

AR0021750

2nd QTR

May 5, 2015
Control No. 189843
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City of Fort Smith
ATTN: Mr. Lance McAvoy
3900 Kelley Highway
Fort Smith, AR 72904

This report contains the analytical results and supporting information for samples submitted on April 23, 2015. Attached please find a copy of the Chain of Custody and/or other documents received. Note that any remaining sample will be discarded two weeks from the original report date unless other arrangements are made.

This report is intended for the sole use of the client listed above. Assessment of the data requires access to the entire document.

This report has been reviewed by the Laboratory Director or a qualified designee.

John Overbey
Laboratory Director

This document has been distributed to the following:

PDF cc: City of Fort Smith
ATTN: Mr. Lance McAvoy
lmavoy@fortsmithar.gov

City of Fort Smith
3900 Kelley Highway
Fort Smith, AR 72904

SAMPLE INFORMATION

Project Description:

Ten (10) water and one (1) sludge sample(s) received on April 23, 2015
Massard Table II / III Priority Pollutants

Receipt Details:

A Chain of Custody was provided. The samples were delivered in two (2) ice chests.
Ice chest #1 was delivered with a custody seal intact and signed with shipping documentation.
Ice chest #2 was delivered with a custody seal intact and signed with shipping documentation.

Each sample container was checked for proper labeling, including date and time sampled. Sample containers were reviewed for proper type, adequate volume, integrity, temperature, preservation, and holding times. Any exceptions are noted below:

Sample Identification:

Laboratory ID	Client Sample ID	Sampled Date/Time	Notes
189843-1	Massard Influent	21-Apr-2015 1800	
189843-2	Massard Influent	21-Apr-2015 2154	
189843-3	Massard Raw Biosolid	21-Apr-2015 1214	
189843-4	Massard Effluent	21-Apr-2015 1808	
189843-5	Massard Effluent	22-Apr-2015 0800	

Qualifiers:

- D Result is from a secondary dilution factor
- Q Analyte is not within quality control limits
- R n-Nitrosodiphenylamine cannot be separated from diphenylamine
- X Spiking level is invalid due to the high concentration of analyte in the spiked sample

Case Narrative:

Matrix spike for batch B9483 was not performed on any sample associated with AIC Control No. 189843.

Equivalent composite of (4) samples was prepared for Control Numbers 189843-1 and 189843-4.
High recoveries for the Base/Neutral and Acid Surrogates, Terphenyl-D14 and Nitrobenzene-D5, and Pyrene in the Base/Neutral and Acid matrix spike are due to matrix interference. Elevated reporting limits for organochlorine pesticides and the organochlorine pesticides matrix spike/ matrix spike duplicate are not available due to matrix interference.

Analysis of soils/sludges are reported on a dry-weight basis unless specified.

References:

- "Methods for Chemical Analysis of Water and Wastes", EPA/600/4-79-020 (Mar 1983) with updates and supplements EPA/600/5-91-010 (Jun 1991), EPA/600/R-92-129 (Aug 1992) and EPA/600/R-93-100 (Aug 1993).
- "Test Methods for Evaluating Solid Waste Physical/Chemical Methods (SW846)", Third Edition.
- "Standard Methods for the Examination of Water and Wastewaters", (SM).
- "American Society for Testing and Materials" (ASTM).
- "Association of Analytical Chemists" (AOAC).

City of Fort Smith
3900 Kelley Highway
Fort Smith, AR 72904

ANALYTICAL RESULTS

AIC No. 189843-1

Sample Identification: Massard Influent 21-Apr-2015 1800

<u>Analyte</u>	<u>Result</u>	<u>RL</u>	<u>Units</u>	<u>Qualifier</u>
Total Recoverable Phenolics EPA 420.1	35	5	ug/l	
Prep: 27-Apr-2015 0805 by 308	Analyzed: 27-Apr-2015 1130 by 308		Batch: W51727	
Total Cyanide SM 4500-CN C,E 1999	< 10	10	ug/l	
Prep: 24-Apr-2015 0843 by 308	Analyzed: 24-Apr-2015 1457 by 308		Batch: W51711	
Volatile Organic Compounds By EPA 624				
Acrolein EPA 624	< 50	50	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Acrylonitrile EPA 624	< 20	20	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Benzene EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Bromoform EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Carbon tetrachloride EPA 624	< 2.0	2.0	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Chlorobenzene EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Chlorodibromomethane EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Chloroethane EPA 624	< 50	50	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
2-Chloroethyl vinyl ether EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Chloroform EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
1,2-Dichlorobenzene EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
1,3-Dichlorobenzene EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
1,4-Dichlorobenzene EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Dichlorobromomethane EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
1,1-Dichloroethane EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
1,2-Dichloroethane EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
1,1-Dichloroethylene EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
trans-1,2-Dichloroethylene EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	



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ANALYTICAL RESULTS

AIC No. 189843-1 (Continued)

Sample Identification: Massard Influent 21-Apr-2015 1800

Analyte	Result	RL	Units	Qualifier
Volatile Organic Compounds By EPA 624 (Continued)				
1,2-Dichloropropane EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
1,3-Dichloropropylene EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Ethylbenzene EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Methyl bromide(Bromomethane) EPA 624	< 50	50	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Methyl chloride(Chloromethane) EPA 624	< 50	50	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Methylene chloride EPA 624	< 20	20	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
1,1,2,2-Tetrachloroethane EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Tetrachloroethylene EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Toluene EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
1,1,1-Trichloroethane EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
1,1,2-Trichloroethane EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Trichloroethylene EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Vinyl chloride EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Surrogate: 4-Bromofluorobenzene (75.0-120%) EPA 624	97.9		%	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Surrogate: Dibromofluoromethane (85.0-115%) EPA 624	96.1		%	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	
Surrogate: Toluene-D8 (85.0-120%) EPA 624	100		%	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0605 by 301		Batch: V8742	

AIC No. 189843-2

Sample Identification: Massard Influent 21-Apr-2015 2154

Analyte	Result	RL	Units	Qualifier
Mercury, low level EPA 245.7	0.087	0.0050	ug/l	
Prep: 27-Apr-2015 1225 by 302	Analyzed: 27-Apr-2015 1452 by 302		Batch: S38818	
Total Recoverable Antimony EPA 200.8	< 60	60	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1535 by 235		Batch: S38802	

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ANALYTICAL RESULTS

AIC No. 189843-2 (Continued)

Sample Identification: Massard Influent 21-Apr-2015 2154

Analyte	Result	RL	Units	Qualifier
Total Recoverable Arsenic EPA 200.8	1.6	0.5	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1535 by 235		Batch: S38802	
Total Recoverable Beryllium EPA 200.8	< 0.5	0.5	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1535 by 235		Batch: S38802	
Total Recoverable Cadmium EPA 200.8	0.84	0.5	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1535 by 235		Batch: S38802	
Total Recoverable Chromium EPA 200.8	< 10	10	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1535 by 235		Batch: S38802	
Total Recoverable Copper EPA 200.8	12	0.5	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1535 by 235		Batch: S38802	
Total Recoverable Lead EPA 200.8	2.0	0.5	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1535 by 235		Batch: S38802	
Total Recoverable Molybdenum EPA 200.8	< 8	8	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1535 by 235		Batch: S38802	
Total Recoverable Nickel EPA 200.8	5.3	0.5	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1535 by 235		Batch: S38802	
Total Recoverable Selenium EPA 200.8	< 5	5	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1535 by 235		Batch: S38802	
Total Recoverable Silver EPA 200.8	0.96	0.5	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1535 by 235		Batch: S38802	
Total Recoverable Thallium EPA 200.8	< 0.5	0.5	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1535 by 235		Batch: S38802	
Total Recoverable Zinc EPA 200.8	250	20	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1535 by 235		Batch: S38802	
Base/Neutral and Acid Compounds By EPA 625				
Acenaphthene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Acenaphthylene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Anthracene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Benzidine EPA 625	< 50	50	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Benzo(a)anthracene EPA 625	< 5.0	5.0	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Benzo(a)pyrene EPA 625	< 5.0	5.0	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Benzo(g,h,i)perylene EPA 625	< 20	20	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Benzo(k)fluoranthene EPA 625	< 5.0	5.0	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	

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ANALYTICAL RESULTS

AIC No. 189843-2 (Continued)

Sample Identification: Massard Influent 21-Apr-2015 2154

<u>Analyte</u>	<u>Result</u>	<u>RL</u>	<u>Units</u>	<u>Qualifier</u>
Base/Neutral and Acid Compounds By EPA 625 (Continued)				
3,4-Benzofluoranthene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Bis(2-chloroethoxy)methane EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Bis(2-chloroethyl)ether EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Bis(2-chloroisopropyl)ether EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Bis(2-ethylhexyl)phthalate EPA 625	14	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
4-Bromophenyl phenyl ether EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Butylbenzyl phthalate EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
2-Chloronaphthalene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
2-Chlorophenol EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
4-Chlorophenyl phenyl ether EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Chrysene EPA 625	< 5.0	5.0	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Di-n-butyl phthalate EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Di-n-octyl phthalate EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Dibenz(a,h)anthracene EPA 625	< 5.0	5.0	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
3,3'-Dichlorobenzidine EPA 625	< 5.0	5.0	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
2,4-Dichlorophenol EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Diethyl phthalate EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Dimethyl phthalate EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
2,4-Dimethylphenol EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
4,6-Dinitro-o-cresol EPA 625	< 50	50	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	

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ANALYTICAL RESULTS

AIC No. 189843-2 (Continued)

Sample Identification: Massard Influent 21-Apr-2015 2154

Analyte	Result	RL	Units	Qualifier
Base/Neutral and Acid Compounds By EPA 625 (Continued)				
2,4-Dinitrophenol EPA 625	< 50	50	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
2,4-Dinitrotoluene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
2,6-Dinitrotoluene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
1,2-Diphenylhydrazine EPA 625	< 20	20	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Fluorene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Hexachlorobenzene EPA 625	< 5.0	5.0	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Hexachlorobutadiene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Hexachlorocyclopentadiene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Hexachloroethane EPA 625	< 20	20	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Indeno(1,2,3-cd)pyrene EPA 625	< 5.0	5.0	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Isophorone EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
n-Nitrosodi-n-propylamine EPA 625	< 20	20	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
n-Nitrosodimethylamine EPA 625	< 50	50	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
n-Nitrosodiphenylamine EPA 625	< 20	20	ug/l	R
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Naphthalene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Nitrobenzene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
2-Nitrophenol EPA 625	< 20	20	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
4-Nitrophenol EPA 625	< 50	50	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
p-Chloro-m-cresol EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Pentachlorophenol EPA 625	< 5.0	5.0	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	

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ANALYTICAL RESULTS

AIC No. 189843-2 (Continued)

Sample Identification: Massard Influent 21-Apr-2015 2154

Analyte	Result	RL	Units	Qualifier
Base/Neutral and Acid Compounds By EPA 625 (Continued)				
Phenanthrene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Phenol EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Pyrene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
1,2,4-Trichlorobenzene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
2,4,6-Trichlorophenol EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Surrogate: 2-Fluorobiphenyl (50.0-110%) EPA 625	71.9		%	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Surrogate: 2-Fluorophenol (20.0-110%) EPA 625	66.1		%	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Surrogate: Nitrobenzene-D5 (40.0-110%) EPA 625	69.7		%	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Surrogate: Terphenyl-D14 (50.0-135%) EPA 625	108		%	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Surrogate: 2,4,6-Tribromophenol (40.0-125%) EPA 625	78.6		%	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0214 by 301		Batch: B9483	
Organochlorine Pesticides and PCBs By EPA 608				
Aldrin EPA 608	< 0.010	0.010	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
alpha-BHC EPA 608	< 0.050	0.050	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
alpha-Endosulfan EPA 608	< 0.010	0.010	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
beta-BHC EPA 608	< 0.050	0.050	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
beta-Endosulfan EPA 608	< 0.020	0.020	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
Chlordane EPA 608	< 0.20	0.20	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
Chlorpyrifos EPA 608	< 0.070	0.070	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
4,4'-DDD EPA 608	< 0.10	0.10	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
4,4'-DDE EPA 608	< 0.10	0.10	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	

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Fort Smith, AR 72904

ANALYTICAL RESULTS

AIC No. 189843-2 (Continued)

Sample Identification: Massard Influent 21-Apr-2015 2154

<u>Analyte</u>	<u>Result</u>	<u>RL</u>	<u>Units</u>	<u>Qualifier</u>
Organochlorine Pesticides and PCBs By EPA 608 (Continued)				
4,4'-DDT EPA 608	< 0.020	0.020	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
delta-BHC EPA 608	< 0.050	0.050	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
Dieldrin EPA 608	< 0.020	0.020	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
Endosulfan sulfate EPA 608	< 0.10	0.10	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
Endrin EPA 608	< 0.020	0.020	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
Endrin aldehyde EPA 608	< 0.10	0.10	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
gamma-BHC EPA 608	< 0.050	0.050	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
Heptachlor EPA 608	< 0.010	0.010	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
Heptachlor epoxide EPA 608	< 0.010	0.010	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
PCB 1016 EPA 608	< 0.20	0.20	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
PCB 1221 EPA 608	< 0.20	0.20	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
PCB 1232 EPA 608	< 0.20	0.20	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
PCB 1242 EPA 608	< 0.20	0.20	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
PCB 1248 EPA 608	< 0.20	0.20	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
PCB 1254 EPA 608	< 0.20	0.20	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
PCB 1260 EPA 608	< 0.20	0.20	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
Toxaphene EPA 608	< 0.30	0.30	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
Surrogate: Decachlorobiphenyl (30.0-135%) EPA 608	75.0		%	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	
Surrogate: Tetrachloro-m-xylene (25.0-140%) EPA 608	111		%	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1811 by 306		Batch: G10104	

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ANALYTICAL RESULTS

AIC No. 189843-3

Sample Identification: Massard Raw Biosolid 21-Apr-2015 1214

Analyte	Result	RL	Units	Qualifier
Total Cyanide EPA 9010C, 9014	< 2	2	mg/Kg	
Prep: 27-Apr-2015 0806 by 308	Analyzed: 27-Apr-2015 1437 by 308		Batch: W51729	
Total Recoverable Phenolics EPA 9065	120	9	mg/Kg	
Prep: 28-Apr-2015 0805 by 308	Analyzed: 28-Apr-2015 1145 by 308		Batch: W51741	
Total Solids SM 2540 G 1997	5.6	0.01	wt %	
Prep: 23-Apr-2015 1612 by 100	Analyzed: 24-Apr-2015 1512 by 100		Batch: W51706	
Antimony EPA 3051A, 6010C	< 3	3	mg/Kg	
Prep: 24-Apr-2015 0823 by 313	Analyzed: 24-Apr-2015 1335 by 302		Batch: S38807	
Arsenic EPA 3051A, 6010C	7.2	5	mg/Kg	
Prep: 24-Apr-2015 0823 by 313	Analyzed: 24-Apr-2015 1335 by 302		Batch: S38807	
Beryllium EPA 3051A, 6010C	0.61	0.03	mg/Kg	
Prep: 24-Apr-2015 0823 by 313	Analyzed: 24-Apr-2015 1335 by 302		Batch: S38807	
Cadmium EPA 3051A, 6010C	3.5	0.4	mg/Kg	
Prep: 24-Apr-2015 0823 by 313	Analyzed: 24-Apr-2015 1335 by 302		Batch: S38807	
Chromium EPA 3051A, 6010C	26	0.7	mg/Kg	
Prep: 24-Apr-2015 0823 by 313	Analyzed: 24-Apr-2015 1335 by 302		Batch: S38807	
Copper EPA 3051A, 6010C	140	0.6	mg/Kg	
Prep: 24-Apr-2015 0823 by 313	Analyzed: 24-Apr-2015 1335 by 302		Batch: S38807	
Lead EPA 3051A, 6010C	21	4	mg/Kg	
Prep: 24-Apr-2015 0823 by 313	Analyzed: 24-Apr-2015 1335 by 302		Batch: S38807	
Molybdenum EPA 3051A, 6010C	4.9	0.8	mg/Kg	
Prep: 24-Apr-2015 0823 by 313	Analyzed: 24-Apr-2015 1335 by 302		Batch: S38807	
Nickel EPA 3051A, 6010C	19	1	mg/Kg	
Prep: 24-Apr-2015 0823 by 313	Analyzed: 24-Apr-2015 1335 by 302		Batch: S38807	
Selenium EPA 3051A, 6010C	< 7	7	mg/Kg	
Prep: 24-Apr-2015 0823 by 313	Analyzed: 24-Apr-2015 1335 by 302		Batch: S38807	
Silver EPA 3051A, 6010C	7.3	0.7	mg/Kg	
Prep: 24-Apr-2015 0823 by 313	Analyzed: 24-Apr-2015 1335 by 302		Batch: S38807	
Thallium EPA 3051A, 6010C	5.8	4	mg/Kg	
Prep: 24-Apr-2015 0823 by 313	Analyzed: 24-Apr-2015 1335 by 302		Batch: S38807	
Zinc EPA 3051A, 6010C	550	0.2	mg/Kg	
Prep: 24-Apr-2015 0823 by 313	Analyzed: 24-Apr-2015 1335 by 302		Batch: S38807	
Mercury EPA 7471B	1.4	0.1	mg/Kg	
Prep: 28-Apr-2015 0855 by 313	Analyzed: 28-Apr-2015 1314 by 302		Batch: S38824	
Base/Neutral and Acid Compounds By EPA 3550C, 8270D				
3 & 4-Methylphenol EPA 3550C, 8270D	290000	30000	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0422 by 301		Batch: B9484	
Acenaphthene EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
Acenaphthylene EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	

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ANALYTICAL RESULTS

AIC No. 189843-3 (Continued)

Sample Identification: Massard Raw Biosolid 21-Apr-2015 1214

Analyte	Result	RL	Units	Qualifier
Base/Neutral and Acid Compounds By EPA 3550C, 8270D (Continued)				
Anthracene EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
Benzo(a)anthracene EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
Benzo(a)pyrene EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
Benzo(b)fluoranthene EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
Benzo(g,h,i)perylene EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
Benzo(k)fluoranthene EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
Benzoic acid EPA 3550C, 8270D	36000 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	30000	ug/Kg Batch: B9484	
Benzyl alcohol EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
bis(2-Chloroethoxy)Methane EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
bis(2-Chloroethyl)Ether EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
bis(2-Chloroisopropyl)Ether EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
bis(2-Ethylhexyl)Phthalate EPA 3550C, 8270D	33000 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
4-Bromophenyl phenyl ether EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
Butyl benzyl phthalate EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
4-Chloro-3-methylphenol EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
4-Chloroaniline EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
2-Chloronaphthalene EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
2-Chlorophenol EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
4-Chlorophenyl phenyl ether EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
Chrysene EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	

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ANALYTICAL RESULTS

AIC No. 189843-3 (Continued)

Sample Identification: Massard Raw Biosolid 21-Apr-2015 1214

Analyte	Result	RL	Units	Qualifier
Base/Neutral and Acid Compounds By EPA 3550C, 8270D (Continued)				
Di-n-butyl phthalate EPA 3550C, 8270D	21000 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
Di-n-octyl phthalate EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
Dibenz(a,h)anthracene EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
Dibenzofuran EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
1,2-Dichlorobenzene EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
1,3-Dichlorobenzene EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
1,4-Dichlorobenzene EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
3,3'-Dichlorobenzidine EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
2,4-Dichlorophenol EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
Diethyl phthalate EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
Dimethyl phthalate EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
2,4-Dimethylphenol EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
4,6-Dinitro-2-methylphenol EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
2,4-Dinitrophenol EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
2,4-Dinitrotoluene EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
2,6-Dinitrotoluene EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
Fluoranthene EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
Fluorene EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
Hexachlorobenzene EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	
Hexachlorobutadiene EPA 3550C, 8270D	< 5900 Prep: 24-Apr-2015 1451 by 285 Analyzed: 28-Apr-2015 0304 by 301	5900	ug/Kg Batch: B9484	

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ANALYTICAL RESULTS

AIC No. 189843-3 (Continued)

Sample Identification: Massard Raw Biosolid 21-Apr-2015 1214

Analyte	Result	RL	Units	Qualifier
Base/Neutral and Acid Compounds By EPA 3550C, 8270D (Continued)				
Hexachlorocyclopentadiene EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
Hexachloroethane EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
Indeno(1,2,3-cd)pyrene EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
Isophorone EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
2-Methylnaphthalene EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
2-Methylphenol EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
N-Nitroso-di-n-propylamine EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
n-Nitrosodiphenylamine EPA 3550C, 8270D	< 5900	5900	ug/Kg	R
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
Naphthalene EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
2-Nitroaniline EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
3-Nitroaniline EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
4-Nitroaniline EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
Nitrobenzene EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
2-Nitrophenol EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
4-Nitrophenol EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
Pentachlorophenol EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
Phenanthrene EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
Phenol EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
Pyrene EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
1,2,4-Trichlorobenzene EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	

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ANALYTICAL RESULTS

AIC No. 189843-3 (Continued)

Sample Identification: Massard Raw Biosolid 21-Apr-2015 1214

Analyte	Result	RL	Units	Qualifier
Base/Neutral and Acid Compounds By EPA 3550C, 8270D (Continued)				
2,4,5-Trichlorophenol EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
2,4,6-Trichlorophenol EPA 3550C, 8270D	< 5900	5900	ug/Kg	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
Surrogate: 2-Fluorobiphenyl (45.0-105%) EPA 3550C, 8270D	93.2		%	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
Surrogate: 2-Fluorophenol (35.0-105%) EPA 3550C, 8270D	92.5		%	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
Surrogate: Nitrobenzene-D5 (35.0-100%) EPA 3550C, 8270D	108		%	Q
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
Surrogate: Terphenyl-D14 (30.0-125%) EPA 3550C, 8270D	138		%	Q
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
Surrogate: 2,4,6-Tribromophenol (35.0-125%) EPA 3550C, 8270D	112		%	
Prep: 24-Apr-2015 1451 by 285	Analyzed: 28-Apr-2015 0304 by 301		Batch: B9484	
Volatile Organic Compounds By EPA 5035, 8260C				
Acetone EPA 5035, 8260C	< 8900	8900	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Benzene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Bromobenzene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Bromochloromethane EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Bromodichloromethane EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Bromoform EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Bromomethane EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
2-Butanone EPA 5035, 8260C	< 8900	8900	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Carbon disulfide EPA 5035, 8260C	< 8900	8900	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Carbon Tetrachloride EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Chlorobenzene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Chloroethane EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	

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ANALYTICAL RESULTS

AIC No. 189843-3 (Continued)

Sample Identification: Massard Raw Biosolid 21-Apr-2015 1214

Analyte	Result	RL	Units	Qualifier
Volatile Organic Compounds By EPA 5035, 8260C (Continued)				
2-Chloroethyl vinyl ether EPA 5035, 8260C	< 8900 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	8900	ug/Kg	Batch: V8741
Chloroform EPA 5035, 8260C	< 4500 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	4500	ug/Kg	Batch: V8741
Chloromethane EPA 5035, 8260C	< 4500 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	4500	ug/Kg	Batch: V8741
2-Chlorotoluene EPA 5035, 8260C	< 4500 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	4500	ug/Kg	Batch: V8741
4-Chlorotoluene EPA 5035, 8260C	< 4500 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	4500	ug/Kg	Batch: V8741
1,2-Dibromo-3-chloropropane EPA 5035, 8260C	< 4500 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	4500	ug/Kg	Batch: V8741
Dibromochloromethane EPA 5035, 8260C	< 4500 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	4500	ug/Kg	Batch: V8741
1,2-Dibromoethane EPA 5035, 8260C	< 4500 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	4500	ug/Kg	Batch: V8741
Dibromomethane EPA 5035, 8260C	< 4500 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	4500	ug/Kg	Batch: V8741
1,2-Dichlorobenzene EPA 5035, 8260C	< 4500 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	4500	ug/Kg	Batch: V8741
1,3-Dichlorobenzene EPA 5035, 8260C	< 4500 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	4500	ug/Kg	Batch: V8741
1,4-Dichlorobenzene EPA 5035, 8260C	< 4500 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	4500	ug/Kg	Batch: V8741
Dichlorodifluoromethane EPA 5035, 8260C	< 4500 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	4500	ug/Kg	Batch: V8741
1,1-Dichloroethane EPA 5035, 8260C	< 4500 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	4500	ug/Kg	Batch: V8741
1,2-Dichloroethane EPA 5035, 8260C	< 4500 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	4500	ug/Kg	Batch: V8741
1,1-Dichloroethene EPA 5035, 8260C	< 4500 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	4500	ug/Kg	Batch: V8741
cis-1,2-Dichloroethene EPA 5035, 8260C	< 4500 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	4500	ug/Kg	Batch: V8741
trans-1,2-Dichloroethene EPA 5035, 8260C	< 4500 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	4500	ug/Kg	Batch: V8741
1,2-Dichloropropane EPA 5035, 8260C	< 4500 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	4500	ug/Kg	Batch: V8741
1,3-Dichloropropane EPA 5035, 8260C	< 4500 Prep: 23-Apr-2015 1000 by 301 Analyzed: 23-Apr-2015 1435 by 301	4500	ug/Kg	Batch: V8741

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ANALYTICAL RESULTS

AIC No. 189843-3 (Continued)

Sample Identification: Massard Raw Biosolid 21-Apr-2015 1214

Analyte	Result	RL	Units	Qualifier
Volatile Organic Compounds By EPA 5035, 8260C (Continued)				
2,2-Dichloropropane EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
1,1-Dichloropropene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
cis-1,3-Dichloropropene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
trans-1,3-Dichloropropene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Ethylbenzene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Hexachlorobutadiene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
2-Hexanone EPA 5035, 8260C	< 8900	8900	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Isopropylbenzene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
m&p-Xylenes EPA 5035, 8260C	< 8900	8900	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
4-Methyl-2-pentanone EPA 5035, 8260C	< 8900	8900	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Methylene chloride EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
n-Butylbenzene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
n-Propylbenzene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Naphthalene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
o-Xylene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
p-Isopropyltoluene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
sec-Butylbenzene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Styrene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
tert-Butylbenzene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
1,1,1,2-Tetrachloroethane EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	

