4	74	123	20	0.0000	52.000	54.000	104	52.000	55.990	108	4
7	Acrolein	107-02-8	69	156	20	0.0000	208.00	180.71	87	208.00	206.65	99	13
8	1,1-Dichloroethene	75-35-4	81	122	14	0.0000	52.000	57.170	110	52.000	59.130	114	3
9	Acetone	67-64-1	50	113	20	0.0000	81.000	79.210	98	81.000	87.100	108	9
10	Carbon disulfide	75-15-0	60	126	20	0.0000	51.000	67.090	132 *	51.000	70.610	138 *	5
11	Acetonitrile	75-05-8	250	750	0	0.0000	490.00	368.02	75 *	490.00	385.76	79 *	5 *
12	Methylene chloride	75-09-2	77	114	20	0.0000	49.000	52.190	107	49.000	54.710	112	5
13	tert-Butyl Alcohol	75-65-0	74	132	20	0.0000	102.00	90.350	89	102.00	100.52	99	11
14	trans-1,2-Dichloroethene	156-60-5	80	119	20	0.0000	51.000	57.830	113	51.000	58.090	114	0
15	Methyl-tert butyl ether	1634-04-4	81	122	20	0.0000	48.000	50.970	106	48.000	56.630	118	11
16	Acrylonitrile	107-13-1	82	124	20	0.0000	100.00	90.330	90	100.00	93.480	93	3
17	1,1-Dichloroethane	75-34-3	85	120	20	0.0000	51.000	50.170	98	51.000	52.010	102	4
18	Vinyl acetate	108-05-4	71	161	20	0.0000	97.000	80.130	83	97.000	83.100	86	4
19	2,2-Dichloropropane	594-20-7	83	124	20	0.0000	52.000	53.440	103	52.000	54.630	105	2
20	cis-1,2-Dichloroethene	156-59-2	85	119	20	0.0000	52.000	55.530	107	52.000	57.340	110	3
21	2-Butanone	78-93-3	52	128	20	0.0000	96.000	75.690	79	96.000	81.810	85	8
22	Bromochloromethane	74-97-5	81	119	20	0.0000	48.000	54.210	113	48.000	57.360	120 *	6
23	Chloroform	67-66-3	86	119	20	0.0000	50.000	51.870	104	50.000	54.750	110	5
24	1,1,1-Trichloroethane	71-55-6	86	120	20	0.0000	49.000	55.240	113	49.000	57.890	118	5
25	Carbon tetrachloride	56-23-5	86	125	20	0.0000	50.000	62.720	125 *	50.000	64.740	129 *	3
26	1,1-Dichloropropene	563-58-6	82	121	20	0.0000	49.000	50.900	104	49.000	52.990	108	4

Printed: 05/02/14 03:43:58 PM

FORM III VOA_1

1 of

SampleList: 042514T8

ERM: K:\EMSL_ENV\ERMS\VOAERMS\8260ERMS\AQQA2014.erm

EMSL Analytical Inc.

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

	Lab Name:	EMSL ANALYTICAL	Original			401866-3MS							
			File ID:			T4987.D/T4991.D/T4992.D							
* : Values outside of QC													
	COMPOUND	CAS NO	LOW LIMIT	HIGH LIMIT	RPD LIMIT	SAMPLE CONC.	MS SPIKE ADDED	MS CONC.	MS REC%	MSD SPIKE ADDED	MSD CONC.	MSD REC%	RPD %
27	Benzene	71-43-2	82	117	11	0.0000	48.000	46.280	96	48.000	48.260	101	4
28	1,2-Dichloroethane	107-06-2	84	121	20	0.0000	50.000	55.100	110	50.000	58.580	117	6
29	Trichloroethene	79-01-6	85	118	14	0.0000	48.000	52.090	109	48.000	53.120	111	2
30	1,2-Dichloropropane	78-87-5	86	121	20	0.0000	49.000	44.560	91	49.000	44.990	92	1
31	Dibromomethane	74-95-3	86	118	20	0.0000	50.000	53.930	108	50.000	58.210	116	8
32	Bromodichloromethane	75-27-4	90	123	20	0.0000	49.000	52.210	107	49.000	58.100	119	11
33	2-Chloroethyl vinyl ether	110-75-8	87	124	20	0.0000	99.000	0.0000	0 *	99.000	0.0000	0 *	0
34	cis-1,3-Dichloropropene	10061-01-5	88	125	20	0.0000	48.000	43.430	90	48.000	49.670	103	13
35	4-Methyl-2-pentanone	108-10-1	71	128	20	0.0000	98.000	81.790	83	98.000	85.440	87	4
36	Toluene	108-88-3	74	116	13	0.0000	48.000	48.170	100	48.000	50.790	106	5
37	trans-1,3-Dichloropropene	10061-02-6	71	127	20	0.0000	49.000	47.700	97	49.000	53.300	109	11
38	1,1,2-Trichloroethane	79-00-5	72	121	14	0.0000	49.000	45.280	92	49.000	51.100	104	12
39	Tetrachloroethene	127-18-4	66	119	20	0.0000	50.000	56.150	112	50.000	57.780	116	3
40	1,3-Dichloropropane	142-28-9	67	120	20	0.0000	48.000	45.600	95	48.000	51.550	107	12
41	2-Hexanone	591-78-6	77	127	20	0.0000	97.000	80.080	83	97.000	87.320	90	9
42	Dibromochloromethane	124-48-1	74	128	20	0.0000	49.000	53.840	110	49.000	61.400	125	13
43	1,2-Dibromoethane	106-93-4	62	121	20	0.0000	48.000	51.660	108	48.000	59.340	124 *	14
44	Chlorobenzene	108-90-7	72	120	13	0.0000	49.000	48.420	99	49.000	45.690	93	6
45	1,1,1,2-Tetrachloroethane	630-20-6	77	125	20	0.0000	49.000	53.540	109	49.000	53.370	109	0
46	Ethylbenzene	100-41-4	77	121	20	0.0000	49.000	46.670	95	49.000	45.420	93	3
47	Xylene (para & meta)	179601-23-	73	127	20	0.0000	98.000	95.890	98	98.000	90.510	92	6
48	Xylene (Ortho)	95-47-6	79	126	20	0.0000	47.000	50.410	107	47.000	47.340	101	6
49	Styrene	100-42-5	74	132	20	0.0000	49.000	45.220	92	49.000	43.400	89	4
50	Bromoform	75-25-2	71	131	20	0.0000	49.000	50.430	103	49.000	53.940	110	7
51	Isopropylbenzene	98-82-8	72	121	20	0.0000	49.000	47.750	97	49.000	46.750	95	2
52	Bromobenzene	108-86-1	73	122	20	0.0000	47.000	53.460	114	47.000	52.370	111	2

