Microbac Laboratories, Inc.

Baltimore Division

2101 Van Deman Street • Baltimore, MD 21224

Phone: 410-633-1800
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www.microbac.com

COVER LETTER

Jamie Pierce
Total Environmental Concepts
3308 Mount Vernon Avenue
Alexandria, VA 21061

RE: WRAMC-Special (GW)

April 01, 2013
Report No.: 13C0322

The report of analyses contains test results for samples received at Microbac Laboratories, Inc., Baltimore Division on 03/05/2013 14:15.

The enclosed results were obtained from and applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report has been reviewed and meet the applicable project and certification specific requirements, unless otherwise noted.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories, Inc.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

This Data Package contains the following:

- This Cover Page
- Sample Summary
- Test Results
- Certifications/Notes and Definitions
- Cooler Receipt Log
- Chain of Custody

Melanie C Duszynski

4/1/2013

Final report reviewed by: Melanie C. Duszynski/Project Manager Report issue date

All samples received in proper condition and results conform to ISO 17025 and TNI NELAC standards unless otherwise noted.

If we have not met or exceeded your expectations, please contact Mark Horan, Managing Director, at 410-633-1800 You may also contact Sean Hyde, Chief Operating Officer at sean.hyde@microbac.com or James Nokes, President james.nokes@microbac.com

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CERTIFICATE OF ANALYSIS

Total Environmental Concepts 3308 Mount Vernon Avenue Alexandria, VA 21061	Project: WRAMC-Special (GW) Project Number: WRAMC-Special (GW) Project Manager: Jamie Pierce	Report: 13C0322 Reported: 04/01/2013 13:38

SAMPLE SUMMARY

Sample ID	Laboratory ID	Matrix	Type	Date Sampled	Date Received
Water Under Surface	13C0322-01	Water	Grab	03/05/2013 08:35	03/05/2013 14:15
Pipe Discharge	13C0322-02	Water	Grab	03/05/2013 09:30	03/05/2013 14:15

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Melanie C. Duszynski

Melanie C. Duszynski, Project Manager

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Water Under Surface

13C0322-01 (Water) Sampled: 03/05/2013 08:35; Type: Grab

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Microbac Laboratories, Inc., Baltimore Division								
Acid and Base/Neutral Extractables by EPA Method 8270C								
N-Nitrosodimethylamine	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Pyridine	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	V6
Aniline	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Bis(2-Chloroethyl)ether	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Phenol	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
2-Chlorophenol	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
1,3-Dichlorobenzene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
1,2-Dichlorobenzene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Benzyl alcohol	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	V6
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
2-Methylphenol	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Hexachloroethane	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
N-Nitroso-di-n-propylamine	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
4-Methylphenol, 3-Methylphenol	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Nitrobenzene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Isophorone	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
2-Nitrophenol	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
2,4-Dimethylphenol	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
bis(2-Chloroethoxy)methane	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
2,4-Dichlorophenol	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
1,2,4-Trichlorobenzene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Naphthalene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
4-Chloroaniline	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	V6
Benzoic Acid	ND	10	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	V6
Hexachlorobutadiene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
4-Chloro-3-methylphenol	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
2-Methylnaphthalene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Hexachlorocyclopentadiene	ND	10	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	V6
2,4,6-Trichlorophenol	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
2,4,5-Trichlorophenol	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	

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Melanie C. Duszynski, Project Manager

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CERTIFICATE OF ANALYSIS

Total Environmental Concepts 3308 Mount Vernon Avenue Alexandria, VA 21061	Project: WRAMC-Special (GW) Project Number: WRAMC-Special (GW) Project Manager: Jamie Pierce	Report: 13C0322 Reported: 04/01/2013 13:38

Water Under Surface

13C0322-01 (Water) Sampled: 03/05/2013 08:35; Type: Grab

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Microbac Laboratories, Inc., Baltimore Division								
Acid and Base/Neutral Extractables by EPA Method 8270C								
2-Chloronaphthalene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
2-Nitroaniline	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Acenaphthylene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Dimethylphthalate	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
2,6-Dinitrotoluene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Acenaphthene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
3-Nitroaniline	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	V6
2,4-Dinitrophenol	ND	10	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Dibenzofuran	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
2,4-Dinitrotoluene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
4-Nitrophenol	ND	10	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Fluorene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
4-Chlorophenyl-phenylether	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Diethylphthalate	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
4-Nitroaniline	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
N-Nitrosodiphenylamine	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
4-Bromophenyl-phenylether	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Hexachlorobenzene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Pentachlorophenol	ND	10	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Phenanthrene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Anthracene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Carbazole	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Di-n-butylphthalate	**30**	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Fluoranthene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Pyrene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Benzidine	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	V6
Butylbenzylphthalate	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
3,3'-Dichlorobenzidine	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	V6
Benz(a)anthracene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	

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CERTIFICATE OF ANALYSIS

Total Environmental Concepts	Project: WRAMC-Special (GW)	Report: 13C0322
3308 Mount Vernon Avenue	Project Number: WRAMC-Special (GW)	Reported: 04/01/2013 13:38
Alexandria, VA 21061	Project Manager: Jamie Pierce	

Water Under Surface

13C0322-01 (Water) Sampled: 03/05/2013 08:35; Type: Grab

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Microbac Laboratories, Inc., Baltimore Division								
Acid and Base/Neutral Extractables by EPA Method 8270C								
Chrysene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Bis(2-Ethylhexyl)phthalate	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Di-n-octylphthalate	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Benzo[b]fluoranthene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Benzo[k]fluoranthene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Benzo[a]pyrene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Indeno[1,2,3-cd]pyrene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Dibenz[a,h]anthracene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Benzo[g,h,i]perylene	ND	5.0	ug/L	030613 0740	031413 2031	GWP	EPA 8270C	
Surrogate: 2-Fluorophenol		*42.0%*	*9.03-72.7*	*030613 0740*	*031413 2031*		*EPA 8270C*	
Surrogate: Phenol-d5		*29.7%*	*12.6-48.3*	*030613 0740*	*031413 2031*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*63.0%*	*14.9-110*	*030613 0740*	*031413 2031*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*61.6%*	*17-107*	*030613 0740*	*031413 2031*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*80.6%*	*19-114*	*030613 0740*	*031413 2031*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*64.8%*	*15.3-121*	*030613 0740*	*031413 2031*		*EPA 8270C*	
Diesel Range Organics (C10 to C28)								
Diesel Range Organics (C10-C28)	ND	400	ug/L	030813 1438	031513 1555	GWP	EPA 8015B	
Surrogate: o-Terphenyl		*86.6%*	*50-150*	*030813 1438*	*031513 1555*		*EPA 8015B*	
Gasoline Range Organics (C6 to C10)								
Gasoline Range Organics (C6-C10)	ND	40	ug/L	031213 0302	031213 0302	GWP	EPA 8015B	
Surrogate: Bromofluorobenzene		*112%*	*70-130*	*031213 0302*	*031213 0302*		*EPA 8015B*	

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Melanie C. Duszynski

Melanie C. Duszynski, Project Manager

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Water Under Surface

13C0322-01 (Water) Sampled: 03/05/2013 08:35; Type: Grab

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Microbac Laboratories, Inc., Baltimore Division								
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	030613 1326	030613 1658	APS	EPA 245.1	
Metals, Total by EPA 200 Series Methods								
Silver	ND	0.0010	mg/L	030713 0753	030813 1057	PBK	EPA 200.8	
Arsenic	**0.0036**	0.0020	mg/L	030713 0753	030813 1057	PBK	EPA 200.8	
Barium	**0.084**	0.0050	mg/L	030713 0753	030813 1057	PBK	EPA 200.8	
Cadmium	ND	0.00050	mg/L	030713 0753	030813 1057	PBK	EPA 200.8	
Chromium	ND	0.0020	mg/L	030713 0753	030813 1057	PBK	EPA 200.8	
Lead	**0.0025**	0.0010	mg/L	030713 0753	030813 1057	PBK	EPA 200.8	
Selenium	ND	0.0050	mg/L	030713 0753	030813 1057	PBK	EPA 200.8	
Oil and Grease								
Oil & Grease	ND	5	mg/L	030613 1417	030613 1417	BAB	EPA 1664A	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Chloromethane	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Vinyl chloride	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Bromomethane	ND	5.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Chloroethane	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Trichlorofluoromethane	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Acetone	ND	25	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Iodomethane	ND	5.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Carbon disulfide	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Methylene Chloride	ND	5.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Methyl-tert-Butyl Ether	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
trans-1,2-Dichloroethene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	

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Water Under Surface

13C0322-01 (Water) Sampled: 03/05/2013 08:35; Type: Grab

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Vinyl acetate	ND	5.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
2,2-Dichloropropane	ND	5.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
cis-1,2-Dichloroethene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
2-Butanone (MEK)	ND	5.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Chloroform	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Bromochloromethane	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
1,1-Dichloropropene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Carbon Tetrachloride	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Benzene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Trichloroethene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Bromodichloromethane	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Dibromomethane	ND	2.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Methyl Isobutyl Ketone	ND	5.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Toluene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
2-Hexanone (MBK)	ND	5.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
1,2-Dibromoethane	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Tetrachloroethene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
1,3-Dichloropropane	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Dibromochloromethane	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Chlorobenzene	**4.3**	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Ethylbenzene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
m,p-Xylenes	ND	2.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	

Microbac Laboratories, Inc., Baltimore Division

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Melanie C. Duszynski, Project Manager

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CERTIFICATE OF ANALYSIS

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Water Under Surface

13C0322-01 (Water) Sampled: 03/05/2013 08:35; Type: Grab

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Microbac Laboratories, Inc., Baltimore Division								
Volatile Organic Compounds by EPA Method 8260B								
o-Xylene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Styrene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Bromoform	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Isopropylbenzene (Cumene)	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
1,2,3-Trichloropropane	ND	5.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Bromobenzene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Propylbenzene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
2-Chlorotoluene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
4-Chlorotoluene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
tert-Butylbenzene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	V6
1,2,4-Trimethylbenzene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
sec-Butylbenzene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
4-Isopropyltoluene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
1,3-Dichlorobenzene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
1,4-Dichlorobenzene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Butylbenzene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
1,2-Dichlorobenzene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
1,2,4-Trichlorobenzene	ND	5.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Hexachlorobutadiene	ND	5.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Naphthalene	ND	1.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
1,2,3-Trichlorobenzene	ND	5.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Total Xylenes	ND	3.0	ug/L	030713 2031	030713 2031	GWP	EPA 8260B	
Surrogate: Dibromofluoromethane		*108%*	*70-130*	*030713 2031*	*030713 2031*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*102%*	*70-130*	*030713 2031*	*030713 2031*		*EPA 8260B*	
Surrogate: Toluene-d8		*94.3%*	*70-130*	*030713 2031*	*030713 2031*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*90.1%*	*70-130*	*030713 2031*	*030713 2031*		*EPA 8260B*	

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Melanie C. Duszynski, Project Manager

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CERTIFICATE OF ANALYSIS

Total Environmental Concepts	Project: WRAMC-Special (GW)	Report: 13C0322
3308 Mount Vernon Avenue	Project Number: WRAMC-Special (GW)	Reported: 04/01/2013 13:38
Alexandria, VA 21061	Project Manager: Jamie Pierce	

Pipe Discharge

13C0322-02 (Water) Sampled: 03/05/2013 09:30; Type: Grab

Microbac Laboratories, Inc., Baltimore Division

Acid and Base/Neutral Extractables by EPA Method 8270C

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
N-Nitrosodimethylamine	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Pyridine	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	V6
Aniline	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Bis(2-Chloroethyl)ether	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Phenol	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
2-Chlorophenol	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
1,3-Dichlorobenzene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
1,2-Dichlorobenzene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Benzyl alcohol	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	V6
Bis(2-chloroisopropyl)ether	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
2-Methylphenol	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Hexachloroethane	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
N-Nitroso-di-n-propylamine	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
4-Methylphenol, 3-Methylphenol	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Nitrobenzene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Isophorone	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
2-Nitrophenol	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
2,4-Dimethylphenol	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
bis(2-Chloroethoxy)methane	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
2,4-Dichlorophenol	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
1,2,4-Trichlorobenzene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Naphthalene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
4-Chloroaniline	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	V6
Benzoic Acid	ND	10	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	V6
Hexachlorobutadiene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
4-Chloro-3-methylphenol	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
2-Methylnaphthalene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Hexachlorocyclopentadiene	ND	10	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	V6
2,4,6-Trichlorophenol	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
2,4,5-Trichlorophenol	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
2-Chloronaphthalene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	