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ANALYTICAL RESULTS

AIC No. 189843-3 (Continued)

Sample Identification: Massard Raw Biosolid 21-Apr-2015 1214

<u>Analyte</u>	<u>Result</u>	<u>RL</u>	<u>Units</u>	<u>Qualifier</u>
Volatile Organic Compounds By EPA 5035, 8260C (Continued)				
1,1,2,2-Tetrachloroethane EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Tetrachloroethene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Toluene EPA 5035, 8260C	78000	8900	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1843 by 301		Batch: V8741	
1,2,3-Trichlorobenzene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
1,2,4-Trichlorobenzene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
1,1,1-Trichloroethane EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
1,1,2-Trichloroethane EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Trichloroethene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Trichlorofluoromethane EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
1,2,3-Trichloropropane EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
1,2,4-Trimethylbenzene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
1,3,5-Trimethylbenzene EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Vinyl acetate EPA 5035, 8260C	< 8900	8900	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Vinyl chloride EPA 5035, 8260C	< 4500	4500	ug/Kg	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Surrogate: 4-Bromofluorobenzene (85.0-120%) EPA 5035, 8260C	93.1		%	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Surrogate: Dibromofluoromethane (80.0-120%) EPA 5035, 8260C	96.4		%	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Surrogate: Toluene-D8 (85.0-115%) EPA 5035, 8260C	101		%	
Prep: 23-Apr-2015 1000 by 301	Analyzed: 23-Apr-2015 1435 by 301		Batch: V8741	
Organochlorine Pesticides By EPA 3550C, 8081B				
Aldrin EPA 3550C, 8081B	< 120	120	ug/Kg	
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306		Batch: G10106	
alpha-BHC EPA 3550C, 8081B	< 240	240	ug/Kg	
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306		Batch: G10106	

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ANALYTICAL RESULTS

AIC No. 189843-3 (Continued)

Sample Identification: Massard Raw Biosolid 21-Apr-2015 1214

Analyte	Result	RL	Units	Qualifier
Organochlorine Pesticides By EPA 3550C, 8081B (Continued)				
alpha-Endosulfan EPA 3550C, 8081B	< 120	120	ug/Kg	
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306		Batch: G10106	
beta-BHC EPA 3550C, 8081B	< 240	240	ug/Kg	
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306		Batch: G10106	
beta-Endosulfan EPA 3550C, 8081B	< 240	240	ug/Kg	
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306		Batch: G10106	
Chlordane EPA 3550C, 8081B	< 1200	1200	ug/Kg	
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306		Batch: G10106	
4,4'-DDD EPA 3550C, 8081B	< 240	240	ug/Kg	
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306		Batch: G10106	
4,4'-DDE EPA 3550C, 8081B	< 240	240	ug/Kg	
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306		Batch: G10106	
4,4'-DDT EPA 3550C, 8081B	< 240	240	ug/Kg	
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306		Batch: G10106	
delta-BHC EPA 3550C, 8081B	< 240	240	ug/Kg	
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306		Batch: G10106	
Dieldrin EPA 3550C, 8081B	< 240	240	ug/Kg	
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306		Batch: G10106	
Endosulfan sulfate EPA 3550C, 8081B	< 240	240	ug/Kg	
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306		Batch: G10106	
Endrin EPA 3550C, 8081B	< 240	240	ug/Kg	
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306		Batch: G10106	
Endrin aldehyde EPA 3550C, 8081B	< 240	240	ug/Kg	
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306		Batch: G10106	
gamma-BHC EPA 3550C, 8081B	< 240	240	ug/Kg	
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306		Batch: G10106	
Heptachlor EPA 3550C, 8081B	< 120	120	ug/Kg	
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306		Batch: G10106	
Heptachlor epoxide EPA 3550C, 8081B	< 120	120	ug/Kg	
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306		Batch: G10106	
Methoxychlor EPA 3550C, 8081B	< 240	240	ug/Kg	
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306		Batch: G10106	
Toxaphene EPA 3550C, 8081B	< 2400	2400	ug/Kg	
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306		Batch: G10106	
Surrogate: Decachlorobiphenyl (Diluted Out) EPA 3550C, 8081B	-			Batch: G10106
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306			
Surrogate: Tetrachloro-m-xylene (Diluted Out) EPA 3550C, 8081B	-			Batch: G10106
Prep: 29-Apr-2015 1056 by 306	Analyzed: 04-May-2015 2339 by 306			

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ANALYTICAL RESULTS

AIC No. 189843-4

Sample Identification: Massard Effluent 21-Apr-2015 1808

Analyte	Result	RL	Units	Qualifier
Total Recoverable Phenolics EPA 420.1	11 Prep: 27-Apr-2015 0805 by 308 Analyzed: 27-Apr-2015 1130 by 308	5	ug/l Batch: W51727	
Total Cyanide SM 4500-CN C,E 1999	< 10 Prep: 24-Apr-2015 0843 by 308 Analyzed: 24-Apr-2015 1448 by 308	10	ug/l Batch: W51711	
Volatile Organic Compounds By EPA 624				
Acrolein EPA 624	< 50 Prep: 23-Apr-2015 1133 by 301 Analyzed: 24-Apr-2015 0653 by 301	50	ug/l Batch: V8742	
Acrylonitrile EPA 624	< 20 Prep: 23-Apr-2015 1133 by 301 Analyzed: 24-Apr-2015 0653 by 301	20	ug/l Batch: V8742	
Benzene EPA 624	< 10 Prep: 23-Apr-2015 1133 by 301 Analyzed: 24-Apr-2015 0653 by 301	10	ug/l Batch: V8742	
Bromoform EPA 624	< 10 Prep: 23-Apr-2015 1133 by 301 Analyzed: 24-Apr-2015 0653 by 301	10	ug/l Batch: V8742	
Carbon tetrachloride EPA 624	< 2.0 Prep: 23-Apr-2015 1133 by 301 Analyzed: 24-Apr-2015 0653 by 301	2.0	ug/l Batch: V8742	
Chlorobenzene EPA 624	< 10 Prep: 23-Apr-2015 1133 by 301 Analyzed: 24-Apr-2015 0653 by 301	10	ug/l Batch: V8742	
Chlorodibromomethane EPA 624	< 10 Prep: 23-Apr-2015 1133 by 301 Analyzed: 24-Apr-2015 0653 by 301	10	ug/l Batch: V8742	
Chloroethane EPA 624	< 50 Prep: 23-Apr-2015 1133 by 301 Analyzed: 24-Apr-2015 0653 by 301	50	ug/l Batch: V8742	
2-Chloroethyl vinyl ether EPA 624	< 10 Prep: 23-Apr-2015 1133 by 301 Analyzed: 24-Apr-2015 0653 by 301	10	ug/l Batch: V8742	
Chloroform EPA 624	< 10 Prep: 23-Apr-2015 1133 by 301 Analyzed: 24-Apr-2015 0653 by 301	10	ug/l Batch: V8742	
1,2-Dichlorobenzene EPA 624	< 10 Prep: 23-Apr-2015 1133 by 301 Analyzed: 24-Apr-2015 0653 by 301	10	ug/l Batch: V8742	
1,3-Dichlorobenzene EPA 624	< 10 Prep: 23-Apr-2015 1133 by 301 Analyzed: 24-Apr-2015 0653 by 301	10	ug/l Batch: V8742	
1,4-Dichlorobenzene EPA 624	< 10 Prep: 23-Apr-2015 1133 by 301 Analyzed: 24-Apr-2015 0653 by 301	10	ug/l Batch: V8742	
Dichlorobromomethane EPA 624	< 10 Prep: 23-Apr-2015 1133 by 301 Analyzed: 24-Apr-2015 0653 by 301	10	ug/l Batch: V8742	
1,1-Dichloroethane EPA 624	< 10 Prep: 23-Apr-2015 1133 by 301 Analyzed: 24-Apr-2015 0653 by 301	10	ug/l Batch: V8742	
1,2-Dichloroethane EPA 624	< 10 Prep: 23-Apr-2015 1133 by 301 Analyzed: 24-Apr-2015 0653 by 301	10	ug/l Batch: V8742	
1,1-Dichloroethylene EPA 624	< 10 Prep: 23-Apr-2015 1133 by 301 Analyzed: 24-Apr-2015 0653 by 301	10	ug/l Batch: V8742	
trans-1,2-Dichloroethylene EPA 624	< 10 Prep: 23-Apr-2015 1133 by 301 Analyzed: 24-Apr-2015 0653 by 301	10	ug/l Batch: V8742	

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ANALYTICAL RESULTS

AIC No. 189843-4 (Continued)

Sample Identification: Massard Effluent 21-Apr-2015 1808

<u>Analyte</u>	<u>Result</u>	<u>RL</u>	<u>Units</u>	<u>Qualifier</u>
Volatile Organic Compounds By EPA 624 (Continued)				
1,2-Dichloropropane EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0653 by 301		Batch: V8742	
1,3-Dichloropropylene EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0653 by 301		Batch: V8742	
Ethylbenzene EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0653 by 301		Batch: V8742	
Methyl bromide(Bromomethane) EPA 624	< 50	50	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0653 by 301		Batch: V8742	
Methyl chloride(Chloromethane) EPA 624	< 50	50	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0653 by 301		Batch: V8742	
Methylene chloride EPA 624	< 20	20	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0653 by 301		Batch: V8742	
1,1,2,2-Tetrachloroethane EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0653 by 301		Batch: V8742	
Tetrachloroethylene EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0653 by 301		Batch: V8742	
Toluene EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0653 by 301		Batch: V8742	
1,1,1-Trichloroethane EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0653 by 301		Batch: V8742	
1,1,2-Trichloroethane EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0653 by 301		Batch: V8742	
Trichloroethylene EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0653 by 301		Batch: V8742	
Vinyl chloride EPA 624	< 10	10	ug/l	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0653 by 301		Batch: V8742	
Surrogate: 4-Bromofluorobenzene (75.0-120%) EPA 624	99.7		%	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0653 by 301		Batch: V8742	
Surrogate: Dibromofluoromethane (85.0-115%) EPA 624	94.9		%	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0653 by 301		Batch: V8742	
Surrogate: Toluene-D8 (85.0-120%) EPA 624	101		%	
Prep: 23-Apr-2015 1133 by 301	Analyzed: 24-Apr-2015 0653 by 301		Batch: V8742	

AIC No. 189843-5

Sample Identification: Massard Effluent 22-Apr-2015 0800

<u>Analyte</u>	<u>Result</u>	<u>RL</u>	<u>Units</u>	<u>Qualifier</u>
Mercury, low level EPA 245.7	< 0.0050	0.0050	ug/l	
Prep: 27-Apr-2015 1225 by 302	Analyzed: 27-Apr-2015 1417 by 302		Batch: S38818	
Total Recoverable Antimony EPA 200.8	< 60	60	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1541 by 235		Batch: S38802	

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ANALYTICAL RESULTS

AIC No. 189843-5 (Continued)

Sample Identification: Massard Effluent 22-Apr-2015 0800

Analyte	Result	RL	Units	Qualifier
Total Recoverable Arsenic EPA 200.8	0.85	0.5	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1541 by 235		Batch: S38802	
Total Recoverable Beryllium EPA 200.8	< 0.5	0.5	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1541 by 235		Batch: S38802	
Total Recoverable Cadmium EPA 200.8	< 0.5	0.5	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1541 by 235		Batch: S38802	
Total Recoverable Chromium EPA 200.8	< 10	10	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1541 by 235		Batch: S38802	
Total Recoverable Copper EPA 200.8	2.9	0.5	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1541 by 235		Batch: S38802	
Total Recoverable Lead EPA 200.8	< 0.5	0.5	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1541 by 235		Batch: S38802	
Total Recoverable Molybdenum EPA 200.8	< 8	8	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1541 by 235		Batch: S38802	
Total Recoverable Nickel EPA 200.8	3.7	0.5	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1541 by 235		Batch: S38802	
Total Recoverable Selenium EPA 200.8	< 5	5	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1541 by 235		Batch: S38802	
Total Recoverable Silver EPA 200.8	< 0.5	0.5	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1541 by 235		Batch: S38802	
Total Recoverable Thallium EPA 200.8	< 0.5	0.5	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1541 by 235		Batch: S38802	
Total Recoverable Zinc EPA 200.8	39	20	ug/l	
Prep: 23-Apr-2015 1148 by 313	Analyzed: 23-Apr-2015 1541 by 235		Batch: S38802	
Base/Neutral and Acid Compounds By EPA 625				
Acenaphthene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Acenaphthylene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Anthracene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Benzidine EPA 625	< 50	50	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Benzo(a)anthracene EPA 625	< 5.0	5.0	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Benzo(a)pyrene EPA 625	< 5.0	5.0	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Benzo(g,h,i)perylene EPA 625	< 20	20	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Benzo(k)fluoranthene EPA 625	< 5.0	5.0	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	

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ANALYTICAL RESULTS

AIC No. 189843-5 (Continued)

Sample Identification: Massard Effluent 22-Apr-2015 0800

Analyte	Result	RL	Units	Qualifier
Base/Neutral and Acid Compounds By EPA 625 (Continued)				
3,4-Benzofluoranthene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Bis(2-chloroethoxy)methane EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Bis(2-chloroethyl)ether EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Bis(2-chloroisopropyl)ether EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Bis(2-ethylhexyl)phthalate EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
4-Bromophenyl phenyl ether EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Butylbenzyl phthalate EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
2-Chloronaphthalene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
2-Chlorophenol EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
4-Chlorophenyl phenyl ether EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Chrysene EPA 625	< 5.0	5.0	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Di-n-butyl phthalate EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Di-n-octyl phthalate EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Dibenz(a,h)anthracene EPA 625	< 5.0	5.0	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
3,3'-Dichlorobenzidine EPA 625	< 5.0	5.0	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
2,4-Dichlorophenol EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Diethyl phthalate EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Dimethyl phthalate EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
2,4-Dimethylphenol EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
4,6-Dinitro-o-cresol EPA 625	< 50	50	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	

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ANALYTICAL RESULTS

AIC No. 189843-5 (Continued)

Sample Identification: Massard Effluent 22-Apr-2015 0800

Analyte	Result	RL	Units	Qualifier
Base/Neutral and Acid Compounds By EPA 625 (Continued)				
2,4-Dinitrophenol EPA 625	< 50 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	50	ug/l Batch: B9483	
2,4-Dinitrotoluene EPA 625	< 10 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	10	ug/l Batch: B9483	
2,6-Dinitrotoluene EPA 625	< 10 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	10	ug/l Batch: B9483	
1,2-Diphenylhydrazine EPA 625	< 20 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	20	ug/l Batch: B9483	
Fluorene EPA 625	< 10 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	10	ug/l Batch: B9483	
Hexachlorobenzene EPA 625	< 5.0 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	5.0	ug/l Batch: B9483	
Hexachlorobutadiene EPA 625	< 10 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	10	ug/l Batch: B9483	
Hexachlorocyclopentadiene EPA 625	< 10 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	10	ug/l Batch: B9483	
Hexachloroethane EPA 625	< 20 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	20	ug/l Batch: B9483	
Indeno(1,2,3-cd)pyrene EPA 625	< 5.0 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	5.0	ug/l Batch: B9483	
Isophorone EPA 625	< 10 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	10	ug/l Batch: B9483	
n-Nitrosodi-n-propylamine EPA 625	< 20 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	20	ug/l Batch: B9483	
n-Nitrosodimethylamine EPA 625	< 50 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	50	ug/l Batch: B9483	
n-Nitrosodiphenylamine EPA 625	< 20 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	20	ug/l Batch: B9483	R
Naphthalene EPA 625	< 10 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	10	ug/l Batch: B9483	
Nitrobenzene EPA 625	< 10 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	10	ug/l Batch: B9483	
2-Nitrophenol EPA 625	< 20 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	20	ug/l Batch: B9483	
4-Nitrophenol EPA 625	< 50 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	50	ug/l Batch: B9483	
p-Chloro-m-cresol EPA 625	< 10 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	10	ug/l Batch: B9483	
Pentachlorophenol EPA 625	< 5.0 Prep: 24-Apr-2015 0943 by 285 Analyzed: 25-Apr-2015 0253 by 301	5.0	ug/l Batch: B9483	

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ANALYTICAL RESULTS

AIC No. 189843-5 (Continued)

Sample Identification: Massard Effluent 22-Apr-2015 0800

Analyte	Result	RL	Units	Qualifier
Base/Neutral and Acid Compounds By EPA 625 (Continued)				
Phenanthrene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Phenol EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Pyrene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
1,2,4-Trichlorobenzene EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
2,4,6-Trichlorophenol EPA 625	< 10	10	ug/l	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Surrogate: 2-Fluorobiphenyl (50.0-110%) EPA 625	90.8		%	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Surrogate: 2-Fluorophenol (20.0-110%) EPA 625	68.2		%	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Surrogate: Nitrobenzene-D5 (40.0-110%) EPA 625	80.7		%	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Surrogate: Terphenyl-D14 (50.0-135%) EPA 625	106		%	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Surrogate: 2,4,6-Tribromophenol (40.0-125%) EPA 625	83.6		%	
Prep: 24-Apr-2015 0943 by 285	Analyzed: 25-Apr-2015 0253 by 301		Batch: B9483	
Organochlorine Pesticides and PCBs By EPA 608				
Aldrin EPA 608	< 0.010	0.010	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
alpha-BHC EPA 608	< 0.050	0.050	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
alpha-Endosulfan EPA 608	< 0.010	0.010	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
beta-BHC EPA 608	< 0.050	0.050	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
beta-Endosulfan EPA 608	< 0.020	0.020	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
Chlordane EPA 608	< 0.20	0.20	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
Chlorpyrifos EPA 608	< 0.070	0.070	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
4,4'-DDD EPA 608	< 0.10	0.10	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
4,4'-DDE EPA 608	< 0.10	0.10	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	

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ANALYTICAL RESULTS

AIC No. 189843-5 (Continued)

Sample Identification: Massard Effluent 22-Apr-2015 0800

<u>Analyte</u>	<u>Result</u>	<u>RL</u>	<u>Units</u>	<u>Qualifier</u>
Organochlorine Pesticides and PCBs By EPA 608 (Continued)				
4,4'-DDT EPA 608	< 0.020	0.020	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
delta-BHC EPA 608	< 0.050	0.050	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
Dieldrin EPA 608	< 0.020	0.020	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
Endosulfan sulfate EPA 608	< 0.10	0.10	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
Endrin EPA 608	< 0.020	0.020	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
Endrin aldehyde EPA 608	< 0.10	0.10	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
gamma-BHC EPA 608	< 0.050	0.050	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
Heptachlor EPA 608	< 0.010	0.010	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
Heptachlor epoxide EPA 608	< 0.010	0.010	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
PCB 1016 EPA 608	< 0.20	0.20	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
PCB 1221 EPA 608	< 0.20	0.20	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
PCB 1232 EPA 608	< 0.20	0.20	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
PCB 1242 EPA 608	< 0.20	0.20	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
PCB 1248 EPA 608	< 0.20	0.20	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
PCB 1254 EPA 608	< 0.20	0.20	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
PCB 1260 EPA 608	< 0.20	0.20	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
Toxaphene EPA 608	< 0.30	0.30	ug/l	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
Surrogate: Decachlorobiphenyl (30.0-135%) EPA 608	72.4		%	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	
Surrogate: Tetrachloro-m-xylene (25.0-140%) EPA 608	109		%	
Prep: 27-Apr-2015 1348 by 285	Analyzed: 27-Apr-2015 1823 by 306		Batch: G10104	

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DUPLICATE RESULTS

Analyte	AIC No.	Result	RPD	RPD Limit	Preparation Date	Analysis Date	Dil	Qual
Total Solids	189725-2	0.43 wt %			23Apr15 1606 by 100	24Apr15 1512 by 100		
	Batch: W51706 Duplicate	0.43 wt %	0.397	10.0	23Apr15 1606 by 100	24Apr15 1512 by 100		
Base/Neutral and Acid Compounds								
3 & 4-Methylphenol	189843-3	290000 ug/Kg			24Apr15 1451 by 285	28Apr15 0422 by 301		
	Batch: B9484 Duplicate	300000 ug/Kg	3.47	30.0	24Apr15 1452 by 285	28Apr15 0343 by 301		
Acenaphthene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Acenaphthylene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Anthracene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Benzo(a)anthracene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Benzo(a)pyrene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Benzo(b)fluoranthene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Benzo(g,h,i)perylene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Benzo(k)fluoranthene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Benzoic acid	189843-3	36000 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	35000 ug/Kg	1.55	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Benzyl alcohol	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
bis(2-Chloroethoxy)Methane	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
bis(2-Chloroethyl)Ether	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
bis(2-Chloroisopropyl)Ether	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
bis(2-Ethylhexyl)Phthalate	189843-3	33000 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	28000 ug/Kg	15.7	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
4-Bromophenyl phenyl ether	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Butyl benzyl phthalate	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
4-Chloro-3-methylphenol	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
4-Chloroaniline	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
2-Chloronaphthalene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
2-Chlorophenol	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
4-Chlorophenyl phenyl ether	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		

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DUPLICATE RESULTS

Analyte	AIC No.	Result	RPD	RPD Limit	Preparation Date	Analysis Date	Dil	Qual
Chrysene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Di-n-butyl phthalate	189843-3	21000 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	20000 ug/Kg	3.97	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Di-n-octyl phthalate	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Dibenz(a,h)anthracene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Dibenzofuran	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
1,2-Dichlorobenzene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
1,3-Dichlorobenzene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
1,4-Dichlorobenzene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
3,3'-Dichlorobenzidine	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
2,4-Dichlorophenol	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Diethyl phthalate	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Dimethyl phthalate	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
2,4-Dimethylphenol	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
4,6-Dinitro-2-methylphenol	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
2,4-Dinitrophenol	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
2,4-Dinitrotoluene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
2,6-Dinitrotoluene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Fluoranthene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Fluorene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Hexachlorobenzene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Hexachlorobutadiene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Hexachlorocyclopentadiene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Hexachloroethane	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Indeno(1,2,3-cd)pyrene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		



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DUPLICATE RESULTS

Analyte	AIC No.	Result	RPD	RPD Limit	Preparation Date	Analysis Date	Dil	Qual
Base/Neutral and Acid Compounds (Continued)								
Isophorone	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
2-Methylnaphthalene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
2-Methylphenol	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
N-Nitroso-di-n-propylamine	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
n-Nitrosodiphenylamine	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		R
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		R
Naphthalene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
2-Nitroaniline	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
3-Nitroaniline	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
4-Nitroaniline	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Nitrobenzene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
2-Nitrophenol	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
4-Nitrophenol	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Pentachlorophenol	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Phenanthrene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Phenol	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
Pyrene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
1,2,4-Trichlorobenzene	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
2,4,5-Trichlorophenol	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
2,4,6-Trichlorophenol	189843-3	< 5900 ug/Kg			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	< 5900 ug/Kg	0.00	30.0	24Apr15 1452 by 285	28Apr15 0225 by 301		
2-Fluorobiphenyl (45.0-105%)	189843-3	93.2 %			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	92.2 %			24Apr15 1452 by 285	28Apr15 0225 by 301		
2-Fluorophenol (35.0-105%)	189843-3	92.5 %			24Apr15 1451 by 285	28Apr15 0304 by 301		
	Batch: B9484 Duplicate	92.1 %			24Apr15 1452 by 285	28Apr15 0225 by 301		
Nitrobenzene-D5 (35.0-100%)	189843-3	108 %			24Apr15 1451 by 285	28Apr15 0304 by 301		Q
	Batch: B9484 Duplicate	103 %			24Apr15 1452 by 285	28Apr15 0225 by 301		Q
Terphenyl-D14 (30.0-125%)	189843-3	138 %			24Apr15 1451 by 285	28Apr15 0304 by 301		Q
	Batch: B9484 Duplicate	181 %			24Apr15 1452 by 285	28Apr15 0225 by 301		Q

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DUPLICATE RESULTS

Analyte	AIC No.	Result	RPD	RPD Limit	Preparation Date	Analysis Date	Dil	Qual
2,4,6-Tribromophenol (35.0-125%)	189843-3	112 %			24Apr15 1451 by 285	28Apr15 0304 by 301		
Batch: B9484	Duplicate	112 %			24Apr15 1452 by 285	28Apr15 0225 by 301		
Volatile Organic Compounds								
Acetone	189843-3	< 8900 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 8900 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Benzene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Bromobenzene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Bromochloromethane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Bromodichloromethane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Bromoform	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Bromomethane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
2-Butanone	189843-3	< 8900 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 8900 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Carbon disulfide	189843-3	< 8900 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 8900 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Carbon Tetrachloride	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Chlorobenzene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Chloroethane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
2-Chloroethyl vinyl ether	189843-3	< 8900 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 8900 ug/Kg	0.00	20.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Chloroform	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Chloromethane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
2-Chlorotoluene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
4-Chlorotoluene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
1,2-Dibromo-3-chloropropane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Dibromochloromethane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
1,2-Dibromoethane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Dibromomethane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
1,2-Dichlorobenzene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
Batch: V8741	Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		

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DUPLICATE RESULTS

Analyte	AIC No.	Result	RPD	RPD Limit	Preparation Date	Analysis Date	Dil	Qual
1,3-Dichlorobenzene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
1,4-Dichlorobenzene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Dichlorodifluoromethane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
1,1-Dichloroethane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
1,2-Dichloroethane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
1,1-Dichloroethene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
cis-1,2-Dichloroethene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
trans-1,2-Dichloroethene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
1,2-Dichloropropane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
1,3-Dichloropropane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
2,2-Dichloropropane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
1,1-Dichloropropene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
cis-1,3-Dichloropropene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
trans-1,3-Dichloropropene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Ethylbenzene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Hexachlorobutadiene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
2-Hexanone	189843-3	< 8900 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 8900 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Isopropylbenzene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
m&p-Xylenes	189843-3	< 8900 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 8900 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
4-Methyl-2-pentanone	189843-3	< 8900 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 8900 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Methylene chloride	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
n-Butylbenzene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
n-Propylbenzene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Naphthalene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		