Printed: 05/02/14 03:43:58 PM

FORM III VOA_1

2 of

SampleList: 042514T8

ERM: K:\EMSL_ENV\ERMS\VOAERMS\8260ERMS\AQQA2014.erm

EMSL Analytical Inc.

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

	Lab Name:	EMSL ANALYTICAL		Original		401866-3MS							
				File ID:		T4987.D/T4991.D/T4992.D							
* : Values outside of QC													
	COMPOUND	CAS NO	LOW LIMIT	HIGH LIMIT	RPD LIMIT	SAMPLE CONC.	MS SPIKE ADDED	MS CONC.	MS REC%	MSD SPIKE ADDED	MSD CONC.	MSD REC%	RPD %
53	1,1,2,2-Tetrachloroethane	79-34-5	77	123	20	0.0000	47.000	44.900	96	47.000	45.720	97	2
54	1,2,3-Trichloropropane	96-18-4	75	128	20	0.0000	48.000	51.960	108	48.000	53.630	112	3
55	n-Propylbenzene	103-65-1	77	127	20	0.0000	49.000	45.390	93	49.000	43.740	89	4
56	trans-1,4-Dichloro-2-buten	110-57-6	71	135	20	0.0000	51.000	43.980	86	51.000	46.090	90	5
57	2-Chlorotoluene	95-49-8	63	124	20	0.0000	49.000	46.040	94	49.000	44.400	91	4
58	4-Chlorotoluene	106-43-4	61	126	20	0.0000	49.000	46.640	95	49.000	44.120	90	6
59	1,3,5-Trimethylbenzene	108-67-8	68	128	20	0.0000	49.000	48.960	100	49.000	45.550	93	7
60	tert-Butylbenzene	98-06-6	66	119	20	0.0000	47.000	47.540	101	47.000	46.930	100	1
61	1,2,4-Trimethylbenzene	95-63-6	68	128	20	0.0000	49.000	48.500	99	49.000	45.520	93	6
62	sec-Butylbenzene	135-98-8	68	128	20	0.0000	49.000	46.920	96	49.000	45.360	93	3
63	1,3-Dichlorobenzene	541-73-1	60	127	20	0.0000	48.000	50.130	104	48.000	49.850	104	1
64	4-Isopropyltoluene	99-87-6	64	131	20	0.0000	49.000	46.670	95	49.000	45.360	93	3
65	1,4-Dichlorobenzene	106-46-7	60	126	20	0.0000	49.000	51.250	105	49.000	50.490	103	1
66	1,2-Dichlorobenzene	95-50-1	66	119	20	0.0000	48.000	50.270	105	48.000	49.860	104	1
67	n-Butylbenzene	104-51-8	60	128	20	0.0000	51.000	41.230	81	51.000	42.100	83	2
68	Hexachloroethane	67-72-1	66	136	20	0.0000	50.000	56.300	113	50.000	56.940	114	1
69	1,2-Dibromo-3-chloroprop	96-12-8	68	137	20	0.0000	50.000	47.840	96	50.000	50.840	102	6
70	Nitrobenzene	98-95-3	200	600	0	0.0000	475.00	463.08	97 *	475.00	514.80	108 *	11 *
71	1,2,4-Trichlorobenzene	120-82-1	65	126	20	0.0000	49.000	49.770	102	49.000	51.330	105	3
72	Hexachlorobutadiene	87-68-3	66	127	20	0.0000	50.000	51.030	102	50.000	52.280	105	2
73	Naphthalene	91-20-3	67	121	20	0.0000	48.000	51.940	108	48.000	54.650	114	5
74	1,2,3-Trichlorobenzene	87-61-6	67	122	20	0.0000	48.000	51.430	107	48.000	53.530	112	4
75	Methyl Acetate	79-20-9	74	126	20	0.0000	102.00	70.720	69 *	102.00	70.140	69 *	1
Total Out									7 of 75			9 of 75	2 of 75