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Melanie C. Duszynski

Melanie C. Duszynski, Project Manager

Original Lab Report

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CERTIFICATE OF ANALYSIS

Total Environmental Concepts 3308 Mount Vernon Avenue Alexandria, VA 21061	Project: WRAMC-Special (GW) Project Number: WRAMC-Special (GW) Project Manager: Jamie Pierce	Report: 13C0322 Reported: 04/01/2013 13:38

Pipe Discharge

13C0322-02 (Water) Sampled: 03/05/2013 09:30; Type: Grab

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Microbac Laboratories, Inc., Baltimore Division								
Acid and Base/Neutral Extractables by EPA Method 8270C								
2-Nitroaniline	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Acenaphthylene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Dimethylphthalate	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
2,6-Dinitrotoluene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Acenaphthene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
3-Nitroaniline	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	V6
2,4-Dinitrophenol	ND	10	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Dibenzofuran	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
2,4-Dinitrotoluene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
4-Nitrophenol	ND	10	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Fluorene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
4-Chlorophenyl-phenylether	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Diethylphthalate	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
4-Nitroaniline	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
4,6-Dinitro-2-methylphenol	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
N-Nitrosodiphenylamine	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
4-Bromophenyl-phenylether	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Hexachlorobenzene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Pentachlorophenol	ND	10	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Phenanthrene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Anthracene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Carbazole	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Di-n-butylphthalate	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Fluoranthene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Pyrene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Benzidine	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	V6
Butylbenzylphthalate	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
3,3'-Dichlorobenzidine	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	V6
Benz(a)anthracene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Chrysene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Bis(2-Ethylhexyl)phthalate	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	

Microbac Laboratories, Inc., Baltimore Division

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Melanie C. Duszynski

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CERTIFICATE OF ANALYSIS

Total Environmental Concepts 3308 Mount Vernon Avenue Alexandria, VA 21061	Project: WRAMC-Special (GW) Project Number: WRAMC-Special (GW) Project Manager: Jamie Pierce	Report: 13C0322 Reported: 04/01/2013 13:38

Pipe Discharge

13C0322-02 (Water) Sampled: 03/05/2013 09:30; Type: Grab

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Microbac Laboratories, Inc., Baltimore Division								
Acid and Base/Neutral Extractables by EPA Method 8270C								
Di-n-octylphthalate	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Benzo[b]fluoranthene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Benzo[k]fluoranthene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Benzo[a]pyrene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Indeno[1,2,3-cd]pyrene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Dibenz[a,h]anthracene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Benzo[g,h,i]perylene	ND	5.0	ug/L	030613 0740	031413 1955	GWP	EPA 8270C	
Surrogate: 2-Fluorophenol		*55.9%*	*9.03-72.7*	*030613 0740*	*031413 1955*		*EPA 8270C*	
Surrogate: Phenol-d5		*40.7%*	*12.6-48.3*	*030613 0740*	*031413 1955*		*EPA 8270C*	
Surrogate: Nitrobenzene-d5		*82.0%*	*14.9-110*	*030613 0740*	*031413 1955*		*EPA 8270C*	
Surrogate: 2-Fluorobiphenyl		*90.1%*	*17-107*	*030613 0740*	*031413 1955*		*EPA 8270C*	
Surrogate: 2,4,6-Tribromophenol		*99.2%*	*19-114*	*030613 0740*	*031413 1955*		*EPA 8270C*	
Surrogate: Terphenyl-d14		*80.1%*	*15.3-121*	*030613 0740*	*031413 1955*		*EPA 8270C*	
Diesel Range Organics (C10 to C28)								
Diesel Range Organics (C10-C28)	ND	400	ug/L	030813 1438	031513 1527	GWP	EPA 8015B	
Surrogate: o-Terphenyl		*94.7%*	*50-150*	*030813 1438*	*031513 1527*		*EPA 8015B*	
Gasoline Range Organics (C6 to C10)								
Gasoline Range Organics (C6-C10)	ND	40	ug/L	031213 0229	031213 0229	GWP	EPA 8015B	
Surrogate: Bromofluorobenzene		*120%*	*70-130*	*031213 0229*	*031213 0229*		*EPA 8015B*	
Mercury, Total by EPA 200/7000 Series Methods								
Mercury	ND	0.00020	mg/L	030613 1326	030613 1700	APS	EPA 245.1	

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Melanie C. Duszynski, Project Manager

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CERTIFICATE OF ANALYSIS

Total Environmental Concepts 3308 Mount Vernon Avenue Alexandria, VA 21061	Project: WRAMC-Special (GW) Project Number: WRAMC-Special (GW) Project Manager: Jamie Pierce	Report: 13C0322 Reported: 04/01/2013 13:38

Pipe Discharge

13C0322-02 (Water) Sampled: 03/05/2013 09:30; Type: Grab

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Microbac Laboratories, Inc., Baltimore Division								
Metals, Total by EPA 200 Series Methods								
Silver	ND	0.0010	mg/L	030713 0753	030813 1202	PBK	EPA 200.8	
Arsenic	**0.0076**	0.0020	mg/L	030713 0753	030813 1202	PBK	EPA 200.8	
Barium	**0.093**	0.0050	mg/L	030713 0753	030813 1440	PBK	EPA 200.8	
Cadmium	ND	0.00050	mg/L	030713 0753	030813 1202	PBK	EPA 200.8	
Chromium	ND	0.0020	mg/L	030713 0753	030813 1202	PBK	EPA 200.8	
Lead	ND	0.0010	mg/L	030713 0753	030813 1440	PBK	EPA 200.8	
Selenium	ND	0.0050	mg/L	030713 0753	030813 1202	PBK	EPA 200.8	
Oil and Grease								
Oil & Grease	ND	5	mg/L	030613 1417	030613 1417	BAB	EPA 1664A	
Volatile Organic Compounds by EPA Method 8260B								
Dichlorodifluoromethane	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Chloromethane	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Vinyl chloride	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Bromomethane	ND	5.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Chloroethane	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Trichlorofluoromethane	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
1,1-Dichloroethene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Acetone	ND	25	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Iodomethane	ND	5.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Carbon disulfide	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Allyl Chloride (3-Chloropropylene)	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Methylene Chloride	ND	5.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Methyl-tert-Butyl Ether	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
trans-1,2-Dichloroethene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
1,1-Dichloroethane	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Vinyl acetate	ND	5.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
2,2-Dichloropropane	ND	5.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
cis-1,2-Dichloroethene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	

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Total Environmental Concepts	Project: WRAMC-Special (GW)	Report: 13C0322
3308 Mount Vernon Avenue	Project Number: WRAMC-Special (GW)	Reported: 04/01/2013 13:38
Alexandria, VA 21061	Project Manager: Jamie Pierce	

Pipe Discharge

13C0322-02 (Water) Sampled: 03/05/2013 09:30; Type: Grab

Microbac Laboratories, Inc., Baltimore Division

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
2-Butanone (MEK)	ND	5.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Chloroform	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Bromochloromethane	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
1,1,1-Trichloroethane	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
1,1-Dichloropropene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Carbon Tetrachloride	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Benzene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
1,2-Dichloroethane	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Trichloroethene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
1,2-Dichloropropane	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Bromodichloromethane	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Dibromomethane	ND	2.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
2-Chloroethyl Vinyl Ether	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Methyl Isobutyl Ketone	ND	5.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
cis-1,3-Dichloropropene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Toluene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
trans-1,3-Dichloropropene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
1,1,2-Trichloroethane	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
2-Hexanone (MBK)	ND	5.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
1,2-Dibromoethane	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Tetrachloroethene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
1,3-Dichloropropane	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Dibromochloromethane	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Chlorobenzene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Ethylbenzene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
m,p-Xylenes	ND	2.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
o-Xylene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Styrene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Bromoform	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Isopropylbenzene (Cumene)	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	

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Total Environmental Concepts 3308 Mount Vernon Avenue Alexandria, VA 21061	Project: WRAMC-Special (GW) Project Number: WRAMC-Special (GW) Project Manager: Jamie Pierce	Report: 13C0322 Reported: 04/01/2013 13:38

Pipe Discharge

13C0322-02 (Water) Sampled: 03/05/2013 09:30; Type: Grab

Analyte	Result	Reporting Limit	Units	Prepared	Analyzed	Analyst	Method	Notes
Microbac Laboratories, Inc., Baltimore Division								
Volatile Organic Compounds by EPA Method 8260B								
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
1,2,3-Trichloropropane	ND	5.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Bromobenzene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Propylbenzene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
2-Chlorotoluene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
1,3,5-Trimethylbenzene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
4-Chlorotoluene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
tert-Butylbenzene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	V6
1,2,4-Trimethylbenzene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
sec-Butylbenzene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
4-Isopropyltoluene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
1,3-Dichlorobenzene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
1,4-Dichlorobenzene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
trans-1,4-Dichloro-2-butene	ND	5.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Butylbenzene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
1,2-Dichlorobenzene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
1,2-Dibromo-3-chloropropane	ND	5.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
1,2,4-Trichlorobenzene	ND	5.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Hexachlorobutadiene	ND	5.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Naphthalene	ND	1.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
1,2,3-Trichlorobenzene	ND	5.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Total Xylenes	ND	3.0	ug/L	030713 2006	030713 2006	GWP	EPA 8260B	
Surrogate: Dibromofluoromethane		*109%*	*70-130*	*030713 2006*	*030713 2006*		*EPA 8260B*	
Surrogate: 1,2-Dichloroethane-d4		*101%*	*70-130*	*030713 2006*	*030713 2006*		*EPA 8260B*	
Surrogate: Toluene-d8		*95.7%*	*70-130*	*030713 2006*	*030713 2006*		*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*92.4%*	*70-130*	*030713 2006*	*030713 2006*		*EPA 8260B*	

Microbac Laboratories, Inc., Baltimore Division

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Melanie C. Duszynski

Melanie C. Duszynski, Project Manager

Original Lab Report

Microbac Laboratories, Inc.
Baltimore Division
2101 Van Deman Street • Baltimore, MD 21224

Phone: 410-633-1800
Fax: 410-633-6553
www.microbac.com

CERTIFICATE OF ANALYSIS

Total Environmental Concepts 3308 Mount Vernon Avenue Alexandria, VA 21061	Project: WRAMC-Special (GW) Project Number: WRAMC-Special (GW) Project Manager: Jamie Pierce	Report: 13C0322 Reported: 04/01/2013 13:38

Project Requested Certification(s):

A2LA (Environmental)
State of Pennsylvania (NELAC)

Analyte Certification Exception Summary

No certification exceptions

All analysis performed were analyzed under the required certification unless otherwise noted in the above summary.

Certification List

Below is a list of certifications maintained by Microbac Laboratories, Inc. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. A complete list of individual analytes pursuant to each certification below is available upon request.

Code	Description	Certification Number	Expires
Microbac Laboratories, Inc., Baltimore Division			
A2LA1	A2LA (Biology)	410.02	04/30/2013
A2LA2	A2LA (Environmental)	410.01	04/30/2013
VA-B	Commonwealth of Virginia (NELAC) - Baltimore	460170-1829	06/14/2013
CPSC	CPSC Testing of Childrens Products and Jewelry	1115	04/30/2013
Pb	Environmental Lead (ELLAP)	410.01	04/30/2013
NJ	New Jersey	NLC120001	06/30/2013
MD	State of Maryland (Drinking Water)	109	06/30/2013
PA	State of Pennsylvania (NELAC)	68-00339	08/31/2013
USDA	US Department of Agriculture	P330-09-00021	02/19/2012
WV	West Virginia	054	08/31/2013
Microbac Laboratories, Inc., Richmond Division			
VA-R	Commonwealth of Virginia (NELAC) - Richmond	460022-1834	06/14/2013

Microbac Laboratories, Inc.
Baltimore Division
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CERTIFICATE OF ANALYSIS

Total Environmental Concepts 3308 Mount Vernon Avenue Alexandria, VA 21061	Project: WRAMC-Special (GW) Project Number: WRAMC-Special (GW) Project Manager: Jamie Pierce	Report: 13C0322 Reported: 04/01/2013 13:38

Qualifiers/Notes and Definitions

General Definitions:

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Analysis Qualifiers/Notes:

Microbac Laboratories, Inc., Baltimore Division

V6	CCV recovery was below acceptance limits. The reported result is estimated.