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DUPLICATE RESULTS

Analyte	AIC No.	Result	RPD	RPD Limit	Preparation Date	Analysis Date	Dil	Qual
Volatile Organic Compounds (Continued)								
o-Xylene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
p-Isopropyltoluene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
sec-Butylbenzene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Styrene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
tert-Butylbenzene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
1,1,1,2-Tetrachloroethane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
1,1,2,2-Tetrachloroethane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Tetrachloroethene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Toluene	189843-3	78000 ug/Kg			23Apr15 1000 by 301	23Apr15 1843 by 301		
	Batch: V8741 Duplicate	75000 ug/Kg	4.04	30.0	23Apr15 1000 by 301	23Apr15 1920 by 301		
1,2,3-Trichlorobenzene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
1,2,4-Trichlorobenzene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
1,1,1-Trichloroethane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
1,1,2-Trichloroethane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Trichloroethene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Trichlorofluoromethane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
1,2,3-Trichloropropane	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
1,2,4-Trimethylbenzene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
1,3,5-Trimethylbenzene	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Vinyl acetate	189843-3	< 8900 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 8900 ug/Kg	0.00	20.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
Vinyl chloride	189843-3	< 4500 ug/Kg			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	< 4500 ug/Kg	0.00	30.0	23Apr15 1000 by 301	23Apr15 1512 by 301		
4-Bromofluorobenzene (85.0-120%)	189843-3	93.1 %			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	91.4 %			23Apr15 1000 by 301	23Apr15 1512 by 301		
Dibromofluoromethane (80.0-120%)	189843-3	96.4 %			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	96.7 %			23Apr15 1000 by 301	23Apr15 1512 by 301		
Toluene-D8 (85.0-115%)	189843-3	101 %			23Apr15 1000 by 301	23Apr15 1435 by 301		
	Batch: V8741 Duplicate	101 %			23Apr15 1000 by 301	23Apr15 1512 by 301		

City of Fort Smith
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DUPLICATE RESULTS

Analyte	AIC No.	Result	RPD	RPD Limit	Preparation Date	Analysis Date	Dil	Qual
Volatile Organic Compounds								
Acrolein	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
Acrylonitrile	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
Benzene	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
Bromodichloromethane	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
Bromoform	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
Bromomethane	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
Carbon tetrachloride	189769-1	< 0.20 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.20 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
Chlorobenzene	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
Chloroethane	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
2-Chloroethyl vinyl ether	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	20.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
Chloroform	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
Chloromethane	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
Dibromochloromethane	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
1,2-Dichlorobenzene	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
1,3-Dichlorobenzene	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
1,4-Dichlorobenzene	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
1,1-Dichloroethane	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
1,2-Dichloroethane	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
trans-1,2-Dichloroethene	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
1,1-Dichloroethylene	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
1,2-Dichloropropane	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
1,3-Dichloropropylene	189769-1	< 0.10 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.10 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
Ethylbenzene	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D



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DUPLICATE RESULTS

Analyte	AIC No.	Result	RPD	RPD Limit	Preparation Date	Analysis Date	Dil	Qual
Methylene chloride	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
1,1,2,2-Tetrachloroethane	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
Tetrachloroethylene	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
Toluene	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
1,1,1-Trichloroethane	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
1,1,2-Trichloroethane	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
Trichloroethylene	189769-1	< 0.50 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.50 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
Vinyl chloride	189769-1	< 0.20 mg/l			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	< 0.20 mg/l	0.00	30.0	23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
4-Bromofluorobenzene (75.0-120%)	189769-1	98.9 %			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	98.3 %			23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
Dibromofluoromethane (85.0-115%)	189769-1	91.6 %			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	91.5 %			23Apr15 1133 by 301	24Apr15 0142 by 301	100	D
Toluene-D8 (85.0-120%)	189769-1	99.0 %			23Apr15 1132 by 301	24Apr15 0052 by 301	100	D
	Batch: V8742 Duplicate	98.8 %			23Apr15 1133 by 301	24Apr15 0142 by 301	100	D

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LABORATORY CONTROL SAMPLE RESULTS

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
Total Recoverable Phenolics	0.1 mg/l	104	85.0-115			W51727	27Apr15 0805 by 308	27Apr15 1130 by 308		
Total Cyanide	0.1 mg/l	101	85.0-115			W51711	24Apr15 0844 by 308	24Apr15 1446 by 308		
Mercury, low level	0.01 ug/l	100	76.0-113			S38818	27Apr15 1225 by 302	27Apr15 1309 by 302		
Total Recoverable Antimony	0.05 mg/l	96.9	85.0-115			S38802	23Apr15 0944 by 313	23Apr15 1448 by 235		
Total Recoverable Arsenic	0.05 mg/l	102	85.0-115			S38802	23Apr15 0944 by 313	23Apr15 1448 by 235		
Total Recoverable Beryllium	0.05 mg/l	98.6	85.0-115			S38802	23Apr15 0944 by 313	23Apr15 1448 by 235		
Total Recoverable Cadmium	0.05 mg/l	99.6	85.0-115			S38802	23Apr15 0944 by 313	23Apr15 1448 by 235		
Total Recoverable Chromium	0.05 mg/l	93.1	85.0-115			S38802	23Apr15 0944 by 313	23Apr15 1448 by 235		
Total Recoverable Copper	0.05 mg/l	104	85.0-115			S38802	23Apr15 0944 by 313	23Apr15 1448 by 235		
Total Recoverable Lead	0.05 mg/l	96.9	85.0-115			S38802	23Apr15 0944 by 313	23Apr15 1448 by 235		
Total Recoverable Molybdenum	0.05 mg/l	101	85.0-115			S38802	23Apr15 0944 by 313	23Apr15 1448 by 235		
Total Recoverable Nickel	0.05 mg/l	106	85.0-115			S38802	23Apr15 0944 by 313	23Apr15 1448 by 235		
Total Recoverable Selenium	0.05 mg/l	104	85.0-115			S38802	23Apr15 0944 by 313	23Apr15 1448 by 235		
Total Recoverable Silver	0.02 mg/l	95.9	85.0-115			S38802	23Apr15 0944 by 313	23Apr15 1448 by 235		
Total Recoverable Thallium	0.05 mg/l	97.7	85.0-115			S38802	23Apr15 0944 by 313	23Apr15 1448 by 235		
Total Recoverable Zinc	0.05 mg/l	102	85.0-115			S38802	23Apr15 0944 by 313	23Apr15 1448 by 235		
Total Cyanide	0.500 mg/Kg	91.4	85.0-115			W51729	27Apr15 0806 by 308	27Apr15 1435 by 308		
Total Recoverable Phenolics	10.0 mg/Kg	96.0	85.0-115			W51741	28Apr15 0805 by 308	28Apr15 1145 by 308		
Antimony	500 mg/Kg	105	85.0-115			S38807	24Apr15 0823 by 313	24Apr15 1318 by 302		
Arsenic	500 mg/Kg	105	85.0-115			S38807	24Apr15 0823 by 313	24Apr15 1318 by 302		
Beryllium	50.0 mg/Kg	106	85.0-115			S38807	24Apr15 0823 by 313	24Apr15 1318 by 302		
Cadmium	500 mg/Kg	104	85.0-115			S38807	24Apr15 0823 by 313	24Apr15 1318 by 302		
Chromium	50.0 mg/Kg	109	85.0-115			S38807	24Apr15 0823 by 313	24Apr15 1318 by 302		
Copper	50.0 mg/Kg	107	85.0-115			S38807	24Apr15 0823 by 313	24Apr15 1318 by 302		
Lead	500 mg/Kg	106	85.0-115			S38807	24Apr15 0823 by 313	24Apr15 1318 by 302		
Molybdenum	50.0 mg/Kg	110	85.0-115			S38807	24Apr15 0823 by 313	24Apr15 1318 by 302		
Nickel	50.0 mg/Kg	107	85.0-115			S38807	24Apr15 0823 by 313	24Apr15 1318 by 302		
Selenium	500 mg/Kg	98.6	85.0-115			S38807	24Apr15 0823 by 313	24Apr15 1318 by 302		
Silver	10.0 mg/Kg	104	85.0-115			S38807	24Apr15 0823 by 313	24Apr15 1318 by 302		
Thallium	500 mg/Kg	111	85.0-115			S38807	24Apr15 0823 by 313	24Apr15 1318 by 302		
Zinc	50.0 mg/Kg	104	85.0-115			S38807	24Apr15 0823 by 313	24Apr15 1318 by 302		
Mercury	1.25 mg/Kg	103	85.0-115			S38824	28Apr15 0855 by 313	28Apr15 1211 by 302		
Base/Neutral and Acid Compounds										
Acenaphthene	40 ug/l	75.5	45.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Acenaphthylene	40 ug/l	75.4	50.0-105			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Anthracene	40 ug/l	77.6	55.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Benzidine	100 ug/l	26.9	0.00-52.0			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Benzo(a)anthracene	40 ug/l	72.9	55.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Benzo(a)pyrene	40 ug/l	71.8	55.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Benzo(b)fluoranthene	40 ug/l	76.6	45.0-120			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Benzo(g,h,i)perylene	40 ug/l	68.0	40.0-125			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		

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LABORATORY CONTROL SAMPLE RESULTS

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
Base/Neutral and Acid Compounds (Continued)										
Benzo(k)fluoranthene	40 ug/l	82.6	45.0-125			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
bis(2-Chloroethoxy)Methane	40 ug/l	66.2	45.0-105			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
bis(2-Chloroethyl)Ether	40 ug/l	66.3	35.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
bis(2-Chloroisopropyl)Ether	40 ug/l	63.7	25.0-130			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
bis(2-Ethylhexyl)Phthalate	40 ug/l	50.0	40.0-125			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
4-Bromophenyl phenyl ether	40 ug/l	70.2	50.0-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Butyl benzyl phthalate	40 ug/l	53.1	45.0-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
4-Chloro-3-methylphenol	40 ug/l	63.1	45.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2-Chloronaphthalene	40 ug/l	78.4	50.0-105			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2-Chlorophenol	40 ug/l	65.0	35.0-105			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
4-Chlorophenyl phenyl ether	40 ug/l	70.1	50.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Chrysene	40 ug/l	75.7	55.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Di-n-butyl phthalate	40 ug/l	78.0	55.0-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Di-n-octyl phthalate	40 ug/l	54.8	35.0-135			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Dibenz(a,h)anthracene	40 ug/l	66.6	40.0-125			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
1,2-Dichlorobenzene	40 ug/l	65.4	35.0-100			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
1,3-Dichlorobenzene	40 ug/l	64.8	30.0-100			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
1,4-Dichlorobenzene	40 ug/l	64.6	30.0-100			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
3,3'-Dichlorobenzidine	40 ug/l	37.9	20.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2,4-Dichlorophenol	40 ug/l	64.8	50.0-105			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Diethyl phthalate	40 ug/l	70.4	40.0-120			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Dimethyl phthalate	40 ug/l	73.0	25.0-125			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2,4-Dimethylphenol	40 ug/l	56.5	30.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
4,6-Dinitro-2-methylphenol	40 ug/l	56.7	40.0-130			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2,4-Dinitrophenol	40 ug/l	50.7	15.0-140			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2,4-Dinitrotoluene	40 ug/l	67.6	50.0-120			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2,6-Dinitrotoluene	40 ug/l	67.0	50.0-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
1,2-Diphenylhydrazine	40 ug/l	78.2	55.0-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Fluorene	40 ug/l	74.1	50.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Hexachlorobenzene	40 ug/l	68.6	50.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Hexachlorobutadiene	40 ug/l	63.6	25.0-105			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Hexachlorocyclopentadiene	40 ug/l	61.2	40.6-99.8			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Hexachloroethane	40 ug/l	62.4	30.0-100			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Indeno(1,2,3-cd)pyrene	40 ug/l	58.9	45.0-125			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Isophorone	40 ug/l	66.4	50.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
N-Nitroso-di-n-propylamine	40 ug/l	65.1	35.0-130			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
n-Nitrosodimethylamine	40 ug/l	66.4	25.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
n-Nitrosodiphenylamine	40 ug/l	75.9	50.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Naphthalene	40 ug/l	69.6	40.0-100			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Nitrobenzene	40 ug/l	68.0	45.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		

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LABORATORY CONTROL SAMPLE RESULTS

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
Base/Neutral and Acid Compounds (Continued)										
2-Nitrophenol	40 ug/l	55.8	40.0-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
4-Nitrophenol	40 ug/l	60.9	0.00-125			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Pentachlorophenol	40 ug/l	57.7	40.0-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Phenanthrene	40 ug/l	77.2	50.0-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Phenol	40 ug/l	65.4	0.00-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Pyrene	40 ug/l	80.6	50.0-130			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
1,2,4-Trichlorobenzene	40 ug/l	65.9	35.0-105			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2,4,6-Trichlorophenol	40 ug/l	74.7	50.0-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Base/Neutral and Acid Compounds Surrogates:										
2-Fluorobiphenyl	40 ug/l	79.6	50.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2-Fluorophenol	40 ug/l	61.8	20.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Nitrobenzene-D5	40 ug/l	65.4	40.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Terphenyl-D14	40 ug/l	75.8	50.0-135			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2,4,6-Tribromophenol	40 ug/l	64.0	40.0-125			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Base/Neutral and Acid Compounds										
Acenaphthene	40 ug/l	75.5	45.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Acenaphthylene	40 ug/l	75.4	50.0-105			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Anthracene	40 ug/l	77.6	55.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Benzo(a)anthracene	40 ug/l	72.9	55.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Benzo(a)pyrene	40 ug/l	71.8	55.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Benzo(g,h,i)perylene	40 ug/l	68.0	40.0-125			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Benzo(k)fluoranthene	40 ug/l	82.6	45.0-125			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
3,4-Benzofluoranthene	40 ug/l	76.6	45.0-120			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Bis(2-chloroethoxy)methane	40 ug/l	66.2	45.0-105			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Bis(2-chloroethyl)ether	40 ug/l	66.3	35.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Bis(2-chloroisopropyl)ether	40 ug/l	63.7	25.0-130			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Bis(2-ethylhexyl)phthalate	40 ug/l	50.0	40.0-125			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
4-Bromophenyl phenyl ether	40 ug/l	70.2	50.0-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Butylbenzyl phthalate	40 ug/l	53.1	45.0-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2-Chloronaphthalene	40 ug/l	78.4	50.0-105			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2-Chlorophenol	40 ug/l	65.0	35.0-105			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
4-Chlorophenyl phenyl ether	40 ug/l	70.1	50.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Chrysene	40 ug/l	75.7	55.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Di-n-butyl phthalate	40 ug/l	78.0	55.0-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Di-n-octyl phthalate	40 ug/l	54.8	35.0-135			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Dibenz(a,h)anthracene	40 ug/l	66.6	40.0-125			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
1,2-Dichlorobenzene	40 ug/l	65.4	35.0-100			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
1,3-Dichlorobenzene	40 ug/l	64.8	30.0-100			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
1,4-Dichlorobenzene	40 ug/l	64.6	30.0-100			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		

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LABORATORY CONTROL SAMPLE RESULTS

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
Base/Neutral and Acid Compounds (Continued)										
3,3'-Dichlorobenzidine	40 ug/l	37.9	20.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2,4-Dichlorophenol	40 ug/l	64.8	50.0-105			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Diethyl phthalate	40 ug/l	70.4	40.0-120			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Dimethyl phthalate	40 ug/l	73.0	25.0-125			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2,4-Dimethylphenol	40 ug/l	56.5	30.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
4,6-Dinitro-o-cresol	40 ug/l	56.7	40.0-130			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2,4-Dinitrophenol	40 ug/l	50.7	15.0-140			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2,4-Dinitrotoluene	40 ug/l	67.6	50.0-120			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2,6-Dinitrotoluene	40 ug/l	67.0	50.0-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
1,2-Diphenylhydrazine	40 ug/l	78.2	55.0-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Fluorene	40 ug/l	74.1	50.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Hexachlorobenzene	40 ug/l	68.6	50.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Hexachlorobutadiene	40 ug/l	63.6	25.0-105			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Hexachlorocyclopentadiene	40 ug/l	61.2	40.6-99.8			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Hexachloroethane	40 ug/l	62.4	30.0-100			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Indeno(1,2,3-cd)pyrene	40 ug/l	58.9	45.0-125			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Isophorone	40 ug/l	66.4	50.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
n-Nitrosodi-n-propylamine	40 ug/l	65.1	35.0-130			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
n-Nitrosodimethylamine	40 ug/l	66.4	25.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
n-Nitrosodiphenylamine	40 ug/l	75.9	50.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Naphthalene	40 ug/l	69.6	40.0-100			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Nitrobenzene	40 ug/l	68.0	45.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2-Nitrophenol	40 ug/l	55.8	40.0-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
4-Nitrophenol	40 ug/l	60.9	0.00-125			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
p-Chloro-m-cresol	40 ug/l	63.1	45.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Pentachlorophenol	40 ug/l	57.7	40.0-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Phenanthrene	40 ug/l	77.2	50.0-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Phenol	40 ug/l	65.4	0.00-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Pyrene	40 ug/l	80.6	50.0-130			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
1,2,4-Trichlorobenzene	40 ug/l	65.9	35.0-105			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2,4,6-Trichlorophenol	40 ug/l	74.7	50.0-115			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Base/Neutral and Acid Compounds Surrogates:										
2-Fluorobiphenyl	40 ug/l	79.6	50.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2-Fluorophenol	40 ug/l	61.8	20.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Nitrobenzene-D5	40 ug/l	65.4	40.0-110			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Terphenyl-D14	40 ug/l	75.8	50.0-135			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
2,4,6-Tribromophenol	40 ug/l	64.0	40.0-125			B9483	24Apr15 0943 by 285	27Apr15 1950 by 301		
Volatile Organic Compounds										
Acrolein	100 ug/l	106	14.9-166			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		



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LABORATORY CONTROL SAMPLE RESULTS

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
Volatile Organic Compounds (Continued)										
Acrylonitrile	100 ug/l	110	62.7-129			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Benzene	20 ug/l	108	80.0-120			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Bromodichloromethane	20 ug/l	102	75.0-120			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Bromoform	20 ug/l	103	70.0-130			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Bromomethane	20 ug/l	99.2	30.0-145			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Carbon tetrachloride	20 ug/l	101	65.0-140			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Chlorobenzene	20 ug/l	107	80.0-120			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Chloroethane	20 ug/l	104	60.0-135			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
2-Chloroethyl vinyl ether	40 ug/l	119	73.1-121			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Chloroform	20 ug/l	105	65.0-135			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Chloromethane	20 ug/l	103	40.0-125			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Dibromochloromethane	20 ug/l	99.8	60.0-135			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
1,2-Dichlorobenzene	20 ug/l	113	70.0-120			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
1,3-Dichlorobenzene	20 ug/l	112	75.0-125			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
1,4-Dichlorobenzene	20 ug/l	111	75.0-125			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
1,1-Dichloroethane	20 ug/l	113	70.0-135			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
1,2-Dichloroethane	20 ug/l	109	70.0-130			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
1,1-Dichloroethene	20 ug/l	99.0	70.0-130			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
trans-1,2-Dichloroethene	20 ug/l	109	60.0-140			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
1,2-Dichloropropane	20 ug/l	100	75.0-125			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
1,3-Dichloropropylene	20 ug/l	95.3	70.0-130			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Ethylbenzene	20 ug/l	105	75.0-125			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Methylene chloride	20 ug/l	108	55.0-140			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
1,1,2,2-Tetrachloroethane	20 ug/l	112	65.0-130			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Tetrachloroethene	20 ug/l	102	45.0-150			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Toluene	20 ug/l	105	75.0-120			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
1,1,1-Trichloroethane	20 ug/l	97.8	65.0-130			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
1,1,2-Trichloroethane	20 ug/l	110	75.0-125			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Trichloroethene	20 ug/l	102	70.0-125			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Vinyl chloride	20 ug/l	108	50.0-145			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Volatile Organic Compounds Surrogates:										
4-Bromofluorobenzene	50 ug/l	98.7	75.0-120			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Dibromofluoromethane	50 ug/l	97.6	85.0-115			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Toluene-D8	50 ug/l	99.0	85.0-120			V8742	23Apr15 1133 by 301	23Apr15 2041 by 301		
Organochlorine Pesticides and PCBs										
Aldrin	10 ug/l	62.1	25.0-140			G10104	27Apr15 1348 by 285	27Apr15 1724 by 306		
alpha-BHC	10 ug/l	72.8	60.0-130			G10104	27Apr15 1348 by 285	27Apr15 1724 by 306		
alpha-Endosulfan	10 ug/l	64.0	50.0-110			G10104	27Apr15 1348 by 285	27Apr15 1724 by 306		
beta-BHC	10 ug/l	66.4	65.0-125			G10104	27Apr15 1348 by 285	27Apr15 1724 by 306		

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Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
Organochlorine Pesticides and PCBs (Continued)										
beta-Endosulfan	10 ug/l	76.4	30.0-130			G10104	27Apr15 1348 by 285	27Apr15 1724 by 306		
Chlorpyrifos	10 ug/l	71.6	49.1-130			G10104	27Apr15 1348 by 285	27Apr15 1724 by 306		
4,4'-DDD	10 ug/l	70.5	25.0-150			G10104	27Apr15 1348 by 285	27Apr15 1724 by 306		
4,4'-DDE	10 ug/l	66.5	35.0-140			G10104	27Apr15 1348 by 285	27Apr15 1724 by 306		
4,4'-DDT	10 ug/l	87.5	45.0-140			G10104	27Apr15 1348 by 285	27Apr15 1724 by 306		
delta-BHC	10 ug/l	68.1	45.0-135			G10104	27Apr15 1348 by 285	27Apr15 1724 by 306		
Dieldrin	10 ug/l	72.1	60.0-130			G10104	27Apr15 1348 by 285	27Apr15 1724 by 306		
Endosulfan sulfate	10 ug/l	72.0	55.0-135			G10104	27Apr15 1348 by 285	27Apr15 1724 by 306		
Endrin	10 ug/l	78.3	55.0-135			G10104	27Apr15 1348 by 285	27Apr15 1724 by 306		
Endrin aldehyde	10 ug/l	78.4	55.0-135			G10104	27Apr15 1348 by 285	27Apr15 1724 by 306		
gamma-BHC	10 ug/l	73.6	25.0-135			G10104	27Apr15 1348 by 285	27Apr15 1724 by 306		
Heptachlor	10 ug/l	65.7	40.0-130			G10104	27Apr15 1348 by 285	27Apr15 1724 by 306		
Heptachlor epoxide	10 ug/l	72.6	60.0-130			G10104	27Apr15 1348 by 285	27Apr15 1724 by 306		
Organochlorine Pesticides and PCBs Surrogates:										
Decachlorobiphenyl	20 ug/l	73.0	30.0-135			G10104	27Apr15 1348 by 285	27Apr15 1724 by 306		
Tetrachloro-m-xylene	20 ug/l	95.4	25.0-140			G10104	27Apr15 1348 by 285	27Apr15 1724 by 306		
Base/Neutral and Acid Compounds										
3 & 4-Methylphenol	2670 ug/Kg	65.5	40.0-105			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Acenaphthene	2670 ug/Kg	75.0	45.0-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Acenaphthylene	2670 ug/Kg	74.5	45.0-105			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Anthracene	2670 ug/Kg	77.9	55.0-105			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Benzo(a)anthracene	2670 ug/Kg	74.8	50.0-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Benzo(a)pyrene	2670 ug/Kg	73.5	50.0-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Benzo(b)fluoranthene	2670 ug/Kg	80.4	45.0-115			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Benzo(g,h,i)perylene	2670 ug/Kg	59.4	40.0-125			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Benzo(k)fluoranthene	2670 ug/Kg	92.6	45.0-125			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Benzoic acid	6670 ug/Kg	31.1	0.00-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Benzyl alcohol	2670 ug/Kg	66.3	20.0-125			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
bis(2-Chloroethoxy)Methane	2670 ug/Kg	66.0	45.0-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
bis(2-Chloroethyl)Ether	2670 ug/Kg	66.8	40.0-105			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
bis(2-Chloroisopropyl)Ether	2670 ug/Kg	62.6	20.0-115			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
bis(2-Ethylhexyl)Phthalate	2670 ug/Kg	66.4	45.0-125			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
4-Bromophenyl phenyl ether	2670 ug/Kg	72.4	45.0-115			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Butyl benzyl phthalate	2670 ug/Kg	69.1	50.0-125			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
4-Chloro-3-methylphenol	2670 ug/Kg	60.7	45.0-115			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
4-Chloroaniline	2670 ug/Kg	60.3	10.0-100			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
2-Chloronaphthalene	2670 ug/Kg	77.8	45.0-105			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
2-Chlorophenol	2670 ug/Kg	66.2	45.0-105			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
4-Chlorophenyl phenyl ether	2670 ug/Kg	70.0	45.0-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		

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LABORATORY CONTROL SAMPLE RESULTS

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
Base/Neutral and Acid Compounds (Continued)										
Chrysene	2670 ug/Kg	77.0	55.0-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Di-n-butyl phthalate	2670 ug/Kg	81.2	55.0-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Di-n-octyl phthalate	2670 ug/Kg	77.4	40.0-130			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Dibenz(a,h)anthracene	2670 ug/Kg	63.5	40.0-125			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Dibenzofuran	2670 ug/Kg	73.2	50.0-105			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
1,2-Dichlorobenzene	2670 ug/Kg	65.2	45.0-100			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
1,3-Dichlorobenzene	2670 ug/Kg	66.0	40.0-100			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
1,4-Dichlorobenzene	2670 ug/Kg	65.8	35.0-105			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
3,3'-Dichlorobenzidine	2670 ug/Kg	48.8	10.0-130			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
2,4-Dichlorophenol	2670 ug/Kg	64.1	45.0-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Diethyl phthalate	2670 ug/Kg	71.7	50.0-115			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Dimethyl phthalate	2670 ug/Kg	74.6	50.0-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
2,4-Dimethylphenol	2670 ug/Kg	57.4	30.0-105			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
4,6-Dinitro-2-methylphenol	2670 ug/Kg	46.2	30.0-135			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
2,4-Dinitrophenol	2670 ug/Kg	37.0	15.0-130			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
2,4-Dinitrotoluene	2670 ug/Kg	68.6	50.0-115			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
2,6-Dinitrotoluene	2670 ug/Kg	66.0	50.0-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Fluoranthene	2670 ug/Kg	69.7	55.0-115			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Fluorene	2670 ug/Kg	74.2	50.0-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Hexachlorobenzene	2670 ug/Kg	70.0	45.0-120			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Hexachlorobutadiene	2670 ug/Kg	65.2	40.0-115			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Hexachlorocyclopentadiene	2670 ug/Kg	55.4	23.6-112			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Hexachloroethane	2670 ug/Kg	62.0	35.0-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Indeno(1,2,3-cd)pyrene	2670 ug/Kg	55.9	40.0-120			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Isophorone	2670 ug/Kg	65.8	45.0-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
2-Methylnaphthalene	2670 ug/Kg	68.8	45.0-105			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
2-Methylphenol	2670 ug/Kg	64.2	40.0-105			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
N-Nitroso-di-n-propylamine	2670 ug/Kg	63.2	40.0-115			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
n-Nitrosodiphenylamine	2670 ug/Kg	78.5	50.0-115			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Naphthalene	2670 ug/Kg	70.6	40.0-105			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
2-Nitroaniline	2670 ug/Kg	65.9	45.0-120			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
3-Nitroaniline	2670 ug/Kg	63.8	25.0-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
4-Nitroaniline	2670 ug/Kg	56.2	35.0-115			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Nitrobenzene	2670 ug/Kg	69.0	40.0-115			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
2-Nitrophenol	2670 ug/Kg	59.5	40.0-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
4-Nitrophenol	2670 ug/Kg	51.0	15.0-140			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Pentachlorophenol	2670 ug/Kg	53.2	25.0-120			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Phenanthrene	2670 ug/Kg	76.9	50.0-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Phenol	2670 ug/Kg	66.5	40.0-100			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Pyrene	2670 ug/Kg	83.9	45.0-125			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		

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LABORATORY CONTROL SAMPLE RESULTS

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
Base/Neutral and Acid Compounds (Continued)										
1,2,4-Trichlorobenzene	2670 ug/Kg	66.7	45.0-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
2,4,5-Trichlorophenol	2670 ug/Kg	65.6	50.0-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
2,4,6-Trichlorophenol	2670 ug/Kg	72.1	45.0-110			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Base/Neutral and Acid Compounds Surrogates:										
2-Fluorobiphenyl	2670 ug/Kg	78.6	45.0-105			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
2-Fluorophenol	2670 ug/Kg	63.8	35.0-105			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Nitrobenzene-D5	2670 ug/Kg	67.3	35.0-100			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Terphenyl-D14	2670 ug/Kg	82.7	30.0-125			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
2,4,6-Tribromophenol	2670 ug/Kg	62.6	35.0-125			B9484	24Apr15 1452 by 285	28Apr15 0107 by 301		
Volatile Organic Compounds										
Acetone	40.0 mg/l	115	20.0-160			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Benzene	20.0 mg/l	103	75.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Bromobenzene	20.0 mg/l	105	65.0-120			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Bromochloromethane	20.0 mg/l	98.8	70.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Bromodichloromethane	20.0 mg/l	102	70.0-130			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Bromoform	20.0 mg/l	102	55.0-135			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Bromomethane	20.0 mg/l	102	30.0-160			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
2-Butanone	40.0 mg/l	106	30.0-160			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Carbon disulfide	40.0 mg/l	100	45.0-160			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Carbon tetrachloride	20.0 mg/l	99.0	65.0-135			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Chlorobenzene	20.0 mg/l	102	75.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Chloroethane	20.0 mg/l	99.4	40.0-155			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
2-Chloroethyl vinyl ether	40.0 mg/l	89.3	39.5-143			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Chloroform	20.0 mg/l	99.6	70.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Chloromethane	20.0 mg/l	100	50.0-130			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
2-Chlorotoluene	20.0 mg/l	104	70.0-130			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
4-Chlorotoluene	20.0 mg/l	106	75.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,2-Dibromo-3-chloropropane	20.0 mg/l	92.0	40.0-135			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Dibromochloromethane	20.0 mg/l	101	65.0-130			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,2-Dibromoethane	20.0 mg/l	99.4	70.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Dibromomethane	20.0 mg/l	102	75.0-130			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,2-Dichlorobenzene	20.0 mg/l	104	75.0-120			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,3-Dichlorobenzene	20.0 mg/l	105	70.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,4-Dichlorobenzene	20.0 mg/l	104	70.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Dichlorodifluoromethane	20.0 mg/l	97.3	35.0-135			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,1-Dichloroethane	20.0 mg/l	97.4	75.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,2-Dichloroethane	20.0 mg/l	100	70.0-135			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,1-Dichloroethene	20.0 mg/l	99.5	65.0-135			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
cis-1,2-Dichloroethene	20.0 mg/l	100	65.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		

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LABORATORY CONTROL SAMPLE RESULTS

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
Volatile Organic Compounds (Continued)										
trans-1,2-Dichloroethene	20.0 mg/l	101	65.0-135			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,2-Dichloropropane	20.0 mg/l	97.2	70.0-120			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,3-Dichloropropane	20.0 mg/l	102	75.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
2,2-Dichloropropane	20.0 mg/l	101	65.0-135			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,1-Dichloropropene	20.0 mg/l	97.4	70.0-135			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
cis-1,3-Dichloropropene	20.0 mg/l	100	70.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
trans-1,3-Dichloropropene	20.0 mg/l	98.4	65.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Ethylbenzene	20.0 mg/l	102	75.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Hexachlorobutadiene	20.0 mg/l	103	55.0-140			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
2-Hexanone	40.0 mg/l	103	45.0-145			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Isopropylbenzene	20.0 mg/l	103	75.0-130			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
m&p-Xylenes	40.0 mg/l	103	80.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
4-Methyl-2-pentanone	40.0 mg/l	100	45.0-145			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Methylene chloride	20.0 mg/l	104	55.0-140			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
n-Butylbenzene	20.0 mg/l	105	65.0-140			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
n-Propylbenzene	20.0 mg/l	106	65.0-135			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Naphthalene	20.0 mg/l	102	40.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
o-Xylene	20.0 mg/l	103	75.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
p-Isopropyltoluene	20.0 mg/l	105	75.0-135			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
sec-Butylbenzene	20.0 mg/l	103	65.0-130			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Styrene	20.0 mg/l	98.6	75.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
tert-Butylbenzene	20.0 mg/l	105	65.0-130			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,1,1,2-Tetrachloroethane	20.0 mg/l	101	75.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,1,2,2-Tetrachloroethane	20.0 mg/l	104	55.0-130			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Tetrachloroethene	20.0 mg/l	101	65.0-140			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Toluene	20.0 mg/l	101	70.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,2,3-Trichlorobenzene	20.0 mg/l	109	60.0-135			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,2,4-Trichlorobenzene	20.0 mg/l	114	65.0-130			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,1,1-Trichloroethane	20.0 mg/l	99.8	70.0-135			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,1,2-Trichloroethane	20.0 mg/l	101	60.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Trichloroethene	20.0 mg/l	103	75.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Trichlorofluoromethane	20.0 mg/l	96.5	25.0-185			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,2,3-Trichloropropane	20.0 mg/l	90.4	65.0-130			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,2,4-Trimethylbenzene	20.0 mg/l	106	65.0-135			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
1,3,5-Trimethylbenzene	20.0 mg/l	106	65.0-135			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Vinyl acetate	40.0 mg/l	101	48.8-133			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Vinyl chloride	20.0 mg/l	96.8	60.0-125			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Volatile Organic Compounds Surrogates:										
4-Bromofluorobenzene	50.0 ug/Kg	99.3	85.0-120			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Dibromofluoromethane	50.0 ug/Kg	99.0	80.0-120			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		



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LABORATORY CONTROL SAMPLE RESULTS

Analyte	Spike Amount	%	Limits	RPD	Limit	Batch	Preparation Date	Analysis Date	Dil	Qual
Volatile Organic Compounds (Continued)										
Volatile Organic Compounds Surrogates:										
Toluene-D8	50.0 ug/Kg	100	85.0-115			V8741	23Apr15 1000 by 301	23Apr15 1028 by 301		
Organochlorine Pesticides										
Aldrin	4.44 ug/Kg	74.8	45.0-140			G10106	29Apr15 1056 by 306	04May15 2326 by 306		
alpha-BHC	4.44 ug/Kg	75.9	60.0-125			G10106	29Apr15 1056 by 306	04May15 2326 by 306		
alpha-Endosulfan	4.44 ug/Kg	73.5	15.0-135			G10106	29Apr15 1056 by 306	04May15 2326 by 306		
beta-BHC	4.44 ug/Kg	79.4	60.0-125			G10106	29Apr15 1056 by 306	04May15 2326 by 306		
beta-Endosulfan	4.44 ug/Kg	80.5	35.0-140			G10106	29Apr15 1056 by 306	04May15 2326 by 306		
4,4'-DDD	4.44 ug/Kg	70.6	30.0-135			G10106	29Apr15 1056 by 306	04May15 2326 by 306		
4,4'-DDE	4.44 ug/Kg	77.2	70.0-125			G10106	29Apr15 1056 by 306	04May15 2326 by 306		
4,4'-DDT	4.44 ug/Kg	133	45.0-140			G10106	29Apr15 1056 by 306	04May15 2326 by 306		
delta-BHC	4.44 ug/Kg	76.9	55.0-130			G10106	29Apr15 1056 by 306	04May15 2326 by 306		
Dieldrin	4.44 ug/Kg	77.7	65.0-125			G10106	29Apr15 1056 by 306	04May15 2326 by 306		
Endosulfan sulfate	4.44 ug/Kg	83.3	60.0-135			G10106	29Apr15 1056 by 306	04May15 2326 by 306		
Endrin	4.44 ug/Kg	88.2	60.0-135			G10106	29Apr15 1056 by 306	04May15 2326 by 306		
Endrin aldehyde	4.44 ug/Kg	86.8	35.0-145			G10106	29Apr15 1056 by 306	04May15 2326 by 306		
gamma-BHC	4.44 ug/Kg	79.7	60.0-125			G10106	29Apr15 1056 by 306	04May15 2326 by 306		
Heptachlor	4.44 ug/Kg	87.1	50.0-140			G10106	29Apr15 1056 by 306	04May15 2326 by 306		
Heptachlor epoxide	4.44 ug/Kg	74.9	65.0-130			G10106	29Apr15 1056 by 306	04May15 2326 by 306		
Methoxychlor	4.44 ug/Kg	142	55.0-145			G10106	29Apr15 1056 by 306	04May15 2326 by 306		
Organochlorine Pesticides Surrogates:										
Decachlorobiphenyl	13.3 ug/Kg	89.4	55.0-130			G10106	29Apr15 1056 by 306	04May15 2326 by 306		
Tetrachloro-m-xylene	13.3 ug/Kg	79.4	70.0-125			G10106	29Apr15 1056 by 306	04May15 2326 by 306		



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MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Total Recoverable Phenolics	189843-4	0.1 mg/l	99.5	80.0-120	W51727	27Apr15 0805 by 308	27Apr15 1130 by 308		
	189843-4	0.1 mg/l	103	80.0-120	W51727	27Apr15 0805 by 308	27Apr15 1130 by 308		
		Relative Percent Difference:	3.11	10.0	W51727				
Total Cyanide	189843-4	0.1 mg/l	96.3	75.0-125	W51711	24Apr15 0844 by 308	24Apr15 1450 by 308		
	189843-4	0.1 mg/l	97.2	75.0-125	W51711	24Apr15 0844 by 308	24Apr15 1452 by 308		
		Relative Percent Difference:	0.930	20.0	W51711				
Mercury, low level	189871-1	0.01 ug/l	106	63.0-111	S38818	27Apr15 1225 by 302	27Apr15 1319 by 302		
	189871-1	0.01 ug/l	97.0	63.0-111	S38818	27Apr15 1225 by 302	27Apr15 1404 by 302		
		Relative Percent Difference:	8.87	18.0	S38818				
Total Recoverable Antimony	189827-1	0.05 mg/l	97.4	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1454 by 235		
	189827-1	0.05 mg/l	97.5	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1500 by 235		
		Relative Percent Difference:	0.140	20.0	S38802				
Total Recoverable Arsenic	189827-1	0.05 mg/l	102	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1454 by 235		
	189827-1	0.05 mg/l	103	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1500 by 235		
		Relative Percent Difference:	1.22	20.0	S38802				
Total Recoverable Beryllium	189827-1	0.05 mg/l	98.7	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1454 by 235		
	189827-1	0.05 mg/l	98.9	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1500 by 235		
		Relative Percent Difference:	0.188	20.0	S38802				
Total Recoverable Cadmium	189827-1	0.05 mg/l	98.0	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1454 by 235		
	189827-1	0.05 mg/l	97.8	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1500 by 235		
		Relative Percent Difference:	0.257	20.0	S38802				
Total Recoverable Chromium	189827-1	0.05 mg/l	90.0	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1454 by 235		
	189827-1	0.05 mg/l	89.4	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1500 by 235		
		Relative Percent Difference:	0.478	20.0	S38802				
Total Recoverable Copper	189827-1	0.05 mg/l	101	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1454 by 235		
	189827-1	0.05 mg/l	100	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1500 by 235		
		Relative Percent Difference:	0.959	20.0	S38802				
Total Recoverable Lead	189827-1	0.05 mg/l	96.0	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1454 by 235		
	189827-1	0.05 mg/l	96.2	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1500 by 235		
		Relative Percent Difference:	0.260	20.0	S38802				
Total Recoverable Molybdenum	189827-1	0.05 mg/l	99.1	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1454 by 235		
	189827-1	0.05 mg/l	98.7	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1500 by 235		
		Relative Percent Difference:	0.370	20.0	S38802				
Total Recoverable Nickel	189827-1	0.05 mg/l	104	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1454 by 235		
	189827-1	0.05 mg/l	103	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1500 by 235		
		Relative Percent Difference:	0.513	20.0	S38802				
Total Recoverable Selenium	189827-1	0.05 mg/l	102	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1454 by 235		
	189827-1	0.05 mg/l	104	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1500 by 235		
		Relative Percent Difference:	2.58	20.0	S38802				
Total Recoverable Silver	189827-1	0.02 mg/l	94.6	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1454 by 235		
	189827-1	0.02 mg/l	92.6	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1500 by 235		
		Relative Percent Difference:	2.21	20.0	S38802				
Total Recoverable Thallium	189827-1	0.05 mg/l	94.2	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1454 by 235		
	189827-1	0.05 mg/l	94.3	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1500 by 235		
		Relative Percent Difference:	0.0488	20.0	S38802				
Total Recoverable Zinc	189827-1	0.05 mg/l	96.1	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1454 by 235		
	189827-1	0.05 mg/l	94.9	75.0-125	S38802	23Apr15 0944 by 313	23Apr15 1500 by 235		
		Relative Percent Difference:	0.854	20.0	S38802				
Total Cyanide	189843-3	0.991 mg/Kg	75.4	75.0-125	W51729	27Apr15 0806 by 308	27Apr15 1438 by 308		
	189843-3	0.989 mg/Kg	76.0	75.0-125	W51729	27Apr15 0806 by 308	27Apr15 1440 by 308		
		Relative Percent Difference:	0.752	20.0	W51729				



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MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Total Recoverable Phenolics	189843-3	9.55 mg/Kg	96.3	80.0-120	W51741	28Apr15 0805 by 308	28Apr15 1145 by 308		
	189843-3	9.39 mg/Kg	96.8	80.0-120	W51741	28Apr15 0805 by 308	28Apr15 1145 by 308		
		Relative Percent Difference:	0.370	10.0	W51741				
Antimony	189851-1	495 mg/Kg	88.7	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1322 by 302		
	189851-1	494 mg/Kg	90.5	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1326 by 302		
		Relative Percent Difference:	2.01	20.0	S38807				
Arsenic	189851-1	495 mg/Kg	94.2	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1322 by 302		
	189851-1	494 mg/Kg	96.5	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1326 by 302		
		Relative Percent Difference:	2.37	20.0	S38807				
Beryllium	189851-1	49.5 mg/Kg	97.1	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1322 by 302		
	189851-1	49.4 mg/Kg	98.4	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1326 by 302		
		Relative Percent Difference:	1.31	20.0	S38807				
Cadmium	189851-1	495 mg/Kg	92.2	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1322 by 302		
	189851-1	494 mg/Kg	93.1	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1326 by 302		
		Relative Percent Difference:	0.897	20.0	S38807				
Chromium	189851-1	49.5 mg/Kg	-	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1322 by 302		X
	189851-1	49.4 mg/Kg	-	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1326 by 302		X
		Relative Percent Difference:	0.473	20.0	S38807				
Copper	189851-1	49.5 mg/Kg	104	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1322 by 302		
	189851-1	49.4 mg/Kg	106	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1326 by 302		
		Relative Percent Difference:	1.83	20.0	S38807				
Lead	189851-1	495 mg/Kg	95.9	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1322 by 302		
	189851-1	494 mg/Kg	97.1	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1326 by 302		
		Relative Percent Difference:	1.26	20.0	S38807				
Molybdenum	189851-1	49.5 mg/Kg	101	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1322 by 302		
	189851-1	49.4 mg/Kg	102	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1326 by 302		
		Relative Percent Difference:	1.44	20.0	S38807				
Nickel	189851-1	49.5 mg/Kg	97.4	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1322 by 302		
	189851-1	49.4 mg/Kg	96.7	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1326 by 302		
		Relative Percent Difference:	0.603	20.0	S38807				
Selenium	189851-1	495 mg/Kg	85.3	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1322 by 302		
	189851-1	494 mg/Kg	86.1	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1326 by 302		
		Relative Percent Difference:	0.921	20.0	S38807				
Silver	189851-1	9.90 mg/Kg	96.1	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1322 by 302		
	189851-1	9.89 mg/Kg	97.9	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1326 by 302		
		Relative Percent Difference:	1.86	20.0	S38807				
Thallium	189851-1	495 mg/Kg	100	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1322 by 302		
	189851-1	494 mg/Kg	102	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1326 by 302		
		Relative Percent Difference:	1.99	20.0	S38807				
Zinc	189851-1	49.5 mg/Kg	88.4	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1322 by 302		
	189851-1	49.4 mg/Kg	88.6	75.0-125	S38807	24Apr15 0823 by 313	24Apr15 1326 by 302		
		Relative Percent Difference:	0.127	20.0	S38807				
Mercury	189522-2	2.31 mg/Kg	108	70.0-130	S38824	28Apr15 0855 by 313	28Apr15 1215 by 302		
	189522-2	2.42 mg/Kg	108	70.0-130	S38824	28Apr15 0855 by 313	28Apr15 1219 by 302		
		Relative Percent Difference:	0.102	20.0	S38824				
Base/Neutral and Acid Compounds									
Acenaphthene	189771-1	40 ug/l	86.4	45.0-110	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	85.4	45.0-110	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
		Relative Percent Difference:	1.22	30.0	B9483				

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MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Acenaphthylene	189771-1	40 ug/l	80.5	50.0-105	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	79.8	50.0-105	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		0.811	30.0	B9483				
Anthracene	189771-1	40 ug/l	89.6	55.0-110	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	89.2	55.0-110	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		0.475	30.0	B9483				
Benzo(a)anthracene	189771-1	40 ug/l	89.7	55.0-110	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	89.0	55.0-110	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		0.699	30.0	B9483				
Benzo(a)pyrene	189771-1	40 ug/l	90.4	55.0-110	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	89.3	55.0-110	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		1.20	30.0	B9483				
Benzo(g,h,i)perylene	189771-1	40 ug/l	73.0	40.0-125	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	72.5	40.0-125	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		0.653	30.0	B9483				
Benzo(k)fluoranthene	189771-1	40 ug/l	98.8	45.0-125	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	93.9	45.0-125	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		5.14	30.0	B9483				
3,4-Benzofluoranthene	189771-1	40 ug/l	99.6	45.0-120	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	98.3	45.0-120	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		1.29	30.0	B9483				
Bis(2-chloroethoxy)methane	189771-1	40 ug/l	79.6	45.0-105	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	86.1	45.0-105	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		7.91	30.0	B9483				
Bis(2-chloroethyl)ether	189771-1	40 ug/l	80.8	35.0-110	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	84.0	35.0-110	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		3.82	30.0	B9483				
Bis(2-chloroisopropyl)ether	189771-1	40 ug/l	76.1	25.0-130	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	79.7	25.0-130	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		4.62	30.0	B9483				
Bis(2-ethylhexyl)phthalate	189771-1	40 ug/l	79.3	40.0-125	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	83.9	40.0-125	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		4.79	30.0	B9483				
4-Bromophenyl phenyl ether	189771-1	40 ug/l	88.2	50.0-115	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	88.3	50.0-115	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		0.113	30.0	B9483				
Butylbenzyl phthalate	189771-1	40 ug/l	85.0	45.0-115	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	88.7	45.0-115	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		3.72	30.0	B9483				
2-Chloronaphthalene	189771-1	40 ug/l	81.8	50.0-105	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	82.9	50.0-105	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		1.28	30.0	B9483				
2-Chlorophenol	189771-1	40 ug/l	81.8	35.0-105	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	84.9	35.0-105	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		3.66	30.0	B9483				
4-Chlorophenyl phenyl ether	189771-1	40 ug/l	84.5	50.0-110	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	83.6	50.0-110	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		1.13	30.0	B9483				
Chrysene	189771-1	40 ug/l	89.6	55.0-110	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	89.2	55.0-110	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		0.391	30.0	B9483				

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Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Base/Neutral and Acid Compounds (Continued)									
Di-n-butyl phthalate	189771-1	40 ug/l	103	55.0-115	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	104	55.0-115	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		1.08	30.0	B9483				
Di-n-octyl phthalate	189771-1	40 ug/l	108	35.0-135	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	115	35.0-135	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		6.07	30.0	B9483				
Dibenz(a,h)anthracene	189771-1	40 ug/l	72.4	40.0-125	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	74.8	40.0-125	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		3.16	30.0	B9483				
1,2-Dichlorobenzene	189771-1	40 ug/l	70.0	35.0-100	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	74.3	35.0-100	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		5.96	30.0	B9483				
1,3-Dichlorobenzene	189771-1	40 ug/l	67.8	30.0-100	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	72.4	30.0-100	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		6.53	30.0	B9483				
1,4-Dichlorobenzene	189771-1	40 ug/l	68.6	30.0-100	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	72.8	30.0-100	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		5.94	30.0	B9483				
3,3'-Dichlorobenzidine	189771-1	40 ug/l	17.5	20.0-110	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	DQ
	189771-1	40 ug/l	17.3	20.0-110	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	DQ
	Relative Percent Difference:		0.862	30.0	B9483				
2,4-Dichlorophenol	189771-1	40 ug/l	76.4	50.0-105	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	84.7	50.0-105	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		10.3	30.0	B9483				
Diethyl phthalate	189771-1	40 ug/l	88.4	40.0-120	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	86.3	40.0-120	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		2.38	30.0	B9483				
Dimethyl phthalate	189771-1	40 ug/l	90.1	25.0-125	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	88.8	25.0-125	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		1.40	30.0	B9483				
2,4-Dimethylphenol	189771-1	40 ug/l	37.5	30.0-110	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	43.6	30.0-110	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		14.9	30.0	B9483				
4,6-Dinitro-o-cresol	189771-1	40 ug/l	87.0	40.0-130	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	91.0	40.0-130	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		4.52	30.0	B9483				
2,4-Dinitrophenol	189771-1	40 ug/l	84.4	15.0-140	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	88.8	15.0-140	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		5.08	30.0	B9483				
2,4-Dinitrotoluene	189771-1	40 ug/l	88.9	50.0-120	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	89.7	50.0-120	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		0.896	30.0	B9483				
2,6-Dinitrotoluene	189771-1	40 ug/l	86.5	50.0-115	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	87.4	50.0-115	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		0.978	30.0	B9483				
1,2-Diphenylhydrazine	189771-1	40 ug/l	90.5	55.0-115	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	88.8	55.0-115	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		1.81	30.0	B9483				

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Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Fluorene	189771-1	40 ug/l	86.7	50.0-110	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	85.2	50.0-110	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		1.77	30.0	B9483				
Hexachlorobenzene	189771-1	40 ug/l	89.2	50.0-110	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	90.6	50.0-110	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		1.61	30.0	B9483				
Hexachlorobutadiene	189771-1	40 ug/l	68.0	25.0-105	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	75.8	25.0-105	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		10.8	30.0	B9483				
Hexachlorocyclopentadiene	189771-1	40 ug/l	59.6	34.1-105	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	63.6	34.1-105	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		6.41	32.7	B9483				
Hexachloroethane	189771-1	40 ug/l	65.4	30.0-100	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	70.1	30.0-100	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		6.94	30.0	B9483				
Indeno(1,2,3-cd)pyrene	189771-1	40 ug/l	79.9	45.0-125	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	82.6	45.0-125	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		3.35	30.0	B9483				
Isophorone	189771-1	40 ug/l	81.8	50.0-110	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	86.3	50.0-110	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		5.41	30.0	B9483				
n-Nitrosodi-n-propylamine	189771-1	40 ug/l	85.4	35.0-130	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	90.1	35.0-130	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		5.30	30.0	B9483				
n-Nitrosodimethylamine	189771-1	40 ug/l	61.4	25.0-110	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	68.0	25.0-110	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		10.2	30.0	B9483				
n-Nitrosodiphenylamine	189771-1	40 ug/l	89.4	50.0-110	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	90.4	50.0-110	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		1.08	30.0	B9483				
Naphthalene	189771-1	40 ug/l	77.9	40.0-100	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	82.2	40.0-100	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		5.43	30.0	B9483				
Nitrobenzene	189771-1	40 ug/l	78.6	45.0-110	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	85.1	45.0-110	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		7.91	30.0	B9483				
2-Nitrophenol	189771-1	40 ug/l	72.2	40.0-115	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	82.3	40.0-115	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		13.1	30.0	B9483				
4-Nitrophenol	189771-1	40 ug/l	68.1	0.00-125	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	74.7	0.00-125	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		9.24	30.0	B9483				
p-Chloro-m-cresol	189771-1	40 ug/l	92.4	45.0-110	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	96.4	45.0-110	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		4.29	30.0	B9483				
Pentachlorophenol	189771-1	40 ug/l	87.5	40.0-115	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	91.2	40.0-115	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		4.17	30.0	B9483				
Phenanthrene	189771-1	40 ug/l	89.0	50.0-115	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	88.4	50.0-115	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		0.677	30.0	B9483				