Microbac Laboratories, Inc.
Baltimore Division
2101 Van Deman Street • Baltimore, MD 21224
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Fax: 410-633-6553
www.microbac.com

Cooler Receipt Log

Cooler ID: Default Cooler **Cooler Temp:** 2.30 °C **Work Order:** 13C0322

Custody Seals Intact:	Yes	COC/Containers Agree:	Yes
Containers Intact:	Yes	Correct Preservation:	Yes
Received On Ice:	Yes	Correct Number of Containers Received:	Yes
Radiation Scan Acceptable:	Yes	Sufficient Sample Volume for Testing:	Yes
COC Present:	Yes	Samples Received in Proper Condition:	Yes

Comments:

Microbac Laboratories, Inc., Baltimore Division
2101 Van Deman Street • Baltimore, MD 21224
Phone: 410-633-1800
Fax: 410-633-6553
www.microbac.com

13C0322

Tenatively Scheduled Date: **3/5/2013**

Client: **Total Environmental Concepts**
Project: **WRAMC-Special (GW)**
Project Number: **WRAMC-Special (GW)**

PO# 18166 (me)

Report To:
Jamie Pierce
3308 Mount Vernon Avenue
Alexandria, VA 21061
Phone: (202) 782-9848

Invoice To:
Jamie Pierce
3308 Mount Vernon Avenue
Alexandria, VA 21061
Phone :(202) 782-9848

TAT 7 days

Sample ID: Sample Name: water under surface

Lab Sample ID: **13C0322-01**
Matrix: Water
Type: Grab
Sampled Date & Time: 3/5/13 0835

Analysis	Method	Container	Hold
RECRA_ICPMS_Group_Ind	varies		180
		A- 500ml Plastic HNO3 to pH <2	
OG	EPA 1664A		28
		C-1000ml Clear Glass HCl to pH <2 (Fill to top)	
8270C	EPA 8270C		7
DRO	EPA 8015B		7
		D-1000ml Amber Glass NM Neat	
SUB_PCB_Congeners	EPA 1668C		180
		D-1000ml Amber Glass NM Neat SUB	
8260B	EPA 8260B		14
GRO	EPA 8015B		14
		V-40ml VOA Vial HCl to pH <2	

Sample ID: Sample Name: pipe discharge

Lab Sample ID: **13C0322-02**
Matrix: Water
Type: Grab
Sampled Date & Time: 3/5/13 0930

Analysis	Method	Container	Hold
RECRA_ICPMS_Group_Ind	varies		180
		A- 500ml Plastic HNO3 to pH <2	
OG	EPA 1664A		28
		C-1000ml Clear Glass HCl to pH <2 (Fill to top)	
8270C	EPA 8270C		7
DRO	EPA 8015B		7
		D-1000ml Amber Glass NM Neat	
SUB_PCB_Congeners	EPA 1668C		180
		D-1000ml Amber Glass NM Neat SUB	
8260B	EPA 8260B		14
GRO	EPA 8015B		14
		V-40ml VOA Vial HCl to pH <2	

Microbac Laboratories, Inc., Baltimore Division
2101 Van Deman Street • Baltimore, MD 21224
Phone: 410-633-1800
Fax: 410-633-6553
www.microbac.com

13C0322

Tenatively Scheduled Date: **3/5/2013**

Client: **Total Environmental Concepts**
Project: **WRAMC-Special (GW)**
Project Number: **WRAMC-Special (GW)**

Sampled by: [signature]	Date/Time: 3/5/13 1415	Received by: [signature]
Printed Name: Jeff V. Duszynski		Printed Name: MLJ
Relinquished by:	Date/Time:	Received by:
Printed Name:		Printed Name:
Relinquished by:	Date/Time:	Received by:
Printed Name:		Printed Name:

On Ice: Yes / No Rad Scan Acceptable: Yes / No Cooler Number: _____ Cooler Temp 2.3

Notes:

CFA | Cape Fear Analytical LLC
an affiliate of The GEL Group INC

3306 Kitty Hawk Road, Suite 120 Wilmington, NC 28405
P 910.795.0421

www.capefearanalytical.com

March 26, 2013

Ms. Melanie C. Duszynski
Microbac Laboratories, Inc.
2101 Van Deman Street
Baltimore, Maryland 21224

Re: Dioxin & PCB Lab subcontract
Work Order: 4608
SDG: 13C0322

Dear Ms. Duszynski:

Cape Fear Analytical LLC (CFA) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on March 08, 2013. This original data report has been prepared and reviewed in accordance with CFA's standard operating procedures.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at 910-795-0421.

Sincerely,

Cynde Larkins

Cynthia Larkins
Project Manager

Enclosures

SUBCONTRACT ORDER

Microbac Work Order: 13C0322

Microbac Laboratories, Inc., Baltimore Division

SENDING LABORATORY:

Microbac Laboratories, Inc., Baltimore Division
2101 Van Deman Street
Baltimore, MD 21224
Phone: 410.633.1800
Fax: 410.633.6553
Project Manager: Melanie C. Duszynski

RECEIVING LABORATORY:

Cape Fear Analytical, LLC
3306 Kitty Hawk Rd, Suite 120
Wilmington, NC 28405
Phone :(910) 795-0421
Fax: NA

Sample ID: 13C0322-01 Matrix: Water Sampled: 03/05/2013 08:35

Analysis	TAT	Due	Expires	Comments
SUB_PCB_Congeners / EPA 1668C	21	04/03/2013 16:00	09/01/2013 08:35	
! "#$%' |*, —&/(				

1 bottle

Sample ID: 13C0322-02 Matrix: Water Sampled: 03/05/2013 09:30

Analysis	TAT	Due	Expires	Comments
SUB_PCB_Congeners / EPA 1668C	21	04/03/2013 16:00	09/01/2013 09:30	
! "#$%' |*, —&/(				

2 bottles

WO #4608

temp.=0.0

Released By	Date	Received By	Date
[signature]	03/07/13	UPS	
UPS	08MAR13 0954	Cynde Larkins	

SAMPLE RECEIPT CHECKLIST
Cape Fear Analytical

Client: MUCR	Work Order: 4608
Received By: Cynde Larkins	Date/Time Received: 08MAR13 0954

Suspected Hazard Information	Yes	NA	No
Shipped as DOT Hazardous?		✓	
Samples identified as Foreign Soil?		✓	

DOE Site Sample Packages	Yes	NA	No*
Screened <0.5 mR/hr?			
Samples < 2x background?			

* Notify RSO of any responses in this column immediately.

	Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	✓			Circle Applicable: seals broken damaged container leaking container other(describe)
2	Chain of Custody documents included with shipment?	✓			
3	Samples requiring cold preservation within 0-6°C?	✓			Preservation Method: ice bags blue ice dry ice none other (describe) 0.0°
4	Samples requiring chemical preservation at proper pH?		✓		Sample IDs, containers affected and pH observed: pH=7 on both samples If preservative added, Lot#:
5	Samples requiring preservation have no residual chlorine?	✓			Sample IDs, containers affected: If preservative added, Lot#:
6	Samples received within holding time?	✓			Sample IDs, tests affected:
7	Sample IDs on COC match IDs on containers?	✓			Sample IDs, containers affected:
8	Date & time of COC match date & time on containers?			✓	Sample IDs, containers affected: No collection date or time on labels
9	Number of containers received match number indicated on COC?	✓			Sample IDs, containers affected:
10	COC form is properly signed in relinquished/received sections?	✓			

Comments:

Checklist performed by: Initials: CL Date: 08MAR13

PCB Congeners Analysis

Case Narrative

PCBC Case Narrative
Microbac Laboratory, Inc. Maryland (MICR)
SDG 13C0322
Work Order 4608

Method/Analysis Information

Product:	**Method 1668C HRMS Aqueous Analysis**
Analytical Method:	EPA Method 1668C
Extraction Method:	SW846 3520C
Analytical Batch Number:	23177
Clean Up Batch Number:	23175
Extraction Batch Number:	23174

Sample Analysis

The following samples were analyzed using the analytical protocol as established in EPA Method 1668C:

Sample ID	Client ID
4608001	13C0322-01
4608002	13C0322-02
12007861	Method Blank (MB)
12007862	Laboratory Control Sample (LCS)
12007863	Laboratory Control Sample Duplicate (LCSD)

The samples in this SDG were analyzed on an "as received" basis.

Preparation/Analytical Method Verification

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by Cape Fear Analytical LLC (CFA) as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with CF-OA-E-003 REV# 4.

Raw data reports are processed and reviewed by the analyst using the TargetLynx software package.

Calibration Information

Initial Calibration

All initial calibration requirements have been met for this sample delivery group (SDG).

Continuing Calibration Verification (CCV) Requirements
All associated calibration verification standard(s) (ICV or CCV) met the acceptance criteria.

Quality Control (QC) Information

Certification Statement
The test results presented in this document are certified to meet all requirements of the 2003 NELAC Standard. Any known exceptions are discussed in the narrative.

Method Blank (MB) Statement
The MB(s) analyzed with this SDG met the acceptance criteria.

Surrogate Recoveries
All surrogate recoveries were within the established acceptance criteria for this SDG.

Laboratory Control Sample (LCS) Recovery
The LCS spike recoveries met the acceptance limits.

Laboratory Control Sample Duplicate (LCSD) Recovery
The LCSD spike recoveries met the acceptance limits.

LCS/LCSD Relative Percent Difference (RPD) Statement
The RPD(s) between the LCS and LCSD met the acceptance limits.

QC Sample Designation
A matrix spike and matrix spike duplicate analysis was not required for this SDG.

Technical Information

Holding Time Specifications
CFA assigns holding times based on the associated methodology, which assigns the date and time from sample collection. Those holding times expressed in hours are calculated in the AlphaLIMS system. Those holding times expressed as days expire at midnight on the day of expiration. All samples in this SDG met the specified holding time.

Preparation/Analytical Method Verification
All procedures were performed as stated in the SOP.

Sample Dilutions
The samples in this SDG did not require dilutions.

Sample Re-extraction/Re-analysis
Re-extractions or re-analyses were not required in this SDG.

Miscellaneous Information

Nonconformance (NCR) Documentation
A NCR was not required for this SDG.

Manual Integrations
Manual integrations were required for data files in this SDG. Certain standards and QC samples required manual integrations to correctly position the baseline as set in the calibration standard injections. Where manual integrations were performed, copies of all manual integration peak profiles are included in the raw data section of this fraction.

System Configuration
This analysis was performed on the following instrument configuration:

Instrument ID	Instrument	System Configuration	Column ID	Column Description
HRP791_1	High-Resolution GC/MS System	PCB Analysis	SPB-Octyl	30m x 0.25mm, 0.25um

Electronic Packaging Comment

This data package was generated using an electronic data processing program referred to as virtual packaging. In an effort to increase quality and efficiency, the laboratory has developed systems to generate all data packages electronically. The following change from traditional packages should be noted: Analyst/peer reviewer initials and dates are not present on the electronic data files. Presently, all initials and dates are present on the original raw data. These hard copies are temporarily stored in the laboratory. An electronic signature page inserted after the case narrative will include the data validator's signature and title. The signature page also includes the data qualifiers used in the fractional package. Data that are not generated electronically, such as hand written pages, will be scanned and inserted into the electronic package.

Sample Data Summary

Cape Fear Analytical, LLC

3306 Kitty Hawk Road Suite 120, Wilmington, NC 28405 - (910) 795-0421 - www.capefearanalytical.com

Qualifier Definition Report
for

MICR001 Microbac Laboratory, Inc. Maryland

Client SDG: 13C0322 CFA Work Order: 4608

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a surrogate compound
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- C Congener has coeluters. When Cxxx, refer to congener number xxx for data
- U Analyte was analyzed for , but not detected above the specified detection limit.

DL Indicates that sample is diluted.
RA Indicates that sample is re-analyzed without re-extraction.
RE Indicates that sample is re-extracted.

Review/Validation

Cape Fear Analytical requires all analytical data to be verified by a qualified data reviewer.