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Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Base/Neutral and Acid Compounds (Continued)									
Phenol	189771-1	40 ug/l	74.5	0.00-115	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	77.9	0.00-115	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		4.46	30.0	B9483				
Pyrene	189771-1	40 ug/l	90.1	50.0-130	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	91.9	50.0-130	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		1.98	30.0	B9483				
1,2,4-Trichlorobenzene	189771-1	40 ug/l	71.9	35.0-105	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	79.2	35.0-105	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		9.56	30.0	B9483				
2,4,6-Trichlorophenol	189771-1	40 ug/l	92.8	50.0-115	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301	10	D
	189771-1	40 ug/l	92.8	50.0-115	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301	10	D
	Relative Percent Difference:		0.0269	30.0	B9483				
Base/Neutral and Acid Compounds Surrogates:									
2-Fluorobiphenyl	189771-1	40 ug/l	88.4	50.0-110	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301		
	189771-1	40 ug/l	88.0	50.0-110	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301		
2-Fluorophenol	189771-1	40 ug/l	82.2	20.0-110	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301		
	189771-1	40 ug/l	85.7	20.0-110	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301		
Nitrobenzene-D5	189771-1	40 ug/l	85.4	40.0-110	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301		
	189771-1	40 ug/l	93.0	40.0-110	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301		
Terphenyl-D14	189771-1	40 ug/l	98.9	50.0-135	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301		
	189771-1	40 ug/l	102	50.0-135	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301		
2,4,6-Tribromophenol	189771-1	40 ug/l	92.2	40.0-125	B9483	24Apr15 0943 by 285	27Apr15 2030 by 301		
	189771-1	40 ug/l	93.9	40.0-125	B9483	24Apr15 0943 by 285	27Apr15 2110 by 301		
Volatile Organic Compounds									
Acrolein	189769-1	100 ug/l	95.7	0.00-162	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Acrylonitrile	189769-1	100 ug/l	92.7	47.4-132	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Benzene	189769-1	20 ug/l	95.3	80.0-120	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Bromodichloromethane	189769-1	20 ug/l	92.0	75.0-120	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Bromoform	189769-1	20 ug/l	86.6	70.0-130	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Bromomethane	189769-1	20 ug/l	89.8	30.0-145	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Carbon tetrachloride	189769-1	20 ug/l	87.5	65.0-140	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Chlorobenzene	189769-1	20 ug/l	92.6	80.0-120	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Chloroethane	189769-1	20 ug/l	91.4	60.0-135	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
2-Chloroethyl vinyl ether	189769-1	40 ug/l	116	43.1-142	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Chloroform	189769-1	20 ug/l	93.2	65.0-135	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Chloromethane	189769-1	20 ug/l	91.1	40.0-125	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Dibromochloromethane	189769-1	20 ug/l	90.1	60.0-135	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
1,2-Dichlorobenzene	189769-1	20 ug/l	98.6	70.0-120	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
1,3-Dichlorobenzene	189769-1	20 ug/l	96.4	75.0-125	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
1,4-Dichlorobenzene	189769-1	20 ug/l	98.4	75.0-125	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
1,1-Dichloroethane	189769-1	20 ug/l	103	70.0-135	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
1,2-Dichloroethane	189769-1	20 ug/l	91.8	70.0-130	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
1,1-Dichloroethene	189769-1	20 ug/l	93.8	70.0-130	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D

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MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Volatile Organic Compounds (Continued)									
trans-1,2-Dichloroethene	189769-1	20 ug/l	91.7	60.0-140	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
1,2-Dichloropropane	189769-1	20 ug/l	89.0	75.0-125	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
1,3-Dichloropropylene	189769-1	20 ug/l	79.8	70.0-130	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Ethylbenzene	189769-1	20 ug/l	93.7	75.0-125	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Methylene chloride	189769-1	20 ug/l	93.4	55.0-140	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
1,1,2,2-Tetrachloroethane	189769-1	20 ug/l	97.7	65.0-130	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Tetrachloroethene	189769-1	20 ug/l	92.3	45.0-150	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Toluene	189769-1	20 ug/l	91.4	75.0-120	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
1,1,1-Trichloroethane	189769-1	20 ug/l	83.0	65.0-130	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
1,1,2-Trichloroethane	189769-1	20 ug/l	96.2	75.0-125	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Trichloroethene	189769-1	20 ug/l	89.0	70.0-125	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Vinyl chloride	189769-1	20 ug/l	93.4	50.0-145	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Volatile Organic Compounds Surrogates:									
4-Bromofluorobenzene	189769-1	50 ug/l	101	75.0-120	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Dibromofluoromethane	189769-1	50 ug/l	97.5	85.0-115	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Toluene-D8	189769-1	50 ug/l	99.7	85.0-120	V8742	23Apr15 1133 by 301	23Apr15 2130 by 301	100	D
Organochlorine Pesticides and PCBs									
Aldrin	189762-1	10 ug/l	62.8	25.0-140	G10104	27Apr15 1348 by 285	27Apr15 1736 by 306	10	D
	189762-1	10 ug/l	68.5	25.0-140	G10104	27Apr15 1348 by 285	27Apr15 1747 by 306	10	D
	Relative Percent Difference:		8.68	30.0	G10104				
alpha-BHC	189762-1	10 ug/l	71.6	60.0-130	G10104	27Apr15 1348 by 285	27Apr15 1736 by 306	10	D
	189762-1	10 ug/l	68.6	60.0-130	G10104	27Apr15 1348 by 285	27Apr15 1747 by 306	10	D
	Relative Percent Difference:		4.28	30.0	G10104				
alpha-Endosulfan	189762-1	10 ug/l	61.8	50.0-110	G10104	27Apr15 1348 by 285	27Apr15 1736 by 306	10	D
	189762-1	10 ug/l	65.8	50.0-110	G10104	27Apr15 1348 by 285	27Apr15 1747 by 306	10	D
	Relative Percent Difference:		6.27	30.0	G10104				
beta-BHC	189762-1	10 ug/l	74.0	65.0-125	G10104	27Apr15 1348 by 285	27Apr15 1736 by 306	10	D
	189762-1	10 ug/l	72.3	65.0-125	G10104	27Apr15 1348 by 285	27Apr15 1747 by 306	10	D
	Relative Percent Difference:		2.32	30.0	G10104				
beta-Endosulfan	189762-1	10 ug/l	60.0	30.0-130	G10104	27Apr15 1348 by 285	27Apr15 1736 by 306	10	D
	189762-1	10 ug/l	65.5	30.0-130	G10104	27Apr15 1348 by 285	27Apr15 1747 by 306	10	D
	Relative Percent Difference:		8.76	30.0	G10104				
Chlorpyrifos	189762-1	10 ug/l	88.1	45.8-126	G10104	27Apr15 1348 by 285	27Apr15 1736 by 306	10	D
	189762-1	10 ug/l	88.0	45.8-126	G10104	27Apr15 1348 by 285	27Apr15 1747 by 306	10	D
	Relative Percent Difference:		0.114	29.1	G10104				
4,4'-DDD	189762-1	10 ug/l	51.9	25.0-150	G10104	27Apr15 1348 by 285	27Apr15 1736 by 306	10	D
	189762-1	10 ug/l	58.8	25.0-150	G10104	27Apr15 1348 by 285	27Apr15 1747 by 306	10	D
	Relative Percent Difference:		12.5	30.0	G10104				
4,4'-DDE	189762-1	10 ug/l	83.2	35.0-140	G10104	27Apr15 1348 by 285	27Apr15 1736 by 306	10	D
	189762-1	10 ug/l	78.8	35.0-140	G10104	27Apr15 1348 by 285	27Apr15 1747 by 306	10	D
	Relative Percent Difference:		5.43	30.0	G10104				
4,4'-DDT	189762-1	10 ug/l	74.1	45.0-140	G10104	27Apr15 1348 by 285	27Apr15 1736 by 306	10	D
	189762-1	10 ug/l	80.7	45.0-140	G10104	27Apr15 1348 by 285	27Apr15 1747 by 306	10	D
	Relative Percent Difference:		8.53	30.0	G10104				

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delta-BHC	189762-1	10 ug/l	68.0	45.0-135	G10104	27Apr15 1348 by 285	27Apr15 1736 by 306	10	D
	189762-1	10 ug/l	63.2	45.0-135	G10104	27Apr15 1348 by 285	27Apr15 1747 by 306	10	D
	Relative Percent Difference:		7.32	30.0	G10104				
Dieldrin	189762-1	10 ug/l	71.8	60.0-130	G10104	27Apr15 1348 by 285	27Apr15 1736 by 306	10	D
	189762-1	10 ug/l	78.7	60.0-130	G10104	27Apr15 1348 by 285	27Apr15 1747 by 306	10	D
	Relative Percent Difference:		9.17	30.0	G10104				
Endosulfan sulfate	189762-1	10 ug/l	90.1	55.0-135	G10104	27Apr15 1348 by 285	27Apr15 1736 by 306	10	D
	189762-1	10 ug/l	103	55.0-135	G10104	27Apr15 1348 by 285	27Apr15 1747 by 306	10	D
	Relative Percent Difference:		13.2	30.0	G10104				
Endrin	189762-1	10 ug/l	81.7	55.0-135	G10104	27Apr15 1348 by 285	27Apr15 1736 by 306	10	D
	189762-1	10 ug/l	81.9	55.0-135	G10104	27Apr15 1348 by 285	27Apr15 1747 by 306	10	D
	Relative Percent Difference:		0.244	30.0	G10104				
Endrin aldehyde	189762-1	10 ug/l	55.2	55.0-135	G10104	27Apr15 1348 by 285	27Apr15 1736 by 306	10	D
	189762-1	10 ug/l	60.5	55.0-135	G10104	27Apr15 1348 by 285	27Apr15 1747 by 306	10	D
	Relative Percent Difference:		9.16	30.0	G10104				
gamma-BHC	189762-1	10 ug/l	73.0	25.0-135	G10104	27Apr15 1348 by 285	27Apr15 1736 by 306	10	D
	189762-1	10 ug/l	63.2	25.0-135	G10104	27Apr15 1348 by 285	27Apr15 1747 by 306	10	D
	Relative Percent Difference:		14.4	30.0	G10104				
Heptachlor	189762-1	10 ug/l	67.0	40.0-130	G10104	27Apr15 1348 by 285	27Apr15 1736 by 306	10	D
	189762-1	10 ug/l	68.6	40.0-130	G10104	27Apr15 1348 by 285	27Apr15 1747 by 306	10	D
	Relative Percent Difference:		2.36	30.0	G10104				
Heptachlor epoxide	189762-1	10 ug/l	76.2	60.0-130	G10104	27Apr15 1348 by 285	27Apr15 1736 by 306	10	D
	189762-1	10 ug/l	79.8	60.0-130	G10104	27Apr15 1348 by 285	27Apr15 1747 by 306	10	D
	Relative Percent Difference:		4.62	30.0	G10104				
Organochlorine Pesticides and PCBs Surrogates:									
Decachlorobiphenyl	189762-1	20 ug/l	81.4	30.0-135	G10104	27Apr15 1348 by 285	27Apr15 1736 by 306		
	189762-1	20 ug/l	85.5	30.0-135	G10104	27Apr15 1348 by 285	27Apr15 1747 by 306		
Tetrachloro-m-xylene	189762-1	20 ug/l	110	25.0-140	G10104	27Apr15 1348 by 285	27Apr15 1736 by 306		
	189762-1	20 ug/l	118	25.0-140	G10104	27Apr15 1348 by 285	27Apr15 1747 by 306		
Base/Neutral and Acid Compounds									
3 & 4-Methylphenol	189843-3	2650 ug/Kg	-	40.0-105	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		X
Acenaphthene	189843-3	2650 ug/Kg	92.0	45.0-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Acenaphthylene	189843-3	2650 ug/Kg	85.7	45.0-105	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Anthracene	189843-3	2650 ug/Kg	96.5	55.0-105	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Benzo(a)anthracene	189843-3	2650 ug/Kg	93.8	50.0-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Benzo(a)pyrene	189843-3	2650 ug/Kg	95.2	50.0-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Benzo(b)fluoranthene	189843-3	2650 ug/Kg	106	45.0-115	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Benzo(g,h,i)perylene	189843-3	2650 ug/Kg	81.9	40.0-125	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Benzo(k)fluoranthene	189843-3	2650 ug/Kg	104	45.0-125	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Benzoic acid	189843-3	6620 ug/Kg	80.4	0.00-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Benzyl alcohol	189843-3	2650 ug/Kg	109	20.0-125	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
bis(2-Chloroethoxy)Methane	189843-3	2650 ug/Kg	94.2	45.0-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
bis(2-Chloroethyl)Ether	189843-3	2650 ug/Kg	93.5	40.0-105	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
bis(2-Chloroisopropyl)Ether	189843-3	2650 ug/Kg	90.4	20.0-115	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
bis(2-Ethylhexyl)Phthalate	189843-3	2650 ug/Kg	50.8	45.0-125	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
4-Bromophenyl phenyl ether	189843-3	2650 ug/Kg	101	45.0-115	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		

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Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Base/Neutral and Acid Compounds (Continued)									
Butyl benzyl phthalate	189843-3	2650 ug/Kg	113	50.0-125	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
4-Chloro-3-methylphenol	189843-3	2650 ug/Kg	108	45.0-115	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
4-Chloroaniline	189843-3	2650 ug/Kg	18.6	10.0-100	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
2-Chloronaphthalene	189843-3	2650 ug/Kg	87.0	45.0-105	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
2-Chlorophenol	189843-3	2650 ug/Kg	95.6	45.0-105	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
4-Chlorophenyl phenyl ether	189843-3	2650 ug/Kg	91.1	45.0-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Chrysene	189843-3	2650 ug/Kg	92.7	55.0-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Di-n-butyl phthalate	189843-3	2650 ug/Kg	67.0	55.0-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Di-n-octyl phthalate	189843-3	2650 ug/Kg	123	40.0-130	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Dibenz(a,h)anthracene	189843-3	2650 ug/Kg	81.2	40.0-125	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Dibenzofuran	189843-3	2650 ug/Kg	88.7	50.0-105	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
1,2-Dichlorobenzene	189843-3	2650 ug/Kg	82.7	45.0-100	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
1,3-Dichlorobenzene	189843-3	2650 ug/Kg	80.8	40.0-100	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
1,4-Dichlorobenzene	189843-3	2650 ug/Kg	82.3	35.0-105	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
3,3'-Dichlorobenzidine	189843-3	2650 ug/Kg	33.8	10.0-130	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
2,4-Dichlorophenol	189843-3	2650 ug/Kg	101	45.0-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Diethyl phthalate	189843-3	2650 ug/Kg	93.2	50.0-115	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Dimethyl phthalate	189843-3	2650 ug/Kg	96.6	50.0-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
2,4-Dimethylphenol	189843-3	2650 ug/Kg	101	30.0-105	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
4,6-Dinitro-2-methylphenol	189843-3	2650 ug/Kg	98.5	30.0-135	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
2,4-Dinitrophenol	189843-3	2650 ug/Kg	83.8	15.0-130	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
2,4-Dinitrotoluene	189843-3	2650 ug/Kg	106	50.0-115	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
2,6-Dinitrotoluene	189843-3	2650 ug/Kg	101	50.0-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Fluoranthene	189843-3	2650 ug/Kg	74.8	55.0-115	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Fluorene	189843-3	2650 ug/Kg	91.0	50.0-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Hexachlorobenzene	189843-3	2650 ug/Kg	97.5	45.0-120	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Hexachlorobutadiene	189843-3	2650 ug/Kg	88.2	40.0-115	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Hexachlorocyclopentadiene	189843-3	2650 ug/Kg	36.6	0.00-133	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Hexachloroethane	189843-3	2650 ug/Kg	81.4	35.0-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Indeno(1,2,3-cd)pyrene	189843-3	2650 ug/Kg	85.6	40.0-120	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Isophorone	189843-3	2650 ug/Kg	93.5	45.0-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
2-Methylnaphthalene	189843-3	2650 ug/Kg	97.7	45.0-105	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
2-Methylphenol	189843-3	2650 ug/Kg	100	40.0-105	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
N-Nitroso-di-n-propylamine	189843-3	2650 ug/Kg	66.9	40.0-115	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
n-Nitrosodiphenylamine	189843-3	2650 ug/Kg	110	50.0-115	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Naphthalene	189843-3	2650 ug/Kg	90.0	40.0-105	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
2-Nitroaniline	189843-3	2650 ug/Kg	99.5	45.0-120	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
3-Nitroaniline	189843-3	2650 ug/Kg	45.8	25.0-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
4-Nitroaniline	189843-3	2650 ug/Kg	84.6	35.0-115	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Nitrobenzene	189843-3	2650 ug/Kg	91.4	40.0-115	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		

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MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Base/Neutral and Acid Compounds (Continued)									
2-Nitrophenol	189843-3	2650 ug/Kg	91.4	40.0-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
4-Nitrophenol	189843-3	2650 ug/Kg	82.9	15.0-140	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Pentachlorophenol	189843-3	2650 ug/Kg	101	25.0-120	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Phenanthrene	189843-3	2650 ug/Kg	91.4	50.0-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Phenol	189843-3	2650 ug/Kg	97.8	40.0-100	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Pyrene	189843-3	2650 ug/Kg	156	45.0-125	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		Q
1,2,4-Trichlorobenzene	189843-3	2650 ug/Kg	89.9	45.0-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
2,4,5-Trichlorophenol	189843-3	2650 ug/Kg	100	50.0-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
2,4,6-Trichlorophenol	189843-3	2650 ug/Kg	106	45.0-110	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Base/Neutral and Acid Compounds Surrogates:									
2-Fluorobiphenyl	189843-3	2650 ug/Kg	91.7	45.0-105	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
2-Fluorophenol	189843-3	2650 ug/Kg	90.2	35.0-105	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Nitrobenzene-D5	189843-3	2650 ug/Kg	105	35.0-100	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		Q
Terphenyl-D14	189843-3	2650 ug/Kg	156	30.0-125	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		Q
2,4,6-Tribromophenol	189843-3	2650 ug/Kg	102	35.0-125	B9484	24Apr15 1452 by 285	28Apr15 0146 by 301		
Volatile Organic Compounds									
Acetone	189843-3	40 mg/l	112	20.0-160	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Benzene	189843-3	20 mg/l	99.8	75.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Bromobenzene	189843-3	20 mg/l	101	65.0-120	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Bromochloromethane	189843-3	20 mg/l	101	70.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Bromodichloromethane	189843-3	20 mg/l	101	70.0-130	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Bromoform	189843-3	20 mg/l	104	55.0-135	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Bromomethane	189843-3	20 mg/l	131	30.0-160	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
2-Butanone	189843-3	40 mg/l	112	30.0-160	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Carbon disulfide	189843-3	40 mg/l	94.8	45.0-160	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Carbon tetrachloride	189843-3	20 mg/l	93.6	65.0-135	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Chlorobenzene	189843-3	20 mg/l	101	75.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Chloroethane	189843-3	20 mg/l	80.0	40.0-155	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
2-Chloroethyl vinyl ether	189843-3	40 mg/l	88.8	45.9-129	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Chloroform	189843-3	20 mg/l	97.0	70.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Chloromethane	189843-3	20 mg/l	97.6	50.0-130	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
2-Chlorotoluene	189843-3	20 mg/l	95.4	70.0-130	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
4-Chlorotoluene	189843-3	20 mg/l	98.2	75.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
1,2-Dibromo-3-chloropropane	189843-3	20 mg/l	113	40.0-135	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Dibromochloromethane	189843-3	20 mg/l	102	65.0-130	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
1,2-Dibromoethane	189843-3	20 mg/l	104	70.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Dibromomethane	189843-3	20 mg/l	104	75.0-130	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
1,2-Dichlorobenzene	189843-3	20 mg/l	99.1	75.0-120	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
1,3-Dichlorobenzene	189843-3	20 mg/l	101	70.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		

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MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Volatile Organic Compounds (Continued)									
1,4-Dichlorobenzene	189843-3	20 mg/l	101	70.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Dichlorodifluoromethane	189843-3	20 mg/l	98.6	35.0-135	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
1,1-Dichloroethane	189843-3	20 mg/l	91.3	75.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
1,2-Dichloroethane	189843-3	20 mg/l	101	70.0-135	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
1,1-Dichloroethene	189843-3	20 mg/l	94.4	65.0-135	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
cis-1,2-Dichloroethene	189843-3	20 mg/l	102	65.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
trans-1,2-Dichloroethene	189843-3	20 mg/l	99.5	65.0-135	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
1,2-Dichloropropane	189843-3	20 mg/l	96.6	70.0-120	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
1,3-Dichloropropane	189843-3	20 mg/l	106	75.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
2,2-Dichloropropane	189843-3	20 mg/l	90.8	65.0-135	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
1,1-Dichloropropene	189843-3	20 mg/l	93.4	70.0-135	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
cis-1,3-Dichloropropene	189843-3	20 mg/l	98.9	70.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
trans-1,3-Dichloropropene	189843-3	20 mg/l	103	65.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Ethylbenzene	189843-3	20 mg/l	100	75.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Hexachlorobutadiene	189843-3	20 mg/l	89.4	55.0-140	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
2-Hexanone	189843-3	40 mg/l	101	45.0-145	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Isopropylbenzene	189843-3	20 mg/l	98.8	75.0-130	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
m&p-Xylenes	189843-3	40 mg/l	100	80.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
4-Methyl-2-pentanone	189843-3	40 mg/l	102	45.0-145	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Methylene chloride	189843-3	20 mg/l	94.1	55.0-140	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
n-Butylbenzene	189843-3	20 mg/l	95.4	65.0-140	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
n-Propylbenzene	189843-3	20 mg/l	97.5	65.0-135	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Naphthalene	189843-3	20 mg/l	98.8	40.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
o-Xylene	189843-3	20 mg/l	101	75.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
p-Isopropyltoluene	189843-3	20 mg/l	97.4	75.0-135	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
sec-Butylbenzene	189843-3	20 mg/l	95.2	65.0-130	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Styrene	189843-3	20 mg/l	101	75.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
tert-Butylbenzene	189843-3	20 mg/l	96.8	65.0-130	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
1,1,1,2-Tetrachloroethane	189843-3	20 mg/l	99.0	75.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
1,1,2,2-Tetrachloroethane	189843-3	20 mg/l	106	55.0-130	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Tetrachloroethene	189843-3	20 mg/l	99.9	65.0-140	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Toluene	189843-3	20 mg/l	83.4	70.0-125	V8741	23Apr15 1000 by 301	23Apr15 1730 by 301		
1,2,3-Trichlorobenzene	189843-3	20 mg/l	103	60.0-135	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
1,2,4-Trichlorobenzene	189843-3	20 mg/l	102	65.0-130	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
1,1,1-Trichloroethane	189843-3	20 mg/l	91.6	70.0-135	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
1,1,2-Trichloroethane	189843-3	20 mg/l	103	60.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Trichloroethene	189843-3	20 mg/l	98.7	75.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Trichlorofluoromethane	189843-3	20 mg/l	90.6	25.0-185	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
1,2,3-Trichloropropane	189843-3	20 mg/l	89.2	65.0-130	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
1,2,4-Trimethylbenzene	189843-3	20 mg/l	100	65.0-135	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		



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MATRIX SPIKE SAMPLE RESULTS

Analyte	Sample	Spike Amount	%	Limits	Batch	Preparation Date	Analysis Date	Dil	Qual
Volatile Organic Compounds (Continued)									
1,3,5-Trimethylbenzene	189843-3	20 mg/l	98.4	65.0-135	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Vinyl acetate	189843-3	40 mg/l	92.2	0.00-169	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Vinyl chloride	189843-3	20 mg/l	91.9	60.0-125	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Volatile Organic Compounds Surrogates:									
4-Bromofluorobenzene	189843-3	50 ug/Kg	99.0	85.0-120	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Dibromofluoromethane	189843-3	50 ug/Kg	97.8	80.0-120	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		
Toluene-D8	189843-3	50 ug/Kg	102	85.0-115	V8741	23Apr15 1000 by 301	23Apr15 1548 by 301		