The following data validator verified the information presented in this case narrative:

Signature: Heather Patterson **Name: Heather Patterson**

Date: 26 MAR 2013 **Title: Analyst III**

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	**Client:**	MICR001	**Project:**	MICR00109
Lab Sample ID:	4608001	**Date Collected:**	03/05/2013 08:35	**Matrix:**	WATER
Client Sample:	1668C Water	**Date Received:**	03/08/2013 09:54		
Client ID:	13C0322-01			**Prep Basis:**	As Received
Batch ID:	23177	**Method:**	EPA Method 1668C		
Run Date:	03/21/2013 22:24	**Analyst:**	CLP	**Instrument:**	HRP791
Data File:	c21mar13a_2-7			**Dilution:**	1
Prep Batch:	23174	**Prep Method:**	SW846 3520C	**Prep SOP Ref:**	CF-OA-E-001
Prep Date:	19-MAR-13	**Aliquot:**	996.4 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
2051-60-7	1-MoCB	U	20.1	pg/L	20.1
2051-61-8	2-MoCB	U	20.1	pg/L	20.1
2051-62-9	3-MoCB	U	20.1	pg/L	20.1
13029-08-8	4-DiCB	U	100	pg/L	100
16605-91-7	5-DiCB	U	20.1	pg/L	20.1
25569-80-6	6-DiCB	U	20.1	pg/L	20.1
33284-50-3	7-DiCB	U	20.1	pg/L	20.1
34883-43-7	8-DiCB	U	20.1	pg/L	20.1
34883-39-1	9-DiCB	U	20.1	pg/L	20.1
33146-45-1	10-DiCB	U	100	pg/L	100
2050-67-1	11-DiCB	U	100	pg/L	100
2974-92-7	12-DiCB	CU	40.1	pg/L	40.1
2974-90-5	13-DiCB	C12			
34883-41-5	14-DiCB	U	20.1	pg/L	20.1
2050-68-2	15-DiCB		28.5	pg/L	20.1
38444-78-9	16-TrCB	U	100	pg/L	100
37680-66-3	17-TrCB	U	20.1	pg/L	20.1
37680-65-2	18/30-TrCB	CU	40.1	pg/L	40.1
38444-73-4	19-TrCB	U	20.1	pg/L	20.1
38444-84-7	20-TrCB	CU	40.1	pg/L	40.1
55702-46-0	21-TrCB	CU	40.1	pg/L	40.1
38444-85-8	22-TrCB	U	20.1	pg/L	20.1
55720-44-0	23-TrCB	U	20.1	pg/L	20.1
55702-45-9	24-TrCB	U	20.1	pg/L	20.1
55712-37-3	25-TrCB	U	20.1	pg/L	20.1
38444-81-4	26-TrCB	CU	40.1	pg/L	40.1
38444-76-7	27-TrCB	U	20.1	pg/L	20.1
7012-37-5	28-TrCB	C20			
15862-07-4	29-TrCB	C26			
35693-92-6	30-TrCB	C18			
16606-02-3	31-TrCB	U	20.1	pg/L	20.1
38444-77-8	32-TrCB	U	20.1	pg/L	20.1

Comments:

C Congener has coeluters. When Cxxx, refer to congener number xxx for data

U Analyte was analyzed for , but not detected above the specified detection limit.

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	Client:	MICR001	Project:	MICR00109
Lab Sample ID:	4608001	Date Collected:	03/05/2013 08:35	Matrix:	WATER
Client Sample:	1668C Water	Date Received:	03/08/2013 09:54		
Client ID:	13C0322-01			Prep Basis:	As Received
Batch ID:	23177	Method:	EPA Method 1668C		
Run Date:	03/21/2013 22:24	Analyst:	CLP	Instrument:	HRP791
Data File:	c21mar13a_2-7			Dilution:	1
Prep Batch:	23174	Prep Method:	SW846 3520C	Prep SOP Ref:	CF-OA-E-001
Prep Date:	19-MAR-13	Aliquot:	996.4 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
38444-86-9	33-TrCB	C21			
37680-68-5	34-TrCB	U	20.1	pg/L	20.1
37680-69-6	35-TrCB	U	20.1	pg/L	20.1
38444-87-0	36-TrCB	U	20.1	pg/L	20.1
38444-90-5	37-TrCB		31.3	pg/L	20.1
53555-66-1	38-TrCB	U	20.1	pg/L	20.1
38444-88-1	39-TrCB	U	20.1	pg/L	20.1
38444-93-8	40-TeCB	CU	40.1	pg/L	40.1
52663-59-9	41-TeCB	U	100	pg/L	100
36559-22-5	42-TeCB	U	20.1	pg/L	20.1
70362-46-8	43-TeCB	U	20.1	pg/L	20.1
41464-39-5	44/47/65-TeCB	CU	60.2	pg/L	60.2
70362-45-7	45-TeCB	CU	40.1	pg/L	40.1
41464-47-5	46-TeCB	U	20.1	pg/L	20.1
2437-79-8	47-TeCB	C44			
70362-47-9	48-TeCB	U	20.1	pg/L	20.1
41464-40-8	49-TeCB	CU	40.1	pg/L	40.1
62796-65-0	50-TeCB	CU	40.1	pg/L	40.1
68194-04-7	51-TeCB	C45			
35693-99-3	52-TeCB		68.0	pg/L	20.1
41464-41-9	53-TeCB	C50			
15968-05-5	54-TeCB	U	20.1	pg/L	20.1
74338-24-2	55-TeCB	U	20.1	pg/L	20.1
41464-43-1	56-TeCB		28.1	pg/L	20.1
70424-67-8	57-TeCB	U	20.1	pg/L	20.1
41464-49-7	58-TeCB	U	20.1	pg/L	20.1
74472-33-6	59-TeCB	CU	60.2	pg/L	60.2
33025-41-1	60-TeCB	U	20.1	pg/L	20.1
33284-53-6	61-TeCB	CU	80.3	pg/L	80.3
54230-22-7	62-TeCB	C59			
74472-34-7	63-TeCB	U	20.1	pg/L	20.1
52663-58-8	64-TeCB		34.8	pg/L	20.1

Comments:

C Congener has coeluters. When Cxxx, refer to congener number xxx for data

U Analyte was analyzed for , but not detected above the specified detection limit.

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	**Client:**	MICR001	**Project:**	MICR00109
Lab Sample ID:	4608001	**Date Collected:**	03/05/2013 08:35	**Matrix:**	WATER
Client Sample:	1668C Water	**Date Received:**	03/08/2013 09:54		
Client ID:	13C0322-01			**Prep Basis:**	As Received
Batch ID:	23177	**Method:**	EPA Method 1668C		
Run Date:	03/21/2013 22:24	**Analyst:**	CLP	**Instrument:**	HRP791
Data File:	c21mar13a_2-7			**Dilution:**	1
Prep Batch:	23174	**Prep Method:**	SW846 3520C	**Prep SOP Ref:**	CF-OA-E-001
Prep Date:	19-MAR-13	**Aliquot:**	996.4 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
33284-54-7	65-TeCB	C44			
32598-10-0	66-TeCB		47.2	pg/L	20.1
73575-53-8	67-TeCB	U	20.1	pg/L	20.1
73575-52-7	68-TeCB	U	20.1	pg/L	20.1
60233-24-1	69-TeCB	C49			
32598-11-1	70-TeCB	C61			
41464-46-4	71-TeCB	C40			
41464-42-0	72-TeCB	U	20.1	pg/L	20.1
74338-23-1	73-TeCB	U	20.1	pg/L	20.1
32690-93-0	74-TeCB	C61			
32598-12-2	75-TeCB	C59			
70362-48-0	76-TeCB	C61			
32598-13-3	77-TeCB	U	20.1	pg/L	20.1
70362-49-1	78-TeCB	U	20.1	pg/L	20.1
41464-48-6	79-TeCB	U	20.1	pg/L	20.1
33284-52-5	80-TeCB	U	20.1	pg/L	20.1
70362-50-4	81-TeCB	U	20.1	pg/L	20.1
52663-62-4	82-PeCB		23.5	pg/L	20.1
60145-20-2	83-PeCB	U	20.1	pg/L	20.1
52663-60-2	84-PeCB		55.2	pg/L	20.1
65510-45-4	85-PeCB	CU	60.2	pg/L	60.2
55312-69-1	86/87/97/109/119/125-PeCB	C	129	pg/L	120
38380-02-8	87-PeCB	C86			
55215-17-3	88-PeCB	CU	40.1	pg/L	40.1
73575-57-2	89-PeCB	U	20.1	pg/L	20.1
68194-07-0	90/101/113-PeCB	C	566	pg/L	60.2
68194-05-8	91-PeCB	C88			
52663-61-3	92-PeCB		80.7	pg/L	20.1
73575-56-1	93-PeCB	CU	40.1	pg/L	40.1
73575-55-0	94-PeCB	U	20.1	pg/L	20.1
38379-99-6	95-PeCB		548	pg/L	20.1
73575-54-9	96-PeCB	U	20.1	pg/L	20.1

Comments:

C Congener has coeluters. When Cxxx, refer to congener number xxx for data

U Analyte was analyzed for , but not detected above the specified detection limit.

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	Client:	MICR001	Project:	MICR00109
Lab Sample ID:	4608001	Date Collected:	03/05/2013 08:35	Matrix:	WATER
Client Sample:	1668C Water	Date Received:	03/08/2013 09:54		
Client ID:	13C0322-01			Prep Basis:	As Received
Batch ID:	23177	Method:	EPA Method 1668C		
Run Date:	03/21/2013 22:24	Analyst:	CLP	Instrument:	HRP791
Data File:	c21mar13a_2-7			Dilution:	1
Prep Batch:	23174	Prep Method:	SW846 3520C	Prep SOP Ref:	CF-OA-E-001
Prep Date:	19-MAR-13	Aliquot:	996.4 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
41464-51-1	97-PeCB	C86			
60233-25-2	98-PeCB	CU	40.1	pg/L	40.1
38380-01-7	99-PeCB	U	100	pg/L	100
39485-83-1	100-PeCB	C93			
37680-73-2	101-PeCB	C90			
68194-06-9	102-PeCB	C98			
60145-21-3	103-PeCB	U	20.1	pg/L	20.1
56558-16-8	104-PeCB	U	20.1	pg/L	20.1
32598-14-4	105-PeCB	U	100	pg/L	100
70424-69-0	106-PeCB	U	20.1	pg/L	20.1
70424-68-9	107-PeCB	U	20.1	pg/L	20.1
70362-41-3	108-PeCB	CU	40.1	pg/L	40.1
74472-35-8	109-PeCB	C86			
38380-03-9	110/115-PeCB	C	569	pg/L	40.1
39635-32-0	111-PeCB	U	20.1	pg/L	20.1
74472-36-9	112-PeCB	U	20.1	pg/L	20.1
68194-10-5	113-PeCB	C90			
74472-37-0	114-PeCB	U	20.1	pg/L	20.1
74472-38-1	115-PeCB	C110			
18259-05-7	116-PeCB	C85			
68194-11-6	117-PeCB	C85			
31508-00-6	118-PeCB		179	pg/L	20.1
56558-17-9	119-PeCB	C86			
68194-12-7	120-PeCB	U	20.1	pg/L	20.1
56558-18-0	121-PeCB	U	20.1	pg/L	20.1
76842-07-4	122-PeCB	U	20.1	pg/L	20.1
65510-44-3	123-PeCB	U	100	pg/L	100
70424-70-3	124-PeCB	C108			
74472-39-2	125-PeCB	C86			
57465-28-8	126-PeCB	U	20.1	pg/L	20.1
39635-33-1	127-PeCB	U	20.1	pg/L	20.1
38380-07-3	128-HxCB	C	214	pg/L	40.1

Comments:

C Congener has coeluters. When Cxxx, refer to congener number xxx for data

U Analyte was analyzed for , but not detected above the specified detection limit.

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	**Client:**	MICR001	**Project:**	MICR00109
Lab Sample ID:	4608001	**Date Collected:**	03/05/2013 08:35	**Matrix:**	WATER
Client Sample:	1668C Water	**Date Received:**	03/08/2013 09:54		
Client ID:	13C0322-01			**Prep Basis:**	As Received
Batch ID:	23177	**Method:**	EPA Method 1668C		
Run Date:	03/21/2013 22:24	**Analyst:**	CLP	**Instrument:**	HRP791
Data File:	c21mar13a_2-7			**Dilution:**	1
Prep Batch:	23174	**Prep Method:**	SW846 3520C	**Prep SOP Ref:**	CF-OA-E-001
Prep Date:	19-MAR-13	**Aliquot:**	996.4 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
55215-18-4	129/138/163-HxCB	C	3860	pg/L	60.2
52663-66-8	130-HxCB		120	pg/L	20.1
61798-70-7	131-HxCB	U	20.1	pg/L	20.1
38380-05-1	132-HxCB		1140	pg/L	20.1
35694-04-3	133-HxCB		40.2	pg/L	20.1
52704-70-8	134-HxCB		130	pg/L	100
52744-13-5	135/151-HxCB	C	1960	pg/L	40.1
38411-22-2	136-HxCB		506	pg/L	20.1
35694-06-5	137-HxCB	U	20.1	pg/L	20.1
35065-28-2	138-HxCB	C129			
56030-56-9	139-HxCB	CU	40.1	pg/L	40.1
59291-64-4	140-HxCB	C139			
52712-04-6	141-HxCB		975	pg/L	20.1
41411-61-4	142-HxCB	U	20.1	pg/L	20.1
68194-15-0	143-HxCB	U	20.1	pg/L	20.1
68194-14-9	144-HxCB		245	pg/L	20.1
74472-40-5	145-HxCB	U	20.1	pg/L	20.1
51908-16-8	146-HxCB		537	pg/L	20.1
68194-13-8	147-HxCB	C	3870	pg/L	40.1
74472-41-6	148-HxCB	U	20.1	pg/L	20.1
38380-04-0	149-HxCB	C147			
68194-08-1	150-HxCB	U	20.1	pg/L	20.1
52663-63-5	151-HxCB	C135			
68194-09-2	152-HxCB	U	20.1	pg/L	20.1
35065-27-1	153/168-HxCB	C	3690	pg/L	40.1
60145-22-4	154-HxCB	U	20.1	pg/L	20.1
33979-03-2	155-HxCB	U	20.1	pg/L	20.1
38380-08-4	156-HxCB	C	182	pg/L	40.1
69782-90-7	157-HxCB	C156			
74472-42-7	158-HxCB		311	pg/L	20.1
39635-35-3	159-HxCB		53.2	pg/L	20.1
41411-62-5	160-HxCB	U	20.1	pg/L	20.1

Comments:

C Congener has coeluters. When Cxxx, refer to congener number xxx for data

U Analyte was analyzed for , but not detected above the specified detection limit.

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	Client:	MICR001	Project:	MICR00109
Lab Sample ID:	4608001	Date Collected:	03/05/2013 08:35	Matrix:	WATER
Client Sample:	1668C Water	Date Received:	03/08/2013 09:54		
Client ID:	13C0322-01			Prep Basis:	As Received
Batch ID:	23177	Method:	EPA Method 1668C		
Run Date:	03/21/2013 22:24	Analyst:	CLP	Instrument:	HRP791
Data File:	c21mar13a_2-7			Dilution:	1
Prep Batch:	23174	Prep Method:	SW846 3520C	Prep SOP Ref:	CF-OA-E-001
Prep Date:	19-MAR-13	Aliquot:	996.4 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
74472-43-8	161-HxCB	U	20.1	pg/L	20.1
39635-34-2	162-HxCB		40.8	pg/L	20.1
74472-44-9	163-HxCB	C129			
74472-45-0	164-HxCB		313	pg/L	20.1
74472-46-1	165-HxCB	U	20.1	pg/L	20.1
41411-63-6	166-HxCB	C128			
52663-72-6	167-HxCB		104	pg/L	20.1
59291-65-5	168-HxCB	C153			
32774-16-6	169-HxCB	U	20.1	pg/L	20.1
35065-30-6	170-HpCB		1950	pg/L	20.1
52663-71-5	171-HpCB	C	632	pg/L	40.1
52663-74-8	172-HpCB		374	pg/L	20.1
68194-16-1	173-HpCB	C171			
38411-25-5	174-HpCB		2490	pg/L	20.1
40186-70-7	175-HpCB		89.4	pg/L	20.1
52663-65-7	176-HpCB		293	pg/L	20.1
52663-70-4	177-HpCB		1360	pg/L	20.1
52663-67-9	178-HpCB		483	pg/L	20.1
52663-64-6	179-HpCB		941	pg/L	20.1
35065-29-3	180/193-HpCB	C	5190	pg/L	40.1
74472-47-2	181-HpCB	U	20.1	pg/L	20.1
60145-23-5	182-HpCB	U	20.1	pg/L	20.1
52663-69-1	183/185-HpCB	C	1580	pg/L	40.1
74472-48-3	184-HpCB	U	20.1	pg/L	20.1
52712-05-7	185-HpCB	C183			
74472-49-4	186-HpCB	U	20.1	pg/L	20.1
52663-68-0	187-HpCB		2920	pg/L	20.1
74487-85-7	188-HpCB	U	20.1	pg/L	20.1
39635-31-9	189-HpCB		72.4	pg/L	20.1
41411-64-7	190-HpCB		437	pg/L	20.1
74472-50-7	191-HpCB		86.4	pg/L	20.1
74472-51-8	192-HpCB	U	20.1	pg/L	20.1

Comments:

C Congener has coeluters. When Cxxx, refer to congener number xxx for data

U Analyte was analyzed for , but not detected above the specified detection limit.

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	**Client:**	MICR001	**Project:**	MICR00109
Lab Sample ID:	4608001	**Date Collected:**	03/05/2013 08:35	**Matrix:**	WATER
Client Sample:	1668C Water	**Date Received:**	03/08/2013 09:54		
Client ID:	13C0322-01			**Prep Basis:**	As Received
Batch ID:	23177	**Method:**	EPA Method 1668C		
Run Date:	03/21/2013 22:24	**Analyst:**	CLP	**Instrument:**	HRP791
Data File:	c21mar13a_2-7			**Dilution:**	1
Prep Batch:	23174	**Prep Method:**	SW846 3520C	**Prep SOP Ref:**	CF-OA-E-001
Prep Date:	19-MAR-13	**Aliquot:**	996.4 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
69782-91-8	193-HpCB	C180			
35694-08-7	194-OcCB		1040	pg/L	20.1
52663-78-2	195-OcCB		444	pg/L	20.1
42740-50-1	196-OcCB		570	pg/L	20.1
33091-17-7	197-OcCB	C	192	pg/L	40.1
68194-17-2	198-OcCB	C	1250	pg/L	40.1
52663-75-9	199-OcCB	C198			
52663-73-7	200-OcCB	C197			
40186-71-8	201-OcCB		145	pg/L	20.1
2136-99-4	202-OcCB		212	pg/L	20.1
52663-76-0	203-OcCB		700	pg/L	20.1
74472-52-9	204-OcCB	U	20.1	pg/L	20.1
74472-53-0	205-OcCB		58.4	pg/L	20.1
40186-72-9	206-NoCB		220	pg/L	20.1
52663-79-3	207-NoCB		31.5	pg/L	20.1
52663-77-1	208-NoCB		43.8	pg/L	20.1
2051-24-3	209-DeCB	U	20.1	pg/L	20.1
1336-36-3	Total PCB Congeners		44500	pg/L	20.1

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1030	2010	pg/L	51.5	(5%-145%)
13C-3-MoCB		1230	2010	pg/L	61.4	(5%-145%)
13C-4-DiCB		1270	2010	pg/L	63.5	(5%-145%)
13C-15-DiCB		1900	2010	pg/L	94.8	(5%-145%)
13C-19-TrCB		1530	2010	pg/L	76.0	(5%-145%)
13C-37-TrCB		2010	2010	pg/L	99.9	(5%-145%)
13C-54-TeCB		1620	2010	pg/L	80.6	(5%-145%)
13C-77-TeCB		2840	2010	pg/L	142	(10%-145%)
13C-81-TeCB		2740	2010	pg/L	137	(10%-145%)
13C-104-PeCB		1430	2010	pg/L	71.4	(10%-145%)
13C-105-PeCB		2380	2010	pg/L	119	(10%-145%)
13C-114-PeCB		2250	2010	pg/L	112	(10%-145%)
13C-118-PeCB		2270	2010	pg/L	113	(10%-145%)
13C-123-PeCB		2370	2010	pg/L	118	(10%-145%)
13C-126-PeCB		2770	2010	pg/L	138	(10%-145%)
13C-155-HxCB		1530	2010	pg/L	76.2	(10%-145%)
13C-156-HxCB	C	4110	4010	pg/L	102	(10%-145%)
13C-157-HxCB	C156L					
13C-167-HxCB		2000	2010	pg/L	99.5	(10%-145%)
13C-169-HxCB		2410	2010	pg/L	120	(10%-145%)
13C-188-HpCB		1470	2010	pg/L	73.3	(10%-145%)
13C-189-HpCB		1960	2010	pg/L	97.8	(10%-145%)

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	Client:	MICR001	Project:	MICR00109
Lab Sample ID:	4608001	Date Collected:	03/05/2013 08:35	Matrix:	WATER
Client Sample:	1668C Water	Date Received:	03/08/2013 09:54		
Client ID:	13C0322-01			Prep Basis:	As Received
Batch ID:	23177	Method:	EPA Method 1668C		
Run Date:	03/21/2013 22:24	Analyst:	CLP	Instrument:	HRP791
Data File:	c21mar13a_2-7			Dilution:	1
Prep Batch:	23174	Prep Method:	SW846 3520C	Prep SOP Ref:	CF-OA-E-001
Prep Date:	19-MAR-13	Aliquot:	996.4 mL		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-202-OcCB		1690	2010	pg/L	84.4	(10%-145%)
13C-205-OcCB		2060	2010	pg/L	102	(10%-145%)
13C-206-NoCB		2070	2010	pg/L	103	(10%-145%)
13C-208-NoCB		1910	2010	pg/L	95.0	(10%-145%)
13C-209-DeCB		2000	2010	pg/L	99.8	(10%-145%)
13C-28-TrCB		1860	2010	pg/L	92.8	(5%-145%)
13C-111-PeCB		2210	2010	pg/L	110	(10%-145%)
13C-178-HpCB		2190	2010	pg/L	109	(10%-145%)

Comments:

C Congener has coeluters. When Cxxx, refer to congener number xxx for data

U Analyte was analyzed for , but not detected above the specified detection limit.

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	**Client:**	MICR001	**Project:**	MICR00109
Lab Sample ID:	4608002	**Date Collected:**	03/05/2013 09:30	**Matrix:**	WATER
Client Sample:	1668C Water	**Date Received:**	03/08/2013 09:54		
Client ID:	13C0322-02			**Prep Basis:**	As Received
Batch ID:	23177	**Method:**	EPA Method 1668C		
Run Date:	03/21/2013 23:30	**Analyst:**	CLP	**Instrument:**	HRP791
Data File:	c21mar13a_2-8			**Dilution:**	1
Prep Batch:	23174	**Prep Method:**	SW846 3520C	**Prep SOP Ref:**	CF-OA-E-001
Prep Date:	19-MAR-13	**Aliquot:**	979.3 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
2051-60-7	1-MoCB	U	20.4	pg/L	20.4
2051-61-8	2-MoCB	U	20.4	pg/L	20.4
2051-62-9	3-MoCB	U	20.4	pg/L	20.4
13029-08-8	4-DiCB	U	102	pg/L	102
16605-91-7	5-DiCB	U	20.4	pg/L	20.4
25569-80-6	6-DiCB	U	20.4	pg/L	20.4
33284-50-3	7-DiCB	U	20.4	pg/L	20.4
34883-43-7	8-DiCB	U	20.4	pg/L	20.4
34883-39-1	9-DiCB	U	20.4	pg/L	20.4
33146-45-1	10-DiCB	U	102	pg/L	102
2050-67-1	11-DiCB	U	102	pg/L	102
2974-92-7	12-DiCB	CU	40.8	pg/L	40.8
2974-90-5	13-DiCB	C12			
34883-41-5	14-DiCB	U	20.4	pg/L	20.4
2050-68-2	15-DiCB	U	20.4	pg/L	20.4
38444-78-9	16-TrCB	U	102	pg/L	102
37680-66-3	17-TrCB	U	20.4	pg/L	20.4
37680-65-2	18/30-TrCB	CU	40.8	pg/L	40.8
38444-73-4	19-TrCB	U	20.4	pg/L	20.4
38444-84-7	20-TrCB	CU	40.8	pg/L	40.8
55702-46-0	21-TrCB	CU	40.8	pg/L	40.8
38444-85-8	22-TrCB	U	20.4	pg/L	20.4
55720-44-0	23-TrCB	U	20.4	pg/L	20.4
55702-45-9	24-TrCB	U	20.4	pg/L	20.4
55712-37-3	25-TrCB	U	20.4	pg/L	20.4
38444-81-4	26-TrCB	CU	40.8	pg/L	40.8
38444-76-7	27-TrCB	U	20.4	pg/L	20.4
7012-37-5	28-TrCB	C20			
15862-07-4	29-TrCB	C26			
35693-92-6	30-TrCB	C18			
16606-02-3	31-TrCB	U	20.4	pg/L	20.4
38444-77-8	32-TrCB	U	20.4	pg/L	20.4

Comments:

B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
C Congener has coeluters. When Cxxx, refer to congener number xxx for data
U Analyte was analyzed for , but not detected above the specified detection limit.