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LABORATORY BLANK RESULTS

Analyte	Result	RL	PQL	QC			Qual
				Sample	Preparation Date	Analysis Date	
Total Recoverable Phenolics	< 0.005 mg/l	0.005	0.005	W51727-1	27Apr15 0805 by 308	27Apr15 1130 by 308	
Total Cyanide	< 0.01 mg/l	0.01	0.01	W51711-1	24Apr15 0844 by 308	24Apr15 1444 by 308	
Mercury, low level	< 0.0050 ug/l	0.0050	0.0050	S38818-1	27Apr15 1225 by 302	27Apr15 1304 by 302	
Total Recoverable Antimony	< 0.03 mg/l	0.03	0.03	S38802-1	23Apr15 0944 by 313	23Apr15 1442 by 235	
Total Recoverable Arsenic	< 0.0005 mg/l	0.0005	0.0005	S38802-1	23Apr15 0944 by 313	23Apr15 1442 by 235	
Total Recoverable Beryllium	< 0.0002 mg/l	0.0002	0.0002	S38802-1	23Apr15 0944 by 313	23Apr15 1442 by 235	
Total Recoverable Cadmium	< 0.0002 mg/l	0.0002	0.0002	S38802-1	23Apr15 0944 by 313	23Apr15 1442 by 235	
Total Recoverable Chromium	< 0.007 mg/l	0.007	0.007	S38802-1	23Apr15 0944 by 313	23Apr15 1442 by 235	
Total Recoverable Copper	< 0.0005 mg/l	0.0005	0.0005	S38802-1	23Apr15 0944 by 313	23Apr15 1442 by 235	
Total Recoverable Lead	< 0.0005 mg/l	0.0005	0.0005	S38802-1	23Apr15 0944 by 313	23Apr15 1442 by 235	
Total Recoverable Molybdenum	< 0.008 mg/l	0.008	0.008	S38802-1	23Apr15 0944 by 313	23Apr15 1442 by 235	
Total Recoverable Nickel	< 0.0005 mg/l	0.0005	0.0005	S38802-1	23Apr15 0944 by 313	23Apr15 1442 by 235	
Total Recoverable Selenium	< 0.002 mg/l	0.002	0.002	S38802-1	23Apr15 0944 by 313	23Apr15 1442 by 235	
Total Recoverable Silver	< 0.0002 mg/l	0.0002	0.0002	S38802-1	23Apr15 0944 by 313	23Apr15 1442 by 235	
Total Recoverable Thallium	< 0.0005 mg/l	0.0005	0.0005	S38802-1	23Apr15 0944 by 313	23Apr15 1442 by 235	
Total Recoverable Zinc	< 0.002 mg/l	0.002	0.002	S38802-1	23Apr15 0944 by 313	23Apr15 1442 by 235	
Total Cyanide	< 0.1 mg/Kg	0.1	0.1	W51729-1	27Apr15 0806 by 308	27Apr15 1433 by 308	
Total Recoverable Phenolics	< 0.005 mg/Kg	0.005	0.005	W51741-1	28Apr15 0805 by 308	28Apr15 1145 by 308	
Total Solids	< 0.01 wt %	0.01	0.01	W51706-1	23Apr15 1606 by 100	24Apr15 1512 by 100	
Antimony	< 3 mg/Kg	3	3	S38807-1	24Apr15 0823 by 313	24Apr15 1417 by 302	
Arsenic	< 5 mg/Kg	5	5	S38807-1	24Apr15 0823 by 313	24Apr15 1417 by 302	
Beryllium	< 0.03 mg/Kg	0.03	0.03	S38807-1	24Apr15 0823 by 313	24Apr15 1417 by 302	
Cadmium	< 0.4 mg/Kg	0.4	0.4	S38807-1	24Apr15 0823 by 313	24Apr15 1417 by 302	
Chromium	< 0.7 mg/Kg	0.7	0.7	S38807-1	24Apr15 0823 by 313	24Apr15 1417 by 302	
Copper	< 0.6 mg/Kg	0.6	0.6	S38807-1	24Apr15 0823 by 313	24Apr15 1417 by 302	
Lead	< 4 mg/Kg	4	4	S38807-1	24Apr15 0823 by 313	24Apr15 1417 by 302	
Molybdenum	< 0.8 mg/Kg	0.8	0.8	S38807-1	24Apr15 0823 by 313	24Apr15 1417 by 302	
Nickel	< 1 mg/Kg	1	1	S38807-1	24Apr15 0823 by 313	24Apr15 1417 by 302	
Selenium	< 7 mg/Kg	7	7	S38807-1	24Apr15 0823 by 313	24Apr15 1417 by 302	
Silver	< 0.7 mg/Kg	0.7	0.7	S38807-1	24Apr15 0823 by 313	24Apr15 1417 by 302	
Thallium	< 4 mg/Kg	4	4	S38807-1	24Apr15 0823 by 313	24Apr15 1417 by 302	
Zinc	< 0.2 mg/Kg	0.2	0.2	S38807-1	24Apr15 0823 by 313	24Apr15 1417 by 302	
Mercury	< 0.1 mg/Kg	0.1	0.1	S38824-1	28Apr15 0855 by 313	28Apr15 1207 by 302	
Base/Neutral and Acid Compounds							
Acenaphthene	< 0.83 ug/l	0.83	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Acenaphthylene	< 0.79 ug/l	0.79	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Anthracene	< 1.5 ug/l	1.5	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Benzidine	< 14 ug/l	14	25	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Benzo(a)anthracene	< 0.75 ug/l	0.75	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Benzo(a)pyrene	< 0.63 ug/l	0.63	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Benzo(g,h,i)perylene	< 0.79 ug/l	0.79	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Benzo(k)fluoranthene	< 1.6 ug/l	1.6	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
3,4-Benzofluoranthene	< 1.4 ug/l	1.4	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Bis(2-chloroethoxy)methane	< 0.80 ug/l	0.80	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Bis(2-chloroethyl)ether	< 0.88 ug/l	0.88	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Bis(2-chloroisopropyl)ether	< 0.94 ug/l	0.94	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Bis(2-ethylhexyl)phthalate	< 3.8 ug/l	3.8	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
4-Bromophenyl phenyl ether	< 1.2 ug/l	1.2	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Butylbenzyl phthalate	< 1.5 ug/l	1.5	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
2-Chloronaphthalene	< 0.84 ug/l	0.84	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	

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LABORATORY BLANK RESULTS

Analyte	Result	RL	PQL	QC Sample	Preparation Date	Analysis Date	Qual
Base/Neutral and Acid Compounds							
2-Chlorophenol	< 2.1 ug/l	2.1	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
4-Chlorophenyl phenyl ether	< 0.96 ug/l	0.96	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Chrysene	< 0.83 ug/l	0.83	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Di-n-butyl phthalate	< 1.1 ug/l	1.1	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Di-n-octyl phthalate	< 0.70 ug/l	0.70	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Dibenz(a,h)anthracene	< 1.2 ug/l	1.2	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
3,3'-Dichlorobenzidine	< 4.9 ug/l	4.9	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
2,4-Dichlorophenol	< 0.51 ug/l	0.51	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Diethyl phthalate	< 0.85 ug/l	0.85	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Dimethyl phthalate	< 0.93 ug/l	0.93	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
2,4-Dimethylphenol	< 0.79 ug/l	0.79	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
4,6-Dinitro-o-cresol	< 0.75 ug/l	0.75	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
2,4-Dinitrophenol	< 0.74 ug/l	0.74	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
2,4-Dinitrotoluene	< 0.51 ug/l	0.51	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
2,6-Dinitrotoluene	< 0.83 ug/l	0.83	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
1,2-Diphenylhydrazine	< 0.60 ug/l	0.60	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Fluorene	< 0.99 ug/l	0.99	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Hexachlorobenzene	< 1.1 ug/l	1.1	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Hexachlorobutadiene	< 0.71 ug/l	0.71	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Hexachlorocyclopentadiene	< 0.74 ug/l	0.74	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Hexachloroethane	< 0.73 ug/l	0.73	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Indeno(1,2,3-cd)pyrene	< 1.2 ug/l	1.2	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Isophorone	< 0.90 ug/l	0.90	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
n-Nitrosodi-n-propylamine	< 0.90 ug/l	0.90	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
n-Nitrosodimethylamine	< 2.5 ug/l	2.5	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
n-Nitrosodiphenylamine	< 1.1 ug/l	1.1	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	R
Naphthalene	< 0.87 ug/l	0.87	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Nitrobenzene	< 0.85 ug/l	0.85	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
2-Nitrophenol	< 0.82 ug/l	0.82	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
4-Nitrophenol	< 0.70 ug/l	0.70	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
p-Chloro-m-cresol	< 1.7 ug/l	1.7	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Pentachlorophenol	< 0.94 ug/l	0.94	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Phenanthrene	< 0.93 ug/l	0.93	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Phenol	< 2.6 ug/l	2.6	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Pyrene	< 0.56 ug/l	0.56	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
1,2,4-Trichlorobenzene	< 0.87 ug/l	0.87	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
2,4,6-Trichlorophenol	< 1.4 ug/l	1.4	5.0	B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Base/Neutral and Acid Compounds Surrogates:							
2-Fluorobiphenyl (50.0-110%)	86.5 %			B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
2-Fluorophenol (20.0-110%)	71.3 %			B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Nitrobenzene-D5 (40.0-110%)	93.2 %			B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Terphenyl-D14 (50.0-135%)	103 %			B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
2,4,6-Tribromophenol (40.0-125%)	61.7 %			B9483-1	24Apr15 0943 by 285	27Apr15 1911 by 301	
Volatile Organic Compounds							
Acrolein	< 0.78 ug/l	0.78	25	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Acrylonitrile	< 0.63 ug/l	0.63	25	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Benzene	< 0.12 ug/l	0.12	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Bromoform	< 0.26 ug/l	0.26	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Carbon tetrachloride	< 0.21 ug/l	0.21	2.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	

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LABORATORY BLANK RESULTS

Analyte	Result	RL	PQL	QC Sample	Preparation Date	Analysis Date	Qual
Volatile Organic Compounds							
Chlorobenzene	< 0.11 ug/l	0.11	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Chlorodibromomethane	< 0.11 ug/l	0.11	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Chloroethane	< 0.35 ug/l	0.35	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
2-Chloroethyl vinyl ether	< 0.24 ug/l	0.24	10	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Chloroform	< 0.16 ug/l	0.16	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
1,2-Dichlorobenzene	< 0.17 ug/l	0.17	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
1,3-Dichlorobenzene	< 0.14 ug/l	0.14	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
1,4-Dichlorobenzene	< 0.19 ug/l	0.19	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Dichlorobromomethane	< 0.17 ug/l	0.17	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
1,1-Dichloroethane	< 0.15 ug/l	0.15	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
1,2-Dichloroethane	< 0.21 ug/l	0.21	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
1,1-Dichloroethylene	< 0.24 ug/l	0.24	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
trans-1,2-Dichloroethylene	< 0.20 ug/l	0.20	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
1,2-Dichloropropane	< 0.19 ug/l	0.19	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
1,3-Dichloropropylene	< 0.20 ug/l	0.20	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Ethylbenzene	< 0.12 ug/l	0.12	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Methyl bromide(Bromomethane)	< 0.16 ug/l	0.16	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Methyl chloride(Chloromethane)	< 0.19 ug/l	0.19	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Methylene chloride	< 0.25 ug/l	0.25	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
1,1,2,2-Tetrachloroethane	< 0.20 ug/l	0.20	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Tetrachloroethylene	< 0.18 ug/l	0.18	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Toluene	< 0.16 ug/l	0.16	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
1,1,1-Trichloroethane	< 0.13 ug/l	0.13	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
1,1,2-Trichloroethane	< 0.19 ug/l	0.19	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Trichloroethylene	< 0.22 ug/l	0.22	5.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Vinyl chloride	< 0.47 ug/l	0.47	2.0	V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Volatile Organic Compounds Surrogates:							
4-Bromofluorobenzene (75.0-120%)	97.6 %			V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Dibromofluoromethane (85.0-115%)	95.0 %			V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Toluene-D8 (85.0-120%)	97.0 %			V8742-1	23Apr15 1133 by 301	23Apr15 2308 by 301	
Organochlorine Pesticides and PCBs							
Aldrin	< 0.0050 ug/l	0.0050	0.010	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
alpha-BHC	< 0.0050 ug/l	0.0050	0.020	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
alpha-Endosulfan	< 0.0050 ug/l	0.0050	0.010	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
beta-BHC	< 0.0050 ug/l	0.0050	0.020	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
beta-Endosulfan	< 0.0050 ug/l	0.0050	0.020	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
Chlordane	< 0.10 ug/l	0.10	0.10	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
Chlorpyrifos	< 0.0050 ug/l	0.0050	0.050	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
4,4'-DDD	< 0.0050 ug/l	0.0050	0.020	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
4,4'-DDE	< 0.0050 ug/l	0.0050	0.020	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
4,4'-DDT	< 0.0050 ug/l	0.0050	0.020	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
delta-BHC	< 0.0050 ug/l	0.0050	0.020	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
Dieldrin	< 0.0050 ug/l	0.0050	0.020	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
Endosulfan sulfate	< 0.0050 ug/l	0.0050	0.020	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
Endrin	< 0.0050 ug/l	0.0050	0.020	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
Endrin aldehyde	< 0.0050 ug/l	0.0050	0.020	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
gamma-BHC	< 0.0050 ug/l	0.0050	0.020	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
Heptachlor	< 0.0050 ug/l	0.0050	0.010	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
Heptachlor epoxide	< 0.0050 ug/l	0.0050	0.010	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	

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LABORATORY BLANK RESULTS

Analyte	Result	RL	PQL	QC Sample	Preparation Date	Analysis Date	Qual
Organochlorine Pesticides and PCBs							
PCB 1016	< 0.20 ug/l	0.20	0.20	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
PCB 1221	< 0.20 ug/l	0.20	0.20	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
PCB 1232	< 0.20 ug/l	0.20	0.20	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
PCB 1242	< 0.20 ug/l	0.20	0.20	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
PCB 1248	< 0.20 ug/l	0.20	0.20	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
PCB 1254	< 0.20 ug/l	0.20	0.20	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
PCB 1260	< 0.20 ug/l	0.20	0.20	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
Toxaphene	< 0.20 ug/l	0.20	0.20	G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
Organochlorine Pesticides and PCBs Surrogates:							
Decachlorobiphenyl (30.0-135%)	72.2 %			G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
Tetrachloro-m-xylene (25.0-140%)	73.3 %			G10104-1	27Apr15 1348 by 285	27Apr15 1712 by 306	
Base/Neutral and Acid Compounds							
3 & 4-Methylphenol	< 92 ug/Kg	92	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Acenaphthene	< 110 ug/Kg	110	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Acenaphthylene	< 96 ug/Kg	96	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Anthracene	< 120 ug/Kg	120	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Benzo(a)anthracene	< 83 ug/Kg	83	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Benzo(a)pyrene	< 65 ug/Kg	65	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Benzo(b)fluoranthene	< 89 ug/Kg	89	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Benzo(g,h,i)perylene	< 99 ug/Kg	99	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Benzo(k)fluoranthene	< 76 ug/Kg	76	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Benzoic acid	< 300 ug/Kg	300	1700	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Benzyl alcohol	< 150 ug/Kg	150	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
bis(2-Chloroethoxy)Methane	< 110 ug/Kg	110	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
bis(2-Chloroethyl)Ether	< 94 ug/Kg	94	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
bis(2-Chloroisopropyl)Ether	< 88 ug/Kg	88	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
bis(2-Ethylhexyl)Phthalate	< 140 ug/Kg	140	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
4-Bromophenyl phenyl ether	< 130 ug/Kg	130	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Butyl benzyl phthalate	< 130 ug/Kg	130	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
4-Chloro-3-methylphenol	< 130 ug/Kg	130	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
4-Chloroaniline	< 73 ug/Kg	73	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
2-Chloronaphthalene	< 90 ug/Kg	90	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
2-Chlorophenol	< 93 ug/Kg	93	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
4-Chlorophenyl phenyl ether	< 120 ug/Kg	120	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Chrysene	< 99 ug/Kg	99	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Di-n-butyl phthalate	< 130 ug/Kg	130	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Di-n-octyl phthalate	< 160 ug/Kg	160	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Dibenz(a,h)anthracene	< 100 ug/Kg	100	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Dibenzofuran	< 97 ug/Kg	97	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
1,2-Dichlorobenzene	< 92 ug/Kg	92	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
1,3-Dichlorobenzene	< 83 ug/Kg	83	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
1,4-Dichlorobenzene	< 100 ug/Kg	100	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
3,3'-Dichlorobenzidine	< 210 ug/Kg	210	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
2,4-Dichlorophenol	< 110 ug/Kg	110	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Diethyl phthalate	< 110 ug/Kg	110	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Dimethyl phthalate	< 110 ug/Kg	110	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
2,4-Dimethylphenol	< 90 ug/Kg	90	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
4,6-Dinitro-2-methylphenol	< 84 ug/Kg	84	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
2,4-Dinitrophenol	< 210 ug/Kg	210	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	

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Analyte	Result	RL	PQL	QC Sample	Preparation Date	Analysis Date	Qual
Base/Neutral and Acid Compounds							
2,4-Dinitrotoluene	< 110 ug/Kg	110	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
2,6-Dinitrotoluene	< 260 ug/Kg	260	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Fluoranthene	< 110 ug/Kg	110	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Fluorene	< 93 ug/Kg	93	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Hexachlorobenzene	< 110 ug/Kg	110	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Hexachlorobutadiene	< 79 ug/Kg	79	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Hexachlorocyclopentadiene	< 86 ug/Kg	86	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Hexachloroethane	< 88 ug/Kg	88	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Indeno(1,2,3-cd)pyrene	< 85 ug/Kg	85	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Isophorone	< 99 ug/Kg	99	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
2-Methylnaphthalene	< 130 ug/Kg	130	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
2-Methylphenol	< 97 ug/Kg	97	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
N-Nitroso-di-n-propylamine	< 110 ug/Kg	110	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
n-Nitrosodiphenylamine	< 120 ug/Kg	120	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	R
Naphthalene	< 130 ug/Kg	130	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
2-Nitroaniline	< 99 ug/Kg	99	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
3-Nitroaniline	< 140 ug/Kg	140	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
4-Nitroaniline	< 320 ug/Kg	320	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Nitrobenzene	< 130 ug/Kg	130	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
2-Nitrophenol	< 120 ug/Kg	120	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
4-Nitrophenol	< 310 ug/Kg	310	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Pentachlorophenol	< 280 ug/Kg	280	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Phenanthrene	< 120 ug/Kg	120	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Phenol	< 90 ug/Kg	90	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Pyrene	< 110 ug/Kg	110	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
1,2,4-Trichlorobenzene	< 100 ug/Kg	100	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
2,4,5-Trichlorophenol	< 110 ug/Kg	110	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
2,4,6-Trichlorophenol	< 110 ug/Kg	110	330	B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Base/Neutral and Acid Compounds Surrogates:							
2-Fluorobiphenyl (45.0-105%)	78.1 %			B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
2-Fluorophenol (35.0-105%)	59.1 %			B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Nitrobenzene-D5 (35.0-100%)	69.8 %			B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Terphenyl-D14 (30.0-125%)	79.5 %			B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
2,4,6-Tribromophenol (35.0-125%)	42.8 %			B9484-1	24Apr15 1452 by 285	28Apr15 0028 by 301	
Volatile Organic Compounds							
Acetone	< 4.0 ug/Kg	4.0	10	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Benzene	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Bromobenzene	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Bromochloromethane	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Bromodichloromethane	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Bromoform	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Bromomethane	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
2-Butanone	< 1.0 ug/Kg	1.0	10	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Carbon disulfide	< 1.0 ug/Kg	1.0	10	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Carbon Tetrachloride	< 2.0 ug/Kg	2.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Chlorobenzene	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Chloroethane	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
2-Chloroethyl vinyl ether	< 1.0 ug/Kg	1.0	10	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Chloroform	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	

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Analyte	Result	RL	PQL	QC Sample	Preparation Date	Analysis Date	Qual
Volatile Organic Compounds							
Chloromethane	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
2-Chlorotoluene	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
4-Chlorotoluene	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
1,2-Dibromo-3-chloropropane	< 2.0 ug/Kg	2.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Dibromochloromethane	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
1,2-Dibromoethane	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Dibromomethane	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
1,2-Dichlorobenzene	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
1,3-Dichlorobenzene	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
1,4-Dichlorobenzene	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Dichlorodifluoromethane	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
1,1-Dichloroethane	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
1,2-Dichloroethane	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
1,1-Dichloroethene	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
cis-1,2-Dichloroethene	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
trans-1,2-Dichloroethene	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
1,2-Dichloropropane	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
1,3-Dichloropropane	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
2,2-Dichloropropane	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
1,1-Dichloropropene	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
cis-1,3-Dichloropropene	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
trans-1,3-Dichloropropene	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Ethylbenzene	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Hexachlorobutadiene	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
2-Hexanone	< 2.0 ug/Kg	2.0	10	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Isopropylbenzene	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
m&p-Xylenes	< 1.0 ug/Kg	1.0	10	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
4-Methyl-2-pentanone	< 1.0 ug/Kg	1.0	10	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Methylene chloride	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
n-Butylbenzene	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
n-Propylbenzene	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Naphthalene	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
o-Xylene	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
p-Isopropyltoluene	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
sec-Butylbenzene	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Styrene	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
tert-Butylbenzene	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
1,1,1,2-Tetrachloroethane	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
1,1,2,2-Tetrachloroethane	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Tetrachloroethene	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Toluene	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
1,2,3-Trichlorobenzene	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
1,2,4-Trichlorobenzene	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
1,1,1-Trichloroethane	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
1,1,2-Trichloroethane	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Trichloroethene	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Trichlorofluoromethane	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
1,2,3-Trichloropropane	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
1,2,4-Trimethylbenzene	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	

City of Fort Smith
3900 Kelley Highway
Fort Smith, AR 72904

LABORATORY BLANK RESULTS

Analyte	Result	RL	PQL	QC Sample	Preparation Date	Analysis Date	Qual
Volatile Organic Compounds							
1,3,5-Trimethylbenzene	< 1.0 ug/Kg	1.0	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Vinyl acetate	< 1.0 ug/Kg	1.0	10	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Vinyl chloride	< 0.50 ug/Kg	0.50	5.0	V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Volatile Organic Compounds Surrogates:							
4-Bromofluorobenzene (85.0-120%)	91.2 %			V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Dibromofluoromethane (80.0-120%)	96.2 %			V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Toluene-D8 (85.0-115%)	102 %			V8741-1	23Apr15 1000 by 301	23Apr15 1209 by 301	
Organochlorine Pesticides							
Aldrin	< 0.33 ug/Kg	0.33	0.67	G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
alpha-BHC	< 0.33 ug/Kg	0.33	1.4	G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
alpha-Endosulfan	< 0.33 ug/Kg	0.33	0.67	G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
beta-BHC	< 0.33 ug/Kg	0.33	1.4	G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
beta-Endosulfan	< 0.33 ug/Kg	0.33	1.4	G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
Chlordane	< 6.7 ug/Kg	6.7	6.7	G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
4,4'-DDD	< 0.33 ug/Kg	0.33	1.4	G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
4,4'-DDE	< 0.33 ug/Kg	0.33	1.4	G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
4,4'-DDT	< 0.33 ug/Kg	0.33	1.4	G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
delta-BHC	< 0.33 ug/Kg	0.33	1.4	G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
Dieldrin	< 0.33 ug/Kg	0.33	1.4	G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
Endosulfan sulfate	< 0.33 ug/Kg	0.33	1.4	G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
Endrin	< 0.33 ug/Kg	0.33	1.4	G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
Endrin aldehyde	< 0.33 ug/Kg	0.33	1.4	G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
gamma-BHC	< 0.33 ug/Kg	0.33	1.4	G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
Heptachlor	< 0.33 ug/Kg	0.33	0.67	G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
Heptachlor epoxide	< 0.33 ug/Kg	0.33	0.67	G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
Methoxychlor	< 0.33 ug/Kg	0.33	1.4	G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
Toxaphene	< 14 ug/Kg	14	14	G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
Organochlorine Pesticides Surrogates:							
Decachlorobiphenyl (55.0-130%)	94.4 %			G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	
Tetrachloro-m-xylene (70.0-125%)	85.2 %			G10106-1	29Apr15 1056 by 306	04May15 2314 by 306	



CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

Client: <u>City of Fort Smith</u>			PO No.		NO OF BOTTLES	ANALYSES REQUESTED												AIC CONTROL NO: <u>189843</u>	
Project Reference: <u>Massard Table 2/10 Priority Pollutants</u>			SAMPLE MATRIX			T. Cyanide	Phenolics	VOA. 624	BNA. 625	PEST. 605	PP METALS	MD	HA. LL (2457)	Table B, BNA, PEST, VOA, T. Sulphid	Table C, 12 PP METALS, CN.T, Phenolics	Mo	AIC PROPOSAL NO:		
Project Manager: <u>Lance McAvoy</u>			W	S	G	R	A	B	C	O	M	P	P	G	G	G	G	Carrier: <u>FedEx</u>	
Sampled By: <u>Rachel Sharp / Chris Cooper</u>			A	I														Received Temperature C: <u>17</u>	
AIC No.	Sample Identification	Date/Time Collected																	Remarks
1	Massard Influent	4/21/15 0004	X		X														Influent cyanide to be composited.
1	Massard Influent	4/21/15 0557	X		X														Influent Phenolics to be composited.
1	Massard Influent	4/21/15 1157	X		X														
1	Massard Influent	4/21/15 1800	X		X														
2	Massard Influent	4/21/15 0614-2054		X	X														
3	Massard Biosolid	4/21/15 1214	X		X														
3	Massard Biosolid	4/21/15 1214	X		X													X	X
Container Type																			Field pH calibration
Preservative																			on _____ @ _____
G = Glass			P = Plastic			V = VOA vials			H = HCl to pH2			T = Sodium Thiosulfate							
NO = none			S = Sulfuric acid pH2			N = Nitric acid pH2			B = NaOH to pH12			Z = Zinc acetate							
Turnaround Time Requested: (Please circle) <u>NORMAL</u> or EXPEDITED IN _____ DAYS					Relinquished By: <u>Rachel Sharp</u>					Date/Time: <u>4/21/15 1200</u>					Received By:				
Expedited results requested by: _____					Relinquished By: _____					Date/Time: _____					Received in Lab By: <u>D. Brown</u>				
Who should AIC contact with questions: <u>Lance McAvoy</u>					Comments:														
Phone: <u>479-781-2337</u> Fax: _____					<u>Fed Ex Tracking #: 8024 7222 2277</u>														
Report Attention to: _____																			
Report Address to: <u>Lance McAvoy</u>																			



CHAIN OF CUSTODY / ANALYSIS REQUEST FORM


Client: <u>City of Fort Smith</u>			PO No.		NO OF BOTTLES	ANALYSES REQUESTED										AIC CONTROL NO: <u>189843</u>	
Project Reference: <u>Massard Table II/III Priority Relocations</u>			SAMPLE MATRIX			T. Cyanide	Phenolics	VOA. 624	BNA. 625	PEST. 606	PP Metals	Me	Hg LL (245.7)	AIC PROPOSAL NO:			
Project Manager: <u>Lance McAvoy</u>			G R A B	C O M P	W A T E R	S O I L	NO OF BOTTLES	T. Cyanide	Phenolics	VOA. 624	BNA. 625	PEST. 606	PP Metals	Me	Hg LL (245.7)	Carrier: <u>FedEx</u>	
Sampled By: <u>Rachel Sharp / Chris Cooper</u>																Received Temperature C <u>0.5</u>	
AIC No.	Sample Identification	Date/Time Collected															Remarks
4	massard effluent	4/15/15 0010	X		X		5	X	X	X							Effluent cyanide to be composited.
4	massard effluent	4/15/15 0604	X		X		5	X	X	X							Effluent phenolics to be composited.
4	massard effluent	4/15/15 1205	X		X		5	X	X	X							VOA CONTAINER - ONE BROKEN ONE MISSING.
4	massard effluent	4/15/15 1808	X		X		5	X	X	X							
5	massard effluent	4/15/15 0500-0500		X	X		8				X	X	X	X	X		
Container Type								P	G	V	G	G	P	P	G		Field pH calibration
Preservative								B	S	Nc	Nc	Nc	N	N	Nc		on _____ @ _____
G = Glass P = Plastic V = VOA vials H = HCl to pH2 T = Sodium Thiosulfate			NO = none S = Sulfuric acid pH2 N = Nitric acid pH2 B = NaOH to pH12 Z = Zinc acetate														
Turnaround Time Requested: (Please circle) <u>NORMAL</u> or EXPEDITED IN _____ DAYS						Relinquished By: <u>Rachel Sharp</u>			Date/Time: <u>4/22/15 1200</u>			Received By:			Date/Time:		
Expedited results requested by: _____						Relinquished By:			Date/Time:			Received in Lab By: <u>J. Brown</u>			Date/Time: <u>4-23-15 0845</u>		
Who should AIC contact with questions: <u>Lance McAvoy</u>						Comments: <u>Fed. Ex Tracking #: 8024 7222 2266</u>											
Phone: <u>479-734-2330</u> Fax: _____																	
Report Attention to: _____																	
Report Address to: <u>Lance McAvoy</u>																	

INTER-OFFICE MEMO

AR0021750

2ND QTR

TO: Steve Floyd, Superintendent of Water and Wastewater Operations

FROM: Don Clover, Biologist 

DATE: May 20, 2015

RE: Biomonitoring Results - Massard Plant

Please find below the chronic biomonitoring results for the second quarter of 2015. Lethal and sub-lethal toxicity were not experienced in the low-flow dilution of 7% effluent for the *Ceriodaphnia dubia* test organism. The test therefore passes at the low-flow dilution of 7% effluent for lethal and sub-lethal effects. Lethal and sub-lethal toxicity were not experienced in the low-flow dilution of 7% effluent for the fathead minnow (*Pimephales promelas*) test. The test therefore passes at the low-flow dilution of 7% effluent for lethal and sub-lethal effects.