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	Client:	MICR001	Project:	MICR00109
Lab Sample ID:	4608002	Date Collected:	03/05/2013 09:30	Matrix:	WATER
Client Sample:	1668C Water	Date Received:	03/08/2013 09:54		
Client ID:	13C0322-02			Prep Basis:	As Received
Batch ID:	23177	Method:	EPA Method 1668C		
Run Date:	03/21/2013 23:30	Analyst:	CLP	Instrument:	HRP791
Data File:	c21mar13a_2-8			Dilution:	1
Prep Batch:	23174	Prep Method:	SW846 3520C	Prep SOP Ref:	CF-OA-E-001
Prep Date:	19-MAR-13	Aliquot:	979.3 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
38444-86-9	33-TrCB	C21			
37680-68-5	34-TrCB	U	20.4	pg/L	20.4
37680-69-6	35-TrCB	U	20.4	pg/L	20.4
38444-87-0	36-TrCB	U	20.4	pg/L	20.4
38444-90-5	37-TrCB	U	20.4	pg/L	20.4
53555-66-1	38-TrCB	U	20.4	pg/L	20.4
38444-88-1	39-TrCB	U	20.4	pg/L	20.4
38444-93-8	40-TeCB	CU	40.8	pg/L	40.8
52663-59-9	41-TeCB	U	102	pg/L	102
36559-22-5	42-TeCB	U	20.4	pg/L	20.4
70362-46-8	43-TeCB	U	20.4	pg/L	20.4
41464-39-5	44/47/65-TeCB	CU	61.3	pg/L	61.3
70362-45-7	45-TeCB	CU	40.8	pg/L	40.8
41464-47-5	46-TeCB	U	20.4	pg/L	20.4
2437-79-8	47-TeCB	C44			
70362-47-9	48-TeCB	U	20.4	pg/L	20.4
41464-40-8	49-TeCB	CU	40.8	pg/L	40.8
62796-65-0	50-TeCB	CU	40.8	pg/L	40.8
68194-04-7	51-TeCB	C45			
35693-99-3	52-TeCB		40.8	pg/L	20.4
41464-41-9	53-TeCB	C50			
15968-05-5	54-TeCB	U	20.4	pg/L	20.4
74338-24-2	55-TeCB	U	20.4	pg/L	20.4
41464-43-1	56-TeCB	U	20.4	pg/L	20.4
70424-67-8	57-TeCB	U	20.4	pg/L	20.4
41464-49-7	58-TeCB	U	20.4	pg/L	20.4
74472-33-6	59-TeCB	CU	61.3	pg/L	61.3
33025-41-1	60-TeCB	U	20.4	pg/L	20.4
33284-53-6	61-TeCB	CU	81.7	pg/L	81.7
54230-22-7	62-TeCB	C59			
74472-34-7	63-TeCB	U	20.4	pg/L	20.4
52663-58-8	64-TeCB	U	20.4	pg/L	20.4

Comments:

B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.

C Congener has coeluters. When Cxxx, refer to congener number xxx for data

U Analyte was analyzed for , but not detected above the specified detection limit.

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	**Client:**	MICR001	**Project:**	MICR00109
Lab Sample ID:	4608002	**Date Collected:**	03/05/2013 09:30	**Matrix:**	WATER
Client Sample:	1668C Water	**Date Received:**	03/08/2013 09:54		
Client ID:	13C0322-02			**Prep Basis:**	As Received
Batch ID:	23177	**Method:**	EPA Method 1668C		
Run Date:	03/21/2013 23:30	**Analyst:**	CLP	**Instrument:**	HRP791
Data File:	c21mar13a_2-8			**Dilution:**	1
Prep Batch:	23174	**Prep Method:**	SW846 3520C	**Prep SOP Ref:**	CF-OA-E-001
Prep Date:	19-MAR-13	**Aliquot:**	979.3 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
33284-54-7	65-TeCB	C44			
32598-10-0	66-TeCB	U	20.4	pg/L	20.4
73575-53-8	67-TeCB	U	20.4	pg/L	20.4
73575-52-7	68-TeCB	U	20.4	pg/L	20.4
60233-24-1	69-TeCB	C49			
32598-11-1	70-TeCB	C61			
41464-46-4	71-TeCB	C40			
41464-42-0	72-TeCB	U	20.4	pg/L	20.4
74338-23-1	73-TeCB	U	20.4	pg/L	20.4
32690-93-0	74-TeCB	C61			
32598-12-2	75-TeCB	C59			
70362-48-0	76-TeCB	C61			
32598-13-3	77-TeCB	U	20.4	pg/L	20.4
70362-49-1	78-TeCB	U	20.4	pg/L	20.4
41464-48-6	79-TeCB	U	20.4	pg/L	20.4
33284-52-5	80-TeCB	U	20.4	pg/L	20.4
70362-50-4	81-TeCB	U	20.4	pg/L	20.4
52663-62-4	82-PeCB	U	20.4	pg/L	20.4
60145-20-2	83-PeCB	U	20.4	pg/L	20.4
52663-60-2	84-PeCB	U	20.4	pg/L	20.4
65510-45-4	85-PeCB	CU	61.3	pg/L	61.3
55312-69-1	86/87/97/109/119/125-PeCB	CU	123	pg/L	123
38380-02-8	87-PeCB	C86			
55215-17-3	88-PeCB	CU	40.8	pg/L	40.8
73575-57-2	89-PeCB	U	20.4	pg/L	20.4
68194-07-0	90/101/113-PeCB	C	70.7	pg/L	61.3
68194-05-8	91-PeCB	C88			
52663-61-3	92-PeCB	U	20.4	pg/L	20.4
73575-56-1	93-PeCB	CU	40.8	pg/L	40.8
73575-55-0	94-PeCB	U	20.4	pg/L	20.4
38379-99-6	95-PeCB		60.0	pg/L	20.4
73575-54-9	96-PeCB	U	20.4	pg/L	20.4

Comments:

B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
C Congener has coeluters. When Cxxx, refer to congener number xxx for data
U Analyte was analyzed for , but not detected above the specified detection limit.

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	**Client:**	MICR001	**Project:**	MICR00109
Lab Sample ID:	4608002	**Date Collected:**	03/05/2013 09:30	**Matrix:**	WATER
Client Sample:	1668C Water	**Date Received:**	03/08/2013 09:54		
Client ID:	13C0322-02			**Prep Basis:**	As Received
Batch ID:	23177	**Method:**	EPA Method 1668C		
Run Date:	03/21/2013 23:30	**Analyst:**	CLP	**Instrument:**	HRP791
Data File:	c21mar13a_2-8			**Dilution:**	1
Prep Batch:	23174	**Prep Method:**	SW846 3520C	**Prep SOP Ref:**	CF-OA-E-001
Prep Date:	19-MAR-13	**Aliquot:**	979.3 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
41464-51-1	97-PeCB	C86			
60233-25-2	98-PeCB	CU	40.8	pg/L	40.8
38380-01-7	99-PeCB	U	102	pg/L	102
39485-83-1	100-PeCB	C93			
37680-73-2	101-PeCB	C90			
68194-06-9	102-PeCB	C98			
60145-21-3	103-PeCB	U	20.4	pg/L	20.4
56558-16-8	104-PeCB	U	20.4	pg/L	20.4
32598-14-4	105-PeCB	U	102	pg/L	102
70424-69-0	106-PeCB	U	20.4	pg/L	20.4
70424-68-9	107-PeCB	U	20.4	pg/L	20.4
70362-41-3	108-PeCB	CU	40.8	pg/L	40.8
74472-35-8	109-PeCB	C86			
38380-03-9	110/115-PeCB	C	74.7	pg/L	40.8
39635-32-0	111-PeCB	U	20.4	pg/L	20.4
74472-36-9	112-PeCB	U	20.4	pg/L	20.4
68194-10-5	113-PeCB	C90			
74472-37-0	114-PeCB	U	20.4	pg/L	20.4
74472-38-1	115-PeCB	C110			
18259-05-7	116-PeCB	C85			
68194-11-6	117-PeCB	C85			
31508-00-6	118-PeCB		39.5	pg/L	20.4
56558-17-9	119-PeCB	C86			
68194-12-7	120-PeCB	U	20.4	pg/L	20.4
56558-18-0	121-PeCB	U	20.4	pg/L	20.4
76842-07-4	122-PeCB	U	20.4	pg/L	20.4
65510-44-3	123-PeCB	U	102	pg/L	102
70424-70-3	124-PeCB	C108			
74472-39-2	125-PeCB	C86			
57465-28-8	126-PeCB	U	20.4	pg/L	20.4
39635-33-1	127-PeCB	U	20.4	pg/L	20.4
38380-07-3	128-HxCB	CU	40.8	pg/L	40.8

Comments:

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PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	**Client:**	MICR001	**Project:**	MICR00109
Lab Sample ID:	4608002	**Date Collected:**	03/05/2013 09:30	**Matrix:**	WATER
Client Sample:	1668C Water	**Date Received:**	03/08/2013 09:54		
Client ID:	13C0322-02			**Prep Basis:**	As Received
Batch ID:	23177	**Method:**	EPA Method 1668C		
Run Date:	03/21/2013 23:30	**Analyst:**	CLP	**Instrument:**	HRP791
Data File:	c21mar13a_2-8			**Dilution:**	1
Prep Batch:	23174	**Prep Method:**	SW846 3520C	**Prep SOP Ref:**	CF-OA-E-001
Prep Date:	19-MAR-13	**Aliquot:**	979.3 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
55215-18-4	129/138/163-HxCB	C	192	pg/L	61.3
52663-66-8	130-HxCB	U	20.4	pg/L	20.4
61798-70-7	131-HxCB	U	20.4	pg/L	20.4
38380-05-1	132-HxCB		63.3	pg/L	20.4
35694-04-3	133-HxCB	U	20.4	pg/L	20.4
52704-70-8	134-HxCB	U	102	pg/L	102
52744-13-5	135/151-HxCB	C	92.1	pg/L	40.8
38411-22-2	136-HxCB		25.2	pg/L	20.4
35694-06-5	137-HxCB	U	20.4	pg/L	20.4
35065-28-2	138-HxCB	C129			
56030-56-9	139-HxCB	CU	40.8	pg/L	40.8
59291-64-4	140-HxCB	C139			
52712-04-6	141-HxCB		48.3	pg/L	20.4
41411-61-4	142-HxCB	U	20.4	pg/L	20.4
68194-15-0	143-HxCB	U	20.4	pg/L	20.4
68194-14-9	144-HxCB	U	20.4	pg/L	20.4
74472-40-5	145-HxCB	U	20.4	pg/L	20.4
51908-16-8	146-HxCB		27.9	pg/L	20.4
68194-13-8	147-HxCB	C	182	pg/L	40.8
74472-41-6	148-HxCB	U	20.4	pg/L	20.4
38380-04-0	149-HxCB	C147			
68194-08-1	150-HxCB	U	20.4	pg/L	20.4
52663-63-5	151-HxCB	C135			
68194-09-2	152-HxCB	U	20.4	pg/L	20.4
35065-27-1	153/168-HxCB	C	184	pg/L	40.8
60145-22-4	154-HxCB	U	20.4	pg/L	20.4
33979-03-2	155-HxCB	U	20.4	pg/L	20.4
38380-08-4	156-HxCB	CU	40.8	pg/L	40.8
69782-90-7	157-HxCB	C156			
74472-42-7	158-HxCB	U	20.4	pg/L	20.4
39635-35-3	159-HxCB	U	20.4	pg/L	20.4
41411-62-5	160-HxCB	U	20.4	pg/L	20.4

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PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	Client:	MICR001	Project:	MICR00109
Lab Sample ID:	4608002	Date Collected:	03/05/2013 09:30	Matrix:	WATER
Client Sample:	1668C Water	Date Received:	03/08/2013 09:54		
Client ID:	13C0322-02			Prep Basis:	As Received
Batch ID:	23177	Method:	EPA Method 1668C		
Run Date:	03/21/2013 23:30	Analyst:	CLP	Instrument:	HRP791
Data File:	c21mar13a_2-8			Dilution:	1
Prep Batch:	23174	Prep Method:	SW846 3520C	Prep SOP Ref:	CF-OA-E-001
Prep Date:	19-MAR-13	Aliquot:	979.3 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
74472-43-8	161-HxCB	U	20.4	pg/L	20.4
39635-34-2	162-HxCB	U	20.4	pg/L	20.4
74472-44-9	163-HxCB	C129			
74472-45-0	164-HxCB	U	20.4	pg/L	20.4
74472-46-1	165-HxCB	U	20.4	pg/L	20.4
41411-63-6	166-HxCB	C128			
52663-72-6	167-HxCB	U	20.4	pg/L	20.4
59291-65-5	168-HxCB	C153			
32774-16-6	169-HxCB	U	20.4	pg/L	20.4
35065-30-6	170-HpCB		92.7	pg/L	20.4
52663-71-5	171-HpCB	CU	40.8	pg/L	40.8
52663-74-8	172-HpCB	U	20.4	pg/L	20.4
68194-16-1	173-HpCB	C171			
38411-25-5	174-HpCB		116	pg/L	20.4
40186-70-7	175-HpCB	U	20.4	pg/L	20.4
52663-65-7	176-HpCB	U	20.4	pg/L	20.4
52663-70-4	177-HpCB		61.6	pg/L	20.4
52663-67-9	178-HpCB		22.5	pg/L	20.4
52663-64-6	179-HpCB		45.6	pg/L	20.4
35065-29-3	180/193-HpCB	C	252	pg/L	40.8
74472-47-2	181-HpCB	U	20.4	pg/L	20.4
60145-23-5	182-HpCB	U	20.4	pg/L	20.4
52663-69-1	183/185-HpCB	C	72.8	pg/L	40.8
74472-48-3	184-HpCB	U	20.4	pg/L	20.4
52712-05-7	185-HpCB	C183			
74472-49-4	186-HpCB	U	20.4	pg/L	20.4
52663-68-0	187-HpCB	B	144	pg/L	20.4
74487-85-7	188-HpCB	U	20.4	pg/L	20.4
39635-31-9	189-HpCB	U	20.4	pg/L	20.4
41411-64-7	190-HpCB		22.4	pg/L	20.4
74472-50-7	191-HpCB	U	20.4	pg/L	20.4
74472-51-8	192-HpCB	U	20.4	pg/L	20.4

Comments:

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U Analyte was analyzed for , but not detected above the specified detection limit.

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	**Client:**	MICR001	**Project:**	MICR00109
Lab Sample ID:	4608002	**Date Collected:**	03/05/2013 09:30	**Matrix:**	WATER
Client Sample:	1668C Water	**Date Received:**	03/08/2013 09:54		
Client ID:	13C0322-02			**Prep Basis:**	As Received
Batch ID:	23177	**Method:**	EPA Method 1668C		
Run Date:	03/21/2013 23:30	**Analyst:**	CLP	**Instrument:**	HRP791
Data File:	c21mar13a_2-8			**Dilution:**	1
Prep Batch:	23174	**Prep Method:**	SW846 3520C	**Prep SOP Ref:**	CF-OA-E-001
Prep Date:	19-MAR-13	**Aliquot:**	979.3 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
69782-91-8	193-HpCB	C180			
35694-08-7	194-OcCB		55.6	pg/L	20.4
52663-78-2	195-OcCB		27.0	pg/L	20.4
42740-50-1	196-OcCB		31.2	pg/L	20.4
33091-17-7	197-OcCB	CU	40.8	pg/L	40.8
68194-17-2	198-OcCB	C	67.3	pg/L	40.8
52663-75-9	199-OcCB	C198			
52663-73-7	200-OcCB	C197			
40186-71-8	201-OcCB	U	20.4	pg/L	20.4
2136-99-4	202-OcCB	U	20.4	pg/L	20.4
52663-76-0	203-OcCB		42.7	pg/L	20.4
74472-52-9	204-OcCB	U	20.4	pg/L	20.4
74472-53-0	205-OcCB	U	20.4	pg/L	20.4
40186-72-9	206-NoCB	U	20.4	pg/L	20.4
52663-79-3	207-NoCB	U	20.4	pg/L	20.4
52663-77-1	208-NoCB	U	20.4	pg/L	20.4
2051-24-3	209-DeCB	U	20.4	pg/L	20.4
1336-36-3	Total PCB Congeners		2150	pg/L	20.4

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1100	2040	pg/L	53.9	(5%-145%)
13C-3-MoCB		1320	2040	pg/L	64.6	(5%-145%)
13C-4-DiCB		1420	2040	pg/L	69.5	(5%-145%)
13C-15-DiCB		1950	2040	pg/L	95.5	(5%-145%)
13C-19-TrCB		1620	2040	pg/L	79.5	(5%-145%)
13C-37-TrCB		2000	2040	pg/L	97.7	(5%-145%)
13C-54-TeCB		1570	2040	pg/L	76.8	(5%-145%)
13C-77-TeCB		2840	2040	pg/L	139	(10%-145%)
13C-81-TeCB		2830	2040	pg/L	139	(10%-145%)
13C-104-PeCB		1530	2040	pg/L	75.1	(10%-145%)
13C-105-PeCB		2430	2040	pg/L	119	(10%-145%)
13C-114-PeCB		2280	2040	pg/L	112	(10%-145%)
13C-118-PeCB		2320	2040	pg/L	113	(10%-145%)
13C-123-PeCB		2430	2040	pg/L	119	(10%-145%)
13C-126-PeCB		2830	2040	pg/L	139	(10%-145%)
13C-155-HxCB		1580	2040	pg/L	77.4	(10%-145%)
13C-156-HxCB	C	4260	4080	pg/L	104	(10%-145%)
13C-157-HxCB	C156L					
13C-167-HxCB		2080	2040	pg/L	102	(10%-145%)
13C-169-HxCB		2520	2040	pg/L	124	(10%-145%)
13C-188-HpCB		1490	2040	pg/L	72.9	(10%-145%)
13C-189-HpCB		2010	2040	pg/L	98.4	(10%-145%)

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	Client:	MICR001	Project:	MICR00109
Lab Sample ID:	4608002	Date Collected:	03/05/2013 09:30	Matrix:	WATER
Client Sample:	1668C Water	Date Received:	03/08/2013 09:54		
Client ID:	13C0322-02			Prep Basis:	As Received
Batch ID:	23177	Method:	EPA Method 1668C		
Run Date:	03/21/2013 23:30	Analyst:	CLP	Instrument:	HRP791
Data File:	c21mar13a_2-8			Dilution:	1
Prep Batch:	23174	Prep Method:	SW846 3520C	Prep SOP Ref:	CF-OA-E-001
Prep Date:	19-MAR-13	Aliquot:	979.3 mL		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-202-OcCB		1750	2040	pg/L	85.7	(10%-145%)
13C-205-OcCB		2090	2040	pg/L	102	(10%-145%)
13C-206-NoCB		2120	2040	pg/L	104	(10%-145%)
13C-208-NoCB		1970	2040	pg/L	96.4	(10%-145%)
13C-209-DeCB		2060	2040	pg/L	101	(10%-145%)
13C-28-TrCB		1840	2040	pg/L	89.9	(5%-145%)
13C-111-PeCB		2230	2040	pg/L	109	(10%-145%)
13C-178-HpCB		2330	2040	pg/L	114	(10%-145%)

Comments:

B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.

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U Analyte was analyzed for , but not detected above the specified detection limit.

Quality Control Summary

PCB Congeners
Surrogate Recovery Report

SDG Number: 13C0322
Matrix Type: LIQUID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
12007862	LCS for batch 23174	13C-1-MoCB		57.4	(15%-145%)
		13C-3-MoCB		61.8	(15%-145%)
		13C-4-DiCB		64.4	(15%-145%)
		13C-15-DiCB		74.5	(15%-145%)
		13C-19-TrCB		66.3	(15%-145%)
		13C-37-TrCB		73.6	(15%-145%)
		13C-54-TeCB		67.9	(15%-145%)
		13C-77-TeCB		109	(40%-145%)
		13C-81-TeCB		108	(40%-145%)
		13C-104-PeCB		60.7	(40%-145%)
		13C-105-PeCB		103	(40%-145%)
		13C-114-PeCB		96.5	(40%-145%)
		13C-118-PeCB		97.5	(40%-145%)
		13C-123-PeCB		101	(40%-145%)
		13C-126-PeCB		114	(40%-145%)
		13C-155-HxCB		65.7	(40%-145%)
		13C-156-HxCB	C	90.0	(40%-145%)
		13C-157-HxCB	C156L		
		13C-167-HxCB		87.8	(40%-145%)
		13C-169-HxCB		107	(40%-145%)
		13C-188-HpCB		60.8	(40%-145%)
		13C-189-HpCB		85.7	(40%-145%)
		13C-202-OcCB		70.4	(40%-145%)
		13C-205-OcCB		92.4	(40%-145%)
		13C-206-NoCB		93.3	(40%-145%)
		13C-208-NoCB		83.6	(40%-145%)
		13C-209-DeCB		90.0	(40%-145%)
		13C-28-TrCB		75.2	(15%-145%)
		13C-111-PeCB		94.2	(40%-145%)
		13C-178-HpCB		98.5	(40%-145%)
12007863	LCSD for batch 23174	13C-1-MoCB		59.2	(15%-145%)
		13C-3-MoCB		63.9	(15%-145%)
		13C-4-DiCB		67.6	(15%-145%)
		13C-15-DiCB		81.2	(15%-145%)
		13C-19-TrCB		72.8	(15%-145%)
		13C-37-TrCB		80.3	(15%-145%)
		13C-54-TeCB		73.4	(15%-145%)
		13C-77-TeCB		114	(40%-145%)
		13C-81-TeCB		113	(40%-145%)
		13C-104-PeCB		65.9	(40%-145%)
		13C-105-PeCB		109	(40%-145%)
		13C-114-PeCB		101	(40%-145%)
		13C-118-PeCB		103	(40%-145%)
		13C-123-PeCB		108	(40%-145%)
		13C-126-PeCB		123	(40%-145%)
		13C-155-HxCB		67.8	(40%-145%)
		13C-156-HxCB	C	97.5	(40%-145%)
		13C-157-HxCB	C156L		
		13C-167-HxCB		97.3	(40%-145%)
		13C-169-HxCB		113	(40%-145%)
		13C-188-HpCB		62.7	(40%-145%)
		13C-189-HpCB		92.5	(40%-145%)

PCB Congeners
Surrogate Recovery Report

SDG Number: 13C0322
Matrix Type: LIQUID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
12007863	LCSD for batch 23174	13C-202-OcCB		76.0	(40%-145%)
		13C-205-OcCB		100	(40%-145%)
		13C-206-NoCB		102	(40%-145%)
		13C-208-NoCB		90.0	(40%-145%)
		13C-209-DeCB		101	(40%-145%)
		13C-28-TrCB		82.2	(15%-145%)
		13C-111-PeCB		98.4	(40%-145%)
		13C-178-HpCB		106	(40%-145%)
12007861	MB for batch 23174	13C-1-MoCB		57.0	(5%-145%)
		13C-3-MoCB		59.1	(5%-145%)
		13C-4-DiCB		62.4	(5%-145%)
		13C-15-DiCB		69.1	(5%-145%)
		13C-19-TrCB		65.8	(5%-145%)
		13C-37-TrCB		72.4	(5%-145%)
		13C-54-TeCB		67.7	(5%-145%)
		13C-77-TeCB		104	(10%-145%)
		13C-81-TeCB		104	(10%-145%)
		13C-104-PeCB		62.3	(10%-145%)
		13C-105-PeCB		103	(10%-145%)
		13C-114-PeCB		95.5	(10%-145%)
		13C-118-PeCB		96.1	(10%-145%)
		13C-123-PeCB		101	(10%-145%)
		13C-126-PeCB		114	(10%-145%)
		13C-155-HxCB		64.8	(10%-145%)
		13C-156-HxCB	C	90.5	(10%-145%)
		13C-157-HxCB	C156L		
		13C-167-HxCB		87.6	(10%-145%)
		13C-169-HxCB		108	(10%-145%)
		13C-188-HpCB		58.5	(10%-145%)
		13C-189-HpCB		85.1	(10%-145%)
		13C-202-OcCB		70.4	(10%-145%)
		13C-205-OcCB		92.8	(10%-145%)
		13C-206-NoCB		97.1	(10%-145%)
		13C-208-NoCB		82.8	(10%-145%)
		13C-209-DeCB		96.4	(10%-145%)
		13C-28-TrCB		71.4	(5%-145%)
		13C-111-PeCB		92.2	(10%-145%)
		13C-178-HpCB		98.9	(10%-145%)
4608001	13C0322-01	13C-1-MoCB		51.5	(5%-145%)
		13C-3-MoCB		61.4	(5%-145%)
		13C-4-DiCB		63.5	(5%-145%)
		13C-15-DiCB		94.8	(5%-145%)
		13C-19-TrCB		76.0	(5%-145%)
		13C-37-TrCB		99.9	(5%-145%)
		13C-54-TeCB		80.6	(5%-145%)
		13C-77-TeCB		142	(10%-145%)
		13C-81-TeCB		137	(10%-145%)
		13C-104-PeCB		71.4	(10%-145%)
		13C-105-PeCB		119	(10%-145%)
		13C-114-PeCB		112	(10%-145%)
		13C-118-PeCB		113	(10%-145%)