Parameter #TGP3B- 0

Parameter #TGP6C- 0

Parameter #TLP3B- 0

Parameter #TLP6C- 0

Parameter #TOP3B- 9%

Parameter # TOP6C- 9%

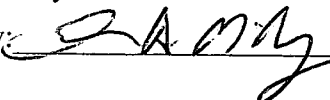
Parameter #TPP3B- 9%

Parameter #TPP6C- 9%

Parameter #TQP3B- 16.46%

Parameter #TQP6C- 9.93%

Prepared By:  Date: 5/20/15

Reviewed By:  Date: 06/01/15



Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

RECEIVED

May 05, 2015

MAY 11 2015

WATER/WASTEWATER

Lance McAvoy
City of Fort Smith
3900 Kelley Hwy.
Fort Smith, AR 72904

RE: Project: MASSARD BIOMONITORING
Pace Project No.: 60192343

Dear Lance McAvoy:

Enclosed are the analytical results for sample(s) received by the laboratory on April 21, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Alice Flanagan
alice.flanagan@pacelabs.com
Project Manager

Enclosures

cc: Dan Clover, City of Fort Smith, AR



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: MASSARD BIOMONITORING
Pace Project No.: 60192343

Southeast Kansas Certification IDs

808 West McKay, Frontenac, KS 66763
Arkansas Certification #: 13-012-0
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055

Oklahoma Certification #: 2012-051
Texas Certification #: T104704407-13-4
Utah Certification #: KS000212013-3
Minnesota Certification #: 495004

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SAMPLE SUMMARY

Project: MASSARD BIOMONITORING
Pace Project No.: 60192343

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60192343001	MASSARD EFFLUENT	Water	04/20/15 08:00	04/21/15 14:00
60192343002	ARKANSAS RIVER	Water	04/20/15 09:00	04/21/15 14:00

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SAMPLE ANALYTE COUNT

Project: MASSARD BIOMONITORING
Pace Project No.: 60192343

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60192343001	MASSARD EFFLUENT	EPA 821/R-02/013	TDH	1

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ANALYTICAL RESULTS

Project: MASSARD BIOMONITORING
 Pace Project No.: 60192343

Sample: MASSARD EFFLUENT	Lab ID: 60192343001	Collected: 04/20/15 08:00	Received: 04/21/15 14:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

Chronic Toxicity	Analytical Method: EPA 821/R-02/013							
Toxicity, Chronic	Complete		1.0	1		04/21/15 14:30		

Sample: ARKANSAS RIVER	Lab ID: 60192343002	Collected: 04/20/15 09:00	Received: 04/21/15 14:00	Matrix: Water				
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual

	Analytical Method: EPA 821/R-02/013							
Toxicity, Chronic	Complete		1.0	1		04/21/15 14:30		

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QUALIFIERS

Project: MASSARD BIOMONITORING
Pace Project No.: 60192343

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MASSARD BIOMONITORING
Pace Project No.: 60192343

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60192343001	MASSARD EFFLUENT	EPA 821/R-02/013	BIO/1804		

REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt

WO#: 60192343
Barcode
60192343

Client Name: Ft Smith Massard

Courier: Fed Ex [] UPS [] USPS [] Client [] Commercial [x] Pace [] Other []
Tracking #: Pace Shipping Label Used? Yes [] No [x]

Optional
Proj Due Date:
Proj Name:

Custody Seal on Cooler/Box Present: Yes [x] No [] Seals intact: Yes [x] No []

Packing Material: Bubble Wrap [] Bubble Bags [] Foam [] None [x] Other []

Thermometer Used: T-111 Type of Ice: Wet [x] Blue [] None [] Samples received on ice, cooling process has begun.
Cooler Temperature: 2.8 (circle one)

Temperature should be above freezing to 6°C

Date and initials of person examining contents: MB 4/21/15 140

Table with 17 rows of inspection criteria and checkboxes. Includes items like Chain of Custody present, Samples arrived within holding time, Containers intact, etc.

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:



REFERENCE #60192343

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
Phone: 913.599.5665
Fax: 913.599.1759

April 30, 2015

Lance McAvoy
City of Fort Smith (Massard)
3900 Kelley HWY
Fort Smith, AR 72904

Re: Lab Project Number: 60192343
Client Project ID: Wet Test

Dear:

Enclosed are the analytical results for sample(s) received by the laboratory. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any question concerning this report, please feel free to contact me.

Sincerely,

Tim Harrell
Tim.Harrell@pacelabs.com
Technical Director

REPORT OF LABORATORY ANALYSIS

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REFERENCE #60192343

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
Phone: 913.599.5665
Fax: 913.599.1759

**CHRONIC TOXICITY TEST FOR
CITY OF FORT SMITH (Massard)**

PERMIT # AR 0021750
AFIN # 66-01652

PERFORMED ON:

Pimephales promelas

and

Ceriodaphnia dubia

PREPARED FOR:

Lance McAvoy
City of Fort Smith (Massard)
3900 Kelley HWY
Fort Smith, AR 72904

PREPARED BY:
Pace Analytical Services, Inc.
808 West McKay
Frontenac, KS 66763
1-620-235-0003

April 30, 2015

REPORT OF LABORATORY ANALYSIS

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REFERENCE #60192343

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
Phone: 913.599.5665
Fax: 913.599.1759

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REFERENCE #60192343

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
Phone: 913.599.5665
Fax: 913.599.1759

SUMMARY

A Chronic Whole Effluent Toxicity Test using the 7-day chronic fathead minnows (*Pimephales promelas*), static renewal larval survival and growth test, and three brood 7-day chronic Cladoceran (*Ceriodaphnia dubia*), static renewal survival and reproduction test, was conducted on effluent discharge water collected at the CITY OF FORT SMITH (Massard) effluent discharge from April 20, 2015 to April 24, 2015. All the test methods followed are as listed in EPA 821-R-02-013, "Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms."

Statistically significant ($p < 0.05$) mortality is determined by Dunnet's procedure using average percent survival of each test concentration versus the average survival of the controls. If significant mortality occurs, median lethal concentrations (LC50) are calculated using effluent concentrations and their corresponding percent mortality data. The LC50's and the 95% confidence intervals are calculated where appropriate by the Spearman-Kärber method. Statistical analysis is accomplished by following steps in EPA 821-R-02-013, November 2002 and by use of Toxstat version 3.4.

In minnow section of testing, it was observed that the effluent had no significant effect on the survival of the larvae at the 9% concentration. No significant mortality was observed in the other effluent concentrations after the 7-day exposure period. The No Observed Effect Concentration (NOEC) was determined to be 9% for survival. The LC50 was estimated to be >9% effluent. No significant reduction in growth was observed in the 9% effluent concentration. The Toxic Units is <1. The IC25 is >9. The NOEC for growth in effluent was determined to be 9%. The PMSD is 11.3.

In Cladoceran section of testing, it was observed that the effluent had no significant effect on the survival of the organisms in the 9% effluent concentration. No significant mortality was observed in the other effluent concentrations after the 7-day exposure period. The No Observed Effect Concentration (NOEC) was determined to be 9% for survival. The LC50 was estimated to be >9% effluent. No significant reduction in reproduction was observed in the 9% effluent concentrations. The Toxic Units is <1. The IC25 is >9. The NOEC for reproduction in effluent was determined to be 9%. The PMSD is 15.7.

The chronic toxicity exhibited by the fathead minnows and the *Ceriodaphnia* treated by the effluent sampled from April 20 to April 24 from the CITY OF FORT SMITH (Massard) effluent discharge, is acceptable as described in EPA 821-R-02-013.

REPORT OF LABORATORY ANALYSIS

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REFERENCE #60192343

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Phone: 913.599.5665
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INTRODUCTION

Pace Analytical was contracted to perform this chronic toxicity test on effluent from the CITY OF FORT SMITH (Massard) effluent discharge. Chronic toxicity was measured using the Pimephales promelas at larval for survival and growth test and the Ceriodaphnia dubia survival and reproduction test described in EPA 821-R-02-013, "Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms." The raw data of the study is stored at Pace Analytical Services, INC. 808 West McKay, Frontenac, KS 66763.

TEST MATERIAL

City of Fort Smith (Massard) personnel collected sampling of the effluent. A sample of the effluent was delivered to Pace by commercial carrier on 4-21-15. Subsequent samples followed by delivery on 4-23-15 and on 4-25-15. All samples were stored at $\leq 6^{\circ}$ Celsius. Upstream Water was used as a control and also to make the required dilutions in the test as described in EPA 821-R-02-013.

TEST METHODS

Pace used EPA test method 1000.0 for conducting the Fathead Minnow, Pimephales promelas, Larval Survival and Growth Test. EPA test method 1002.0 was used for conducting the Cladoceran, Ceriodaphnia dubia, Survival and Reproduction Test. The tests were conducted to estimate the LC50, NOEC, and LOEC for survival, growth, and reproduction of these test species.

The Pimephales and Ceriodaphnia tests were initiated on 4-21-15 and carried out until 4-28-15. The Pimephales tests were conducted in 500 ml plastic jars with 250 ml of test solution. Eight larvae were placed in each of at least 5 replicates to make a total of 40 larvae per sample concentration. The Ceriodaphnia tests were carried out in 35ml vials containing 25 ml of test solution. One Neonate was placed in each of 10 replicates to make a total of 10 neonates per sample concentration.

TEST ORGANISMS

Organisms used in these tests were cultured at Pace under controlled temperature and photo period conditions and/or were purchased from an external supplier. Pace maintains records of culture techniques for all organisms, whether produced in house or purchased.

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RESULTS

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Permittee: CITY OF FORT SMITH (Massard) Effluent discharge.

FATHEAD MINNOW SURVIVAL

Conc. %	Percent Survival in Replicate Chambers					Mean Percent Survival			CV %
	A	B	C	D	E	24hr	48hr	7 day	
Upstream 0%	100	100	100	100	87.5	100	100	97.5	4.79
Dilution 1 3%	100	100	100	100	100	100	100	100	0.00
Dilution 2 4%	100	100	100	87.5	100	100	100	97.5	4.79
Dilution 3 5%	100	87.5	100	87.5	100	100	100	95	5.99
Dilution 4 7%	100	100	100	100	100	100	100	100	0.00
Dilution 5 9%	100	100	100	100	100	100	100	100	0.00

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Permitter: ~~www.CAPM.com~~ FORT SMITH (Massard) Effluent discharge.

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CERIODAPHNIA SURVIVAL AND REPRODUCTION

DATA TABLE FOR CERIODAPHNIA YOUNG PRODUCTION

Replicate	Upstream 0%	Dilution 1 3%	Dilution 2 4%	Dilution 3 5%	Dilution 3 7%	Dilution 4 9%
1	20	22	24	20	22	20
2	22	18	25	26	17	17
3	20	23	18	16	19	23
4	23	20	17	21	22	25
5	20	18	22	20	24	17
6	16	22	15	24	19	23
7	18	20	21	22	14	15
8	24	24	22	18	25	22
9	19	24	24	18	20	23
10	24	16	23	24	23	24
Mean	20.6	20.7	21.1	20.9	20.5	20.9
SD	2.633	2.751	3.348	3.143	3.375	3.446
CV %	12.78	13.29	15.87	15.04	16.46	16.49

at 20°C

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Permittee: CITY OF FORT SMITH (Massard) Effluent discharge.

CERIODAPHNIA MEAN PERCENT SURVIVAL

Time Elapsed	Percent Effluent (%)					
	Upstream 0%	Dilution 1 3%	Dilution 2 4%	Dilution 3 5%	Dilution 4 7%	Dilution 5 9%
24 hrs	100	100	100	100	100	100
48 hrs	100	100	100	100	100	100
7-day	100	100	100	100	100	100
SD	0.0	0.0	0.0	0.0	0.0	0.0
CV %	0.0	0.0	0.0	0.0	0.0	0.0

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TABLE 2
SUMMARY OF TEST CONDITIONS FOR THE FATHEAD MINNOW
(*Pimephales promelas*) LARVAL SURVIVAL AND GROWTH TEST

1. Test type	Static renewal
2. Temperature	25 degrees Celsius
3. Light quality	Ambient laboratory light
4. Light intensity	Ambient laboratory levels
5. Photoperiod	16 hr light, 8 hr dark
6. Test chamber size	500 ml
7. Test solution volume	250 ml
8. Renewal of test concentrations	Daily
9. Age of test organism	< 24 hours
10. No. larvae/chamber	8
9. No. replicates/concentration	5
12. No. larvae/concentration	40
13. Feeding regime	Feed 0.1 ml newly hatched brine shrimp nauplii three times daily. Larvae are not fed 12 hours prior to termination of test.
15. Cleaning	Siphon daily, immediately before test solution renewal
15. Aeration	None

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TABLE 2 (CONT.)

16. Dilution Water	Upstream
17. Effluent concentrations	0%, 3%, 4%, 5%, 7%, 9%
18. Test duration	7 days
19. Endpoints	Survival and growth
20. Test acceptability	80% or greater survival in the controls, Average dry weight in controls >0.25 mg, Coefficient of variation in the control must not exceed 40%.

TABLE 2 (CONT.)

**SUMMARY OF TEST CONDITIONS FOR THE CLADOCERAN
(Ceriodaphnia dubia) SURVIVAL AND REPRODUCTION TEST**

1. Test type	Static renewal
2. Temperature	25 degrees Celsius
3. Light quality	Ambient laboratory light
4. Light intensity	Ambient laboratory levels
5. Photoperiod	16 hr light, 8 hr dark
6. Test chamber size	30 ml
7. Test solution volume	25 ml

TABLE 2 (CONT.)

REPORT OF LABORATORY ANALYSIS

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8. Renewal of test concentrations	Daily
9. Age of test organism	< 24 hours
10. No. larvae/chamber	1
9. No. replicates/concentration	10
12. No. larvae/concentration	10
13. Feeding regime	Feed 0.1 ml YCT three times daily. Larvae are not fed 12 hours prior to termination of test.
15. Cleaning	Siphon daily, immediately before test solution renewal
15. Aeration	None
16. Dilution Water	Upstream
17. Effluent concentrations	0%, 3%, 4%, 5%, 7%, 9%
18. Test duration	Until 60% or more surviving control females have three broods or a maximum of 8 days.
19. Endpoints	Survival and Reproduction
20. Test acceptability	80% or greater survival in the controls, Average reproduction rate of 15 young / adult. Coefficient of variation in the control must not exceed 40%.

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TABLE 2 (SECTION 2)

**BIOMONITORING CHRONIC TOXICITY REPORT
 FATHEAD MINNOW (Pimephales promelas)
 CHEMICAL PARAMETERS CHART**

Permittee: CITY OF FORT SMITH (Massard). Effluent discharge.

ANALYSTS: Pace Analytical Services, Inc.
 Timothy Harrell
 Mike Bollin

SAMPLE NO. 1 COLLECTED: DATE: 4-20-15

SAMPLE NO. 2 COLLECTED: DATE: 4-22-15

SAMPLE NO. 3 COLLECTED: DATE: 4-24-15

**TABLE 2 (SECTION 2)
 INITIAL WATER QUALITY
 EFFLUENT CONCENTRATION**

	Upstream	100%
PH	7.45	7.13
D.O.	8.30	7.70
Temp	25.0	25.0
Alk	74	80
Hard	108	96
Cond	295	361
Chlorine	<0.1	<0.1

- * D.O. is reported as mg/L
- Alkalinity is reported as mg/L CaCO₃
- Hardness is reported as mg/L CaCO₃
- Conductance is reported as umhos
- Chlorine is reported as mg/L

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TEST WATER QUALITY

24-Hour Water Quality Measurements

Effluent Concentration (%)	PH	D.O. (mg/l)	Temperature (C)
0% Upstream	7.84	7.30	25.0
3% Effluent	7.84	7.30	25.0
4% Effluent	7.84	7.30	25.0
5% Effluent	7.84	7.30	25.0
7% Effluent	7.83	7.30	25.0
9% Effluent	7.83	7.30	25.0

48-Hour Water Quality Measurements

Effluent Concentration (%)	PH	D.O. (mg/l)	Temperature (C)
0% Upstream	7.95	7.20	25.2
3% Effluent	7.96	7.20	25.2
4% Effluent	7.97	7.20	25.2
5% Effluent	7.97	7.20	25.2
7% Effluent	7.98	7.20	25.2
9% Effluent	8.00	7.20	25.2

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FINAL WATER QUALITY

EFFLUENT CONCENTRATION

	Upstream	9%
pH	7.95	7.98
D.O.	6.80	6.90
Temp	25.1	25.1
Alk	84	90
Hard	140	150
Cond	449	486

- * D.O. is reported as mg/L
- Alkalinity is reported as mg/L CaCO₃
- Hardness is reported as mg/L CaCO₃
- Conductance is reported as umhos

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TEST VALIDITY

The Pimephales promelas control survival rate was 97.5%. The mean dry weight (growth) of the Pimephales promelas was determined at 0.386 mg/organism in the controls. The percent coefficient of variation (%CV) values for the fathead minnow control for survival and growth were 4.79 and 7.38. The Ceriodaphnia dubia survival rates were 100 in the control. The Ceriodaphnia in the control produced an average of 20.6 young over the seven-day exposure period. Percent CV values for Ceriodaphnia dubia control survival and reproduction was 0.00 and 12.78. Control data met or exceeded all criteria set out by EPA 821-R-02-013 for test acceptance.

CONCLUSIONS

The No Observed Effect Concentration (NOEC) for Pimephales promelas was 9% for survival and 9% for growth. The No Observed Effect Concentration (NOEC) for Ceriodaphnia dubia was 9% for Survival and 9% for Reproduction. The tests were ran using a synthetic control against effluent concentrations of 3%, 4%, 5%, 7%, and 9%. The effluent sampled on 4-20-15, 4-22-15, and 4-24-15 exhibited acceptable chronic toxicity in Pimephales promelas and in Ceriodaphnia dubia during the exposure period as described in EPA 821-R-02-013.

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APPENDIX A STATISTICAL ANALYSIS

REPORT OF LABORATORY ANALYSIS

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60192343 FT SMITH FATHEAD SURVIVAL

File: 6192343A Transform: ARC SINE(SQUARE ROOT(Y))

Chi-square test for normality: actual and expected frequencies

INTERVAL	<-1.5	-1.5 to <-0.5	-0.5 to 0.5	>0.5 to 1.5	>1.5
EXPECTED	2.010	7.260	11.460	7.260	2.010
OBSERVED	2	2	23	3	0

Calculated Chi-Square goodness of fit test statistic = 19.9412

Table Chi-Square value (alpha = 0.01) = 13.277

Data FAIL normality test. Try another transformation.

Warning - The first three homogeneity tests are sensitive to non-normal data and should not be performed.

60192343 FT SMITH FATHEAD SURVIVAL

File: 6192343A Transform: ARC SINE(SQUARE ROOT(Y))

Shapiro - Wilk's test for normality

D = 0.038

W = 0.760

Critical W (P = 0.05) (n = 30) = 0.927

Critical W (P = 0.01) (n = 30) = 0.900

Data FAIL normality test. Try another transformation.

Warning - The first three homogeneity tests are sensitive to non-normal data and should not be performed.

00 016

60192343 FT SMITH FATHEAD SURVIVAL

File: 6192343A Transform: ARC SINE(SQUARE ROOT(Y))

Hartley's test for homogeneity of variance
Bartlett's test for homogeneity of variance

These two tests can not be performed because at least one group has zero variance.

Data FAIL to meet homogeneity of variance assumption.
Additional transformations are useless.

60192343 FT SMITH FATHEAD SURVIVAL

File: 6192343A

Transform: ARC SINE(SQUARE ROOT(Y))

STEEL'S MANY-ONE RANK TEST

Ho: Control < Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	RANK SUM	CRIT. VALUE	df	SIG
1	UPSTREAM	1.084				
2	3%	1.107	30.00	16.00	5.00	
3	4%	1.084	27.50	16.00	5.00	
4	5%	1.061	25.00	16.00	5.00	
5	7%	1.107	30.00	16.00	5.00	
6	9%	1.107	30.00	16.00	5.00	

Critical values use $k = 5$, are 1 tailed, and $\alpha = 0.05$

60192343 FT SMITH FATHEAD GROWTH

File: 6192343B Transform: NO TRANSFORMATION

Shapiro - Wilk's test for normality

D = 0.020

W = 0.962

Critical W (P = 0.05) (n = 30) = 0.927

Critical W (P = 0.01) (n = 30) = 0.900

Data PASS normality test at P=0.01 level. Continue analysis.

60192343 FT SMITH FATHEAD GROWTH

File: 6192343B Transform: NO TRANSFORMATION

Bartlett's test for homogeneity of variance

Calculated B1 statistic = 2.67

Table Chi-square value = 15.09 (alpha = 0.01, df = 5)

Table Chi-square value = 11.07 (alpha = 0.05, df = 5)

Data PASS B1 homogeneity test at 0.01 level. Continue analysis.

60192343 FT SMITH FATHEAD GROWTH

File: 6192343B

Transform: NO TRANSFORMATION

SUMMARY STATISTICS ON TRANSFORMED DATA TABLE 1 of 2

GRP	IDENTIFICATION	N	MIN	MAX	MEAN
1	UPSTREAM	5	0.339	0.408	0.386
2	3%	5	0.364	0.414	0.391
3	4%	5	0.315	0.408	0.366
4	5%	5	0.344	0.401	0.377
5	7%	5	0.346	0.440	0.391
6	9%	5	0.353	0.408	0.382

60192343 FT SMITH FATHEAD GROWTH

File: 6192343B

Transform: NO TRANSFORMATION

SUMMARY STATISTICS ON TRANSFORMED DATA TABLE 2 of 2

GRP	IDENTIFICATION	VARIANCE	SD	SEM	C.V. %
1	UPSTREAM	0.001	0.028	0.013	7.38
2	3%	0.000	0.019	0.008	4.77
3	4%	0.001	0.036	0.016	9.79
4	5%	0.001	0.024	0.011	6.43
5	7%	0.002	0.039	0.017	9.93
6	9%	0.001	0.024	0.011	6.26

60192343 FT SMITH FATHEAD GROWTH

File: 6192343B

Transform: NO TRANSFORMATION

ANOVA TABLE

SOURCE	DF	SS	MS	F
Between	5	0.002	0.000	0.564
Within (Error)	24	0.020	0.001	
Total	29	0.023		

Critical F value = 2.62 (0.05, 5, 24)

Since $F < \text{Critical } F$ FAIL TO REJECT H_0 : All equal

60192343 FT SMITH FATHEAD GROWTH
 File: 6192343B Transform: NO TRANSFORMATION

DUNNETT'S TEST - TABLE 1 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG
1	UPSTREAM	0.386	0.386		
2	3%	0.391	0.391	-0.293	
3	4%	0.366	0.366	1.084	
4	5%	0.377	0.377	0.488	
5	7%	0.391	0.391	-0.314	
6	9%	0.382	0.382	0.173	

Dunnett table value = 2.36 (1 Tailed Value, P=0.05, df=24,5)

60192343 FT SMITH FATHEAD GROWTH
 File: 6192343B Transform: NO TRANSFORMATION

DUNNETT'S TEST - TABLE 2 OF 2 Ho:Control<Treatment

GROUP	IDENTIFICATION	NUM OF REPS	Minimum Sig Diff (IN ORIG. UNITS)	% of CONTROL	DIFFERENCE FROM CONTROL
1	UPSTREAM	5			
2	3%	5	0.044	11.3	-0.005
3	4%	5	0.044	11.3	0.020
4	5%	5	0.044	11.3	0.009
5	7%	5	0.044	11.3	-0.006
6	9%	5	0.044	11.3	0.003

FISHER'S EXACT TEST

IDENTIFICATION	NUMBER OF		
	ALIVE	DEAD	TOTAL ANIMALS
CONTROL	10	0	10
3%	10	0	10
TOTAL	20	0	20

CRITICAL FISHER'S VALUE (10,10,10) (p=0.05) IS 6. b VALUE IS 10.
 Since b is greater than 6 there is no significant difference
 between CONTROL and TREATMENT at the 0.05 level.

FISHER'S EXACT TEST

IDENTIFICATION	NUMBER OF		
	ALIVE	DEAD	TOTAL ANIMALS
CONTROL	10	0	10
4%	10	0	10
TOTAL	20	0	20

CRITICAL FISHER'S VALUE (10,10,10) (p=0.05) IS 6. b VALUE IS 10.
 Since b is greater than 6 there is no significant difference
 between CONTROL and TREATMENT at the 0.05 level.

FISHER'S EXACT TEST

IDENTIFICATION	NUMBER OF		
	ALIVE	DEAD	TOTAL ANIMALS
CONTROL	10	0	10
5%	10	0	10

TOTAL 20 0 20

CRITICAL FISHER'S VALUE (10,10,10) (p=0.05) IS 6. b VALUE IS 10.
 Since b is greater than 6 there is no significant difference
 between CONTROL and TREATMENT at the 0.05 level.

FISHER'S EXACT TEST

IDENTIFICATION	NUMBER OF		
	ALIVE	DEAD	TOTAL ANIMALS
CONTROL	10	0	10
7%	10	0	10
TOTAL	20	0	20

CRITICAL FISHER'S VALUE (10,10,10) (p=0.05) IS 6. b VALUE IS 10.
 Since b is greater than 6 there is no significant difference
 between CONTROL and TREATMENT at the 0.05 level.

FISHER'S EXACT TEST

IDENTIFICATION	NUMBER OF		
	ALIVE	DEAD	TOTAL ANIMALS
CONTROL	10	0	10
9%	10	0	10
TOTAL	20	0	20

CRITICAL FISHER'S VALUE (10,10,10) (p=0.05) IS 6. b VALUE IS 10.
 Since b is greater than 6 there is no significant difference
 between CONTROL and TREATMENT at the 0.05 level.

SUMMARY OF FISHER'S EXACT TESTS

NUMBER NUMBER SIG

GROUP	IDENTIFICATION	EXPOSED	DEAD	(P= .05)
	CONTROL	10	0	
1	3%	10	0	
2	4%	10	0	
3	5%	10	0	
4	7%	10	0	
5	9%	10	0	

60192343 FT SMITH CERIODAPHNIA DUBIA REPRODU
File: 6192343E Transform: NO TRANSFORMATION

Chi-square test for normality: actual and expected frequencies

INTERVAL	<-1.5	-1.5 to <-0.5	-0.5 to 0.5	>0.5 to 1.5	>1.5
EXPECTED	4.020	14.520	22.920	14.520	4.020
OBSERVED	6	11	21	21	1

Calculated Chi-Square goodness of fit test statistic = 7.1501
Table Chi-Square value (alpha = 0.01) = 13.277

Data PASS normality test. Continue analysis.

60192343 FT SMITH CERIODAPHNIA DUBIA REPRODU
File: 6192343E Transform: NO TRANSFORMATION

Bartlett's test for homogeneity of variance
Calculated B1 statistic = 1.08

Table Chi-square value = 15.09 (alpha = 0.01, df = 5)
Table Chi-square value = 11.07 (alpha = 0.05, df = 5)

Data PASS B1 homogeneity test at 0.01 level. Continue analysis.

60192343 FT SMITH CERIODAPHNIA DUBIA REPRODU
File: 6192343E Transform: NO TRANSFORMATION

SUMMARY STATISTICS ON TRANSFORMED DATA TABLE 1 of 2

GRP	IDENTIFICATION	N	MIN	MAX	MEAN
1	UPSTREAM	10	16.000	24.000	20.600
2	3%	10	16.000	24.000	20.700
3	4%	10	15.000	25.000	21.100
4	5%	10	16.000	26.000	20.900
5	7%	10	14.000	25.000	20.500
6	9%	10	15.000	25.000	20.900

60192343 FT SMITH CERIODAPHNIA DUBIA REPRODU
File: 6192343E Transform: NO TRANSFORMATION

SUMMARY STATISTICS ON TRANSFORMED DATA TABLE 2 of 2

GRP	IDENTIFICATION	VARIANCE	SD	SEM	C.V. %
1	UPSTREAM	6.933	2.633	0.833	12.78
2	3%	7.567	2.751	0.870	13.29
3	4%	11.211	3.348	1.059	15.87
4	5%	9.878	3.143	0.994	15.04
5	7%	11.389	3.375	1.067	16.46
6	9%	11.878	3.446	1.090	16.49

60192343 FT SMITH CERIODAPHNIA DUBIA REPRODU
File: 6192343E Transform: NO TRANSFORMATION

ANOVA TABLE

SOURCE	DF	SS	MS	F
Between	5	2.483	0.497	0.051
Within (Error)	54	529.700	9.809	
Total	59	532.183		

Critical F value = 2.45 (0.05,5,40)
Since $F < \text{Critical } F$ FAIL TO REJECT H_0 : All equal

60192343 FT SMITH CERIODAPHNIA DUBIA REPRODU

File: C:\TOXSTAT\6192343E.

Transform: NO TRANSFORMATION

DUNNETT'S TEST - TABLE 1 OF 2

Ho:Control<Treatment

GROUP	IDENTIFICATION	TRANSFORMED MEAN	MEAN CALCULATED IN ORIGINAL UNITS	T STAT	SIG
1	UPSTREAM	20.600	20.600		
2	3%	20.700	20.700	-0.071	
3	4%	21.100	21.100	-0.357	
4	5%	20.900	20.900	-0.214	
5	7%	20.500	20.500	0.071	
6	9%	20.900	20.900	-0.214	

Dunnett table value = 2.31 (1 Tailed Value, P=0.05, df=40,5)

60192343 FT SMITH CERIODAPHNIA DUBIA REPRODU

File: C:\TOXSTAT\6192343E.

Transform: NO TRANSFORMATION

DUNNETT'S TEST - TABLE 2 OF 2

Ho:Control<Treatment

GROUP	IDENTIFICATION	NUM OF REPS	Minimum Sig Diff (IN ORIG. UNITS)	% of CONTROL	DIFFERENCE FROM CONTROL
1	UPSTREAM	10			
2	3%	10	3.236	15.7	-0.100
3	4%	10	3.236	15.7	-0.500
4	5%	10	3.236	15.7	-0.300
5	7%	10	3.236	15.7	0.100
6	9%	10	3.236	15.7	-0.300

Conc. ID	1	2	3	4	5	6
Conc. Tested	0	3	4	5	7	9
Response 1	.400	.364	.346	.399	.421	.404
Response 2	.408	.384	.380	.344	.440	.408
Response 3	.403	.393	.379	.376	.346	.382
Response 4	.378	.414	.315	.363	.365	.353
Response 5	.339	.400	.408	.401	.385	.365

*** Inhibition Concentration Percentage Estimate ***

Toxicant/Effluent: Ft Smith

Test Start Date: 4/21/15 Test Ending Date: 4/28/15

Test Species: Fathead

Test Duration: 7 Day

DATA FILE:

Conc. ID	Number Replicates	Concentration	Response Means	Std. Dev.	Pooled Response Means
1	5	0.000	0.386	0.028	0.388
2	5	3.000	0.391	0.019	0.388
3	5	4.000	0.366	0.036	0.379
4	5	5.000	0.377	0.024	0.379
5	5	7.000	0.391	0.039	0.379
6	5	9.000	0.382	0.024	0.379

*** No Linear Interpolation Estimate can be calculated from the input data since none of the (possibly pooled) group response means were less than 75% of the control response mean.

Conc. ID	1	2	3	4	5	6
Conc. Tested	0	3	4	5	7	9
Response 1	20	22	24	20	22	20
Response 2	22	18	25	26	17	17
Response 3	20	23	18	16	19	23
Response 4	23	20	17	21	22	25
Response 5	20	18	22	20	24	17
Response 6	16	22	15	24	19	23
Response 7	18	20	21	22	14	15
Response 8	24	24	22	18	25	22
Response 9	19	24	24	18	20	23
Response 10	24	16	23	24	23	24

*** Inhibition Concentration Percentage Estimate ***

Toxicant/Effluent: Ft Smith

Test Start Date: 4/21/15 Test Ending Date: 4/28/15

Test Species: Dubia

Test Duration: 7 Day

DATA FILE:

Conc. ID	Number Replicates	Concentration	Response Means	Std. Dev.	Pooled Response Means
1	10	0.000	20.600	2.633	20.825
2	10	3.000	20.700	2.751	20.825
3	10	4.000	21.100	3.348	20.825
4	10	5.000	20.900	3.143	20.825
5	10	7.000	20.500	3.375	20.700
6	10	9.000	20.900	3.446	20.700

*** No Linear Interpolation Estimate can be calculated from the input data since none of the (possibly pooled) group response means were less than 75% of the control response mean.



REFERENCE #60192343

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
Phone: 913.599.5665
Fax: 913.599.1759

APPENDIX B
CHAIN OF CUSTODY FORMS

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
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Sample Condition Upon Receipt

Client Name: FT Smith

Courier: Fed Ex UPS USPS Client Commercial Pace Other

Tracking #: _____ Pace Shipping Label Used? Yes No

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No

Packing Material: Bubble Wrap Bubble Bags Foam None Other

Thermometer Used: T-111

Cooler Temperature: 2.6

Type of Ice: Wet Blue None Samples received on ice, cooling process has begun. (circle one)

Optional
Proj Due Date:
Proj Name:

Temperature should be above freezing to 6°C

Date and initials of person examining contents: MB 4/23/15 144

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Pace containers used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
Includes date/time/ID/analyses Matrix: <u>WT</u>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	15.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Initial when completed
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Lot # of added preservative
Trip Blank present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Pace Trip Blank lot # (if purchased):		
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	List State:

Client Notification/ Resolution: _____ Copy COC to Client? Y / N Field Data Required? Y / N
Person Contacted: _____ Date/Time: _____
Comments/ Resolution: _____



Sample Condition Upon Receipt

Optional
Proj. Due Date:
Proj. Name:

Client Name: FT Smith
 Courier: Fed Ex UPS USPS Client Commercial Pace Other
 Tracking #: _____ Pace Shipping Label Used? Yes No
 Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No
 Packing Material: Bubble Wrap Bubble Bags Foam None Other
 Thermometer Used: T-243 Type of Ice: Wet Blue None Samples received on ice, cooling process has begun.
 Cooler Temperature: 3.0 (circle one)

Temperature should be above freezing to 6°C

Item	Response	No.
Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Includes date/time/ID/analyses Matrix: <u>LOT</u>		13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), phenolics	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed
Trip Blank present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Lot # of added preservative
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State:

Client Notification/ Resolution: _____ Copy COC to Client? Y / N Field Data Required? Y / N
 Person Contacted: _____ Date/Time: _____
 Comments/ Resolution: _____



REFERENCE #60192343

Pace Analytical Services, Inc.
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APPENDIX C

REFERENCE TOXICANTS SUMMARY

REPORT OF LABORATORY ANALYSIS

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The absence of significant control mortality during this test indicated the health of the organisms and indicated that any significant mortality in the test concentrations was not due to contaminants or variations in testing conditions.

Reference toxicity testing is routinely performed by staff members in our biomonitoring - bioassay laboratory.

Start: 4/9/15 10:45 End: 4/16/15 11:00

Reference Toxicant (NaCl)	Pimephales promelas			
10 g/l	40	6	0	0
8 g/l	40	31	24	4
6 g/l	40	38	33	24
4 g/l	40	40	40	39
2 g/l	40	40	40	40

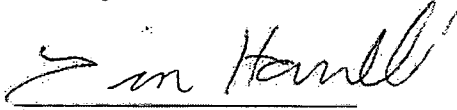
IC25 (5.19 g/l Sodium Chloride)

Survival NOEC: 4.0 g/l

Reference Toxicant (NaCl) Concentration of Toxicant	Ceriodaphnia Dubia Avg. # of Live Organisms/replicate			
	0 hrs	24 hrs	48 hrs	7 days
2.5 g/l	10	5	0	0
2.0 g/l	10	10	9	2
1.5 g/l	10	10	10	10
1.0 g/l	10	10	10	10
0.5 g/l	10	10	10	10

IC25 (1.16 g/l Sodium Chloride)

Survival NOEC: 1.5 g/l

Submitted By: 
 Timothy Harrell, Technical Director

REPORT OF LABORATORY ANALYSIS

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APPENDIX D STATE AGENCY FORMS

REPORT OF LABORATORY ANALYSIS

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Biomonitoring Form
Chronic Toxicity Summary Form
Pimephales promelas
Chemical Parameters Chart

Permittee: City of Fort Smith
 NPDES No.: AR 0021750
 Contact: Lance McAvoy
 Analyst: Tim Harrell
 Mike Bollin

Sample No. 1 Collected: Date: 4/20/2015 Time: 8:00
 Sample No. 2 Collected: Date: 4/22/2015 Time: 8:00
 Sample No. 3 Collected: Date: 4/24/2015 Time: 8:00
 Test Begin: Date: 4/21/2015 Time: 14:30
 Test End: Date: 4/28/2015 Time: 14:00

Dilution: 0								Dilution: 5									
Day:								Day:									
	1	2	3	4	5	6	7	Comments		1	2	3	4	5	6	7	Comments
Temp (C)	25	25.2	25.1	25.2	25.2	24.9	25.1		Temp (C)	25	25.2	25.1	25.2	25.2	24.9	25.1	
DO Initial	7.7	8.1	8	8.4	8.4	8.4	8.2		DO Initial		8.1	8	8.4	8.4	8.4	8.1	
DO Final	7.3	7.2	7.1	7	7.3	7	6.9		DO Final	7.3	7.2	7.1	7	7.3	7	6.9	
pH Initial	7.84	7.58	7.79	7.48	7.83	7.89	7.9		pH Initial		7.57	7.74	7.49	7.85	7.9	7.91	
pH Final	7.62	7.95	7.93	7.96	7.95	7.95	7.98		pH Final	7.84	7.97	7.94	7.95	7.96	7.94	7.97	
Alkalinity	80								Alkalinity								
Hardness	96								Hardness								
Conductivity	361								Conductivity								
Chlorine	<1						<1		Chlorine								

Dilution: 3								Dilution: 7									
Day:								Day:									
	1	2	3	4	5	6	7	Comments		1	2	3	4	5	6	7	Comments
Temp (C)	25	25.2	25.1	25.2	25.2	24.9	25.1		Temp (C)	25	25.2	25.1	25.2	25.2	24.9	25.1	
DO Initial		8.1	8	8.4	8.4	8.4	8.2		DO Initial		8.2	8	8.3	8.4	8.4	8.1	
DO Final	7.3	7.2	7.1	7	7.3	7	6.9		DO Final	7.3	7.2	7.1	7	7.3	7	6.8	
pH Initial		7.58	7.77	7.48	7.83	7.89	7.9		pH Initial		7.56	7.72	7.5	7.85	7.9	7.92	
pH Final	7.84	7.96	7.93	7.96	7.95	7.95	7.98		pH Final	7.83	7.98	7.94	7.94	7.97	7.93	7.95	
Alkalinity									Alkalinity								
Hardness									Hardness								
Conductivity									Conductivity								
Chlorine									Chlorine								

Dilution: 4								Dilution: 9									
Day:								Day:									
	1	2	3	4	5	6	7	Comments		1	2	3	4	5	6	7	Comments
Temp (C)	25	25.2	25.1	25.2	25.2	24.9	25.1		Temp (C)	25	25.2	25.1	25.2	25.2	24.9	25.1	Init. 100%
DO Initial		8.1	8	8.4	8.4	8.4	8.2		DO Initial		8.2	8	8.3	8.4	8.4	8.1	
DO Final	7.3	7.2	7.1	7	7.3	7	6.9		DO Final	7.3	7.2	7.1	7	7.3	7	6.8	
pH Initial		7.58	7.75	7.49	7.83	7.89	7.91		pH Initial		7.55	7.71	7.52	7.85	7.91	7.93	
pH Final	7.84	7.97	7.93	7.96	7.95	7.94	7.97		pH Final	7.83	8	7.94	7.95	7.97	7.92	7.95	
Alkalinity									Alkalinity								74
Hardness									Hardness								108
Conductivity									Conductivity								295
Chlorine									Chlorine							<1	<1

**Summary Reporting Forms Chronic Biomonitoring
Fathead Minnow Larvae Growth and Survival
(Pimephales promelas)**

Permittee: City of Fort Smith

NPDES No.: AR 0021750

Composite 1 Collected	From	Time: 8:00	Date: 4/19/2015	To	Time: 8:00	Date: 4/20/2015
-----------------------	------	------------	-----------------	----	------------	-----------------

Composite 2 Collected	From	Time: 8:00	Date: 4/21/2015	To	Time: 8:00	Date: 4/22/2015
-----------------------	------	------------	-----------------	----	------------	-----------------

Composite 3 Collected	From	Time: 8:00	Date: 4/23/2015	To	Time: 8:00	Date: 4/24/2015
-----------------------	------	------------	-----------------	----	------------	-----------------

Test initiated: am/pm 14:30 date 4/21/2015
 Test terminated: am/pm 14:00 date 4/28/2015

Dilution water used: Receiving X Reconstituted

Data Table for Survival

Effluent Conc. %	Percent Survival in Replicate Chambers					Mean Percent Survival			CV%*
	A	B	C	D	E	24h	48h	7 days	
0%	100	100	100	100	87.5	100	100	97.5	4.79
3%	100	100	100	100	100	100	100	100	0
4%	100	100	100	87.5	100	100	100	97.5	4.79
5%	100	87.5	100	87.5	100	100	100	95	5.99
7%	100	100	100	100	100	100	100	100	0
9%	100	100	100	100	100	100	100	100	0

Data Table for Survival

Effluent Conc. %	Average Dry Weight in milligrams in Replicate Chambers					Mean Dry Weight mg	CV%*
	A	B	C	D	E		
0%	0.4	0.408	0.403	0.378	0.339	0.386	7.38
3%	0.364	0.384	0.393	0.414	0.4	0.391	4.77
4%	0.346	0.38	0.379	0.315	0.408	0.366	9.79
5%	0.399	0.344	0.376	0.363	0.401	0.377	6.43
7%	0.421	0.44	0.346	0.365	0.385	0.391	9.93
9%	0.404	0.408	0.382	0.353	0.365	0.382	6.26

*coefficient of variation = standard deviation x 100/mean.

4 1 7 1

Fathead Minnow Larvae Growth and Survival (cont)
(Pimephales promelas)

1. Dunnett's Procedure or Steels Many-One Rank Test as appropriate:

Is the mean survival at 7 days significantly different ($p=.05$) than the control survival for the % effluent corresponding to:

- | | | | |
|----------------------------------|---------|------|-------|
| a) Low Flow or Critical Dilution | (7 %): | Yes: | No: X |
| b) 1/2 Low Flow Dilution | (%): | Yes: | No: |

2. Dunnett's Procedure (or appropriate test):

Is the mean dry weight (growth) of the effluent at 7 days significantly different ($p=0.05$) than the control's dry weight for the % effluent corresponding to (significant non-lethal effects):

- | | | | |
|----------------------------------|---------|------|-------|
| a) Low Flow or Critical Dilution | (7 %): | Yes: | No: X |
| b) 1/2 Low Flow Dilution | (%): | Yes: | No: |

3. If you answered NO to 1. a) and 2. a) enter (0) otherwise enter (1): 0

4. If you answered NO to 1. b) and 2. b) enter (0) otherwise enter (1):

5. Enter response to item 3 on DMR Form, parameter #TEP6C.

6. Enter response to item 4 on DMR Form, parameter #TFP6C.

7. Enter percent effluent corresponding to each NOEC below and circle lowest number:

- | | |
|-----------------------|--------------|
| a) NOEC survival: | 9 % effluent |
| b) NOEC reproduction: | 9 % effluent |

Biomonitoring Form
Chronic Toxicity Summary Form
Ceriodaphnia dubia
Chemical Parameters Chart

Permittee: City of Fort Smith
 NPDES No.: AR 0021750
 Contact: Lance McAvoy
 Analyst: Tim Harrell
 Mike Bollin

Sample No. 1 Collected: Date: 4/20/2015 Time: 8:00
 Sample No. 2 Collected: Date: 4/22/2015 Time: 8:00
 Sample No. 3 Collected: Date: 4/24/2015 Time: 8:00
 Test Begin: Date: 4/21/2015 Time: 14:30
 Test End: Date: 4/28/2015 Time: 14:00

Dilution: 0								Dilution: 5									
Day:								Day:									
	1	2	3	4	5	6	7	Comments		1	2	3	4	5	6	7	Comments
Temp (C)	25	25.2	25.1	25.2	25.2	24.9	25.1		Temp (C)	25	25.2	25.1	25.2	25.2	24.9	25.1	
DO Initial	7.7	8.1	8	8.4	8.4	8.4	8.2		DO Initial		8.1	8	8.4	8.4	8.4	8.1	
DO Final	7.3	7.2	7.1	7	7.3	7	6.9		DO Final	7.3	7.2	7.1	7	7.3	7	6.9	
pH Initial	7.84	7.58	7.79	7.48	7.83	7.89	7.9		pH Initial		7.57	7.74	7.49	7.85	7.9	7.91	
pH Final	7.62	7.95	7.93	7.96	7.95	7.95	7.98		pH Final	7.84	7.97	7.94	7.95	7.96	7.94	7.97	
Alkalinity	80								Alkalinity								
Hardness	96								Hardness								
Conductivity	361								Conductivity								
Chlorine	<.1						<.1		Chlorine								

Dilution: 3								Dilution: 7									
Day:								Day:									
	1	2	3	4	5	6	7	Comments		1	2	3	4	5	6	7	Comments
Temp (C)	25	25.2	25.1	25.2	25.2	24.9	25.1		Temp (C)	25	25.2	25.1	25.2	25.2	24.9	25.1	
DO Initial		8.1	8	8.4	8.4	8.4	8.2		DO Initial		8.2	8	8.3	8.4	8.4	8.1	
DO Final	7.3	7.2	7.1	7	7.3	7	6.9		DO Final	7.3	7.2	7.1	7	7.3	7	6.8	
pH Initial		7.58	7.77	7.48	7.83	7.89	7.9		pH Initial		7.56	7.72	7.5	7.85	7.9	7.92	
pH Final	7.84	7.96	7.93	7.96	7.95	7.95	7.98		pH Final	7.83	7.98	7.94	7.94	7.97	7.93	7.95	
Alkalinity									Alkalinity								
Hardness									Hardness								
Conductivity									Conductivity								
Chlorine									Chlorine								

Dilution: 4								Dilution: 9									
Day:								Day:									
	1	2	3	4	5	6	7	Comments		1	2	3	4	5	6	7	Comments
Temp (C)	25	25.2	25.1	25.2	25.2	24.9	25.1		Temp (C)	25	25.2	25.1	25.2	25.2	24.9	25.1	Init. 100%
DO Initial		8.1	8	8.4	8.4	8.4	8.2		DO Initial		8.2	8	8.3	8.4	8.4	8.1	
DO Final	7.3	7.2	7.1	7	7.3	7	6.9		DO Final	7.3	7.2	7.1	7	7.3	7	6.8	
pH Initial		7.58	7.75	7.49	7.83	7.89	7.91		pH Initial		7.55	7.71	7.52	7.85	7.91	7.93	
pH Final	7.84	7.97	7.93	7.96	7.95	7.94	7.97		pH Final	7.83	8	7.94	7.93	7.97	7.92	7.95	
Alkalinity									Alkalinity								74
Hardness									Hardness								108
Conductivity									Conductivity								295
Chlorine									Chlorine							<.1	<.1

Ceriodaphnia dubia
Survival and Reproduction (cont)

1. Fisher's Exact Test:

Is the mean survival at the end of the test significantly different ($p=.05$) than the control survival for the % effluent corresponding to (lethality):

a) Low Flow or Critical Dilution	(7 %):	Yes:	No: X
b) 1/2 Low Flow Dilution	(%):	Yes:	No:

2. Dunnett's Procedure or Steel's Many-One Rank Test as appropriate:

Is the mean number of young produced per female significantly different ($p=.05$) than the control's number of young per female for the % effluent corresponding to (significant non-lethal effects):

a) Low Flow or Critical Dilution	(7 %):	Yes:	No: X
b) 1/2 Low Flow Dilution	(%):	Yes:	No:

3. If you answered NO to 1. a) and 2. a) enter (0) otherwise enter (1): 0

4. If you answered NO to 1. b) and 2. b) enter (0) otherwise enter (1):

5. Enter response to item 3 on DMR Form, parameter #TEP3B.

6. Enter response to item 4 on DMR Form, parameter #TFP3B.

7. Enter percent effluent corresponding to each NOEC below and circle lowest number:

a) NOEC survival:	9 % effluent
b) NOEC reproduction:	9 % effluent