PCB Congeners
Surrogate Recovery Report

SDG Number: 13C0322

Matrix Type: LIQUID

Sample ID	Client ID	Surrogate	QUAL	Recovery (%)	Acceptance Limits
4608001	13C0322-01	13C-123-PeCB		118	(10%-145%)
		13C-126-PeCB		138	(10%-145%)
		13C-155-HxCB		76.2	(10%-145%)
		13C-156-HxCB	C	102	(10%-145%)
		13C-157-HxCB	C156L		
		13C-167-HxCB		99.5	(10%-145%)
		13C-169-HxCB		120	(10%-145%)
		13C-188-HpCB		73.3	(10%-145%)
		13C-189-HpCB		97.8	(10%-145%)
		13C-202-OcCB		84.4	(10%-145%)
		13C-205-OcCB		102	(10%-145%)
		13C-206-NoCB		103	(10%-145%)
		13C-208-NoCB		95.0	(10%-145%)
		13C-209-DeCB		99.8	(10%-145%)
		13C-28-TrCB		92.8	(5%-145%)
		13C-111-PeCB		110	(10%-145%)
		13C-178-HpCB		109	(10%-145%)
4608002	13C0322-02	13C-1-MoCB		53.9	(5%-145%)
		13C-3-MoCB		64.6	(5%-145%)
		13C-4-DiCB		69.5	(5%-145%)
		13C-15-DiCB		95.5	(5%-145%)
		13C-19-TrCB		79.5	(5%-145%)
		13C-37-TrCB		97.7	(5%-145%)
		13C-54-TeCB		76.8	(5%-145%)
		13C-77-TeCB		139	(10%-145%)
		13C-81-TeCB		139	(10%-145%)
		13C-104-PeCB		75.1	(10%-145%)
		13C-105-PeCB		119	(10%-145%)
		13C-114-PeCB		112	(10%-145%)
		13C-118-PeCB		113	(10%-145%)
		13C-123-PeCB		119	(10%-145%)
		13C-126-PeCB		139	(10%-145%)
		13C-155-HxCB		77.4	(10%-145%)
		13C-156-HxCB	C	104	(10%-145%)
		13C-157-HxCB	C156L		
		13C-167-HxCB		102	(10%-145%)
		13C-169-HxCB		124	(10%-145%)
		13C-188-HpCB		72.9	(10%-145%)
		13C-189-HpCB		98.4	(10%-145%)
		13C-202-OcCB		85.7	(10%-145%)
		13C-205-OcCB		102	(10%-145%)
		13C-206-NoCB		104	(10%-145%)
		13C-208-NoCB		96.4	(10%-145%)
		13C-209-DeCB		101	(10%-145%)
		13C-28-TrCB		89.9	(5%-145%)
		13C-111-PeCB		109	(10%-145%)
		13C-178-HpCB		114	(10%-145%)

* Recovery outside Acceptance Limits
# Column to be used to flag recovery values
D Sample Diluted

PCB Congeners
Quality Control Summary
Spike Recovery Report

SDG Number: 13C0322
Client ID: LCS for batch 23174
Lab Sample ID: 12007862
Instrument: HRP791
Analyst: CLP

Sample Type: Laboratory Control Sample
Matrix: WATER
Analysis Date: 03/21/2013 16:54
Dilution: 1
Prep Batch ID: 23174
Batch ID: 23177

CAS No.		Parmname	Amount Added pg/L		Spike Conc. pg/L	Recovery %	Acceptance Limits
2051-60-7	LCS	1-MoCB	500		512	102	60-135
2051-62-9	LCS	3-MoCB	500		534	107	60-135
13029-08-8	LCS	4-DiCB	500		501	100	60-135
2050-68-2	LCS	15-DiCB	500		583	117	60-135
38444-73-4	LCS	19-TrCB	500		503	101	60-135
38444-90-5	LCS	37-TrCB	500		564	113	60-135
15968-05-5	LCS	54-TeCB	1000		1020	102	60-135
32598-13-3	LCS	77-TeCB	1000		962	96.2	60-135
70362-50-4	LCS	81-TeCB	1000		1000	100	60-135
56558-16-8	LCS	104-PeCB	1000		1220	122	60-135
32598-14-4	LCS	105-PeCB	1000		1150	115	60-135
74472-37-0	LCS	114-PeCB	1000		1120	112	60-135
31508-00-6	LCS	118-PeCB	1000		996	99.6	60-135
65510-44-3	LCS	123-PeCB	1000		943	94.3	60-135
57465-28-8	LCS	126-PeCB	1000		1120	112	60-135
33979-03-2	LCS	155-HxCB	1000		978	97.8	60-135
38380-08-4	LCS	156-HxCB	2000	C	2230	112	60-135
69782-90-7	LCS	157-HxCB		C156			
52663-72-6	LCS	167-HxCB	1000		1200	120	60-135
32774-16-6	LCS	169-HxCB	1000		1080	108	60-135
74487-85-7	LCS	188-HpCB	1000		1060	106	60-135
39635-31-9	LCS	189-HpCB	1000		1040	104	60-135
2136-99-4	LCS	202-OcCB	1500		1540	103	60-135
74472-53-0	LCS	205-OcCB	1500		1490	99.1	60-135
40186-72-9	LCS	206-NoCB	1500		1470	97.8	60-135
52663-77-1	LCS	208-NoCB	1500		1590	106	60-135
2051-24-3	LCS	209-DeCB	1500		1490	99.5	60-135

PCB Congeners
Quality Control Summary
Spike Recovery Report

SDG Number: 13C0322
Client ID: LCSD for batch 23174
Lab Sample ID: 12007863
Instrument: HRP791
Analyst: CLP

Sample Type: Laboratory Control Sample Duplicate
Matrix: WATER
Analysis Date: 03/21/2013 18:00
Dilution: 1
Prep Batch ID: 23174
Batch ID: 23177

CAS No.		Parmname	Amount Added pg/L		Spike Conc. pg/L	Recovery %	Acceptance Limits	RPD %	Acceptance Limits
2051-60-7	LCSD	1-MoCB	500		525	105	60-135	2.53	0-30
2051-62-9	LCSD	3-MoCB	500		535	107	60-135	0.270	0-30
13029-08-8	LCSD	4-DiCB	500		510	102	60-135	1.63	0-30
2050-68-2	LCSD	15-DiCB	500		583	117	60-135	0.0755	0-30
38444-73-4	LCSD	19-TrCB	500		512	102	60-135	1.78	0-30
38444-90-5	LCSD	37-TrCB	500		543	109	60-135	3.70	0-30
15968-05-5	LCSD	54-TeCB	1000		1030	103	60-135	0.338	0-30
32598-13-3	LCSD	77-TeCB	1000		984	98.4	60-135	2.32	0-30
70362-50-4	LCSD	81-TeCB	1000		1060	106	60-135	5.94	0-30
56558-16-8	LCSD	104-PeCB	1000		1230	123	60-135	0.536	0-30
32598-14-4	LCSD	105-PeCB	1000		1100	110	60-135	4.47	0-30
74472-37-0	LCSD	114-PeCB	1000		1080	108	60-135	3.19	0-30
31508-00-6	LCSD	118-PeCB	1000		985	98.5	60-135	1.19	0-30
65510-44-3	LCSD	123-PeCB	1000		931	93.1	60-135	1.27	0-30
57465-28-8	LCSD	126-PeCB	1000		1100	110	60-135	0.977	0-30
33979-03-2	LCSD	155-HxCB	1000		997	99.7	60-135	1.83	0-30
38380-08-4	LCSD	156-HxCB	2000	C	2240	112	60-135	0.165	0-30
69782-90-7	LCSD	157-HxCB		C156					
52663-72-6	LCSD	167-HxCB	1000		1180	118	60-135	2.17	0-30
32774-16-6	LCSD	169-HxCB	1000		1080	108	60-135	0.231	0-30
74487-85-7	LCSD	188-HpCB	1000		1070	107	60-135	1.34	0-30
39635-31-9	LCSD	189-HpCB	1000		1040	104	60-135	0.206	0-30
2136-99-4	LCSD	202-OcCB	1500		1550	103	60-135	0.424	0-30
74472-53-0	LCSD	205-OcCB	1500		1460	97	60-135	2.08	0-30
40186-72-9	LCSD	206-NoCB	1500		1470	97.7	60-135	0.00546	0-30
52663-77-1	LCSD	208-NoCB	1500		1620	108	60-135	1.47	0-30
2051-24-3	LCSD	209-DeCB	1500		1480	98.6	60-135	0.848	0-30

Method Blank Summary

SDG Number:	**13C0322**	**Client:**	**MICR001**	**Matrix:**	**WATER**
Client ID:	**MB for batch 23174**	**Instrument ID:**	**HRP791**	**Data File:**	**c21mar13a_2-4**
Lab Sample ID:	**12007861**	**Prep Date:**	**19-MAR-13**	**Analyzed:**	**03/21/13 19:06**
Column:					

This method blank applies to the following samples and quality control samples:

	Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Time Analyzed
01	LCS for batch 23174	12007862	c21mar13a_2-2	03/21/13	1654
02	LCSD for batch 23174	12007863	c21mar13a_2-3	03/21/13	1800
03	13C0322-01	4608001	c21mar13a_2-7	03/21/13	2224
04	13C0322-02	4608002	c21mar13a_2-8	03/21/13	2330

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	**Client:**	MICR001	**Project:**	MICR00109
Lab Sample ID:	12007861			**Matrix:**	WATER
Client Sample:	QC for batch 23174				
Client ID:	MB for batch 23174			**Prep Basis:**	As Received
Batch ID:	23177	**Method:**	EPA Method 1668C		
Run Date:	03/21/2013 19:06	**Analyst:**	CLP	**Instrument:**	HRP791
Data File:	c21mar13a_2-4			**Dilution:**	1
Prep Batch:	23174	**Prep Method:**	SW846 3520C	**Prep SOP Ref:**	CF-OA-E-001
Prep Date:	19-MAR-13	**Aliquot:**	1000 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
2051-60-7	1-MoCB	U	20	pg/L	20.0
2051-61-8	2-MoCB	U	20	pg/L	20.0
2051-62-9	3-MoCB	U	20	pg/L	20.0
13029-08-8	4-DiCB	U	100	pg/L	100
16605-91-7	5-DiCB	U	20	pg/L	20.0
25569-80-6	6-DiCB	U	20	pg/L	20.0
33284-50-3	7-DiCB	U	20	pg/L	20.0
34883-43-7	8-DiCB	U	20	pg/L	20.0
34883-39-1	9-DiCB	U	20	pg/L	20.0
33146-45-1	10-DiCB	U	100	pg/L	100
2050-67-1	11-DiCB	U	100	pg/L	100
2974-92-7	12-DiCB	CU	40	pg/L	40.0
2974-90-5	13-DiCB	C12			
34883-41-5	14-DiCB	U	20	pg/L	20.0
2050-68-2	15-DiCB	U	20	pg/L	20.0
38444-78-9	16-TrCB	U	100	pg/L	100
37680-66-3	17-TrCB	U	20	pg/L	20.0
37680-65-2	18/30-TrCB	CU	40	pg/L	40.0
38444-73-4	19-TrCB	U	20	pg/L	20.0
38444-84-7	20-TrCB	CU	40	pg/L	40.0
55702-46-0	21-TrCB	CU	40	pg/L	40.0
38444-85-8	22-TrCB	U	20	pg/L	20.0
55720-44-0	23-TrCB	U	20	pg/L	20.0
55702-45-9	24-TrCB	U	20	pg/L	20.0
55712-37-3	25-TrCB	U	20	pg/L	20.0
38444-81-4	26-TrCB	CU	40	pg/L	40.0
38444-76-7	27-TrCB	U	20	pg/L	20.0
7012-37-5	28-TrCB	C20			
15862-07-4	29-TrCB	C26			
35693-92-6	30-TrCB	C18			
16606-02-3	31-TrCB	U	20	pg/L	20.0
38444-77-8	32-TrCB	U	20	pg/L	20.0

Comments:

C Congener has coeluters. When Cxxx, refer to congener number xxx for data

U Analyte was analyzed for , but not detected above the specified detection limit.

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	Client:	MICR001	Project:	MICR00109
Lab Sample ID:	12007861			Matrix:	WATER
Client Sample:	QC for batch 23174				
Client ID:	MB for batch 23174			Prep Basis:	As Received
Batch ID:	23177	Method:	EPA Method 1668C		
Run Date:	03/21/2013 19:06	Analyst:	CLP	Instrument:	HRP791
Data File:	c21mar13a_2-4			Dilution:	1
Prep Batch:	23174	Prep Method:	SW846 3520C	Prep SOP Ref:	CF-OA-E-001
Prep Date:	19-MAR-13	Aliquot:	1000 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
38444-86-9	33-TrCB	C21			
37680-68-5	34-TrCB	U	20	pg/L	20.0
37680-69-6	35-TrCB	U	20	pg/L	20.0
38444-87-0	36-TrCB	U	20	pg/L	20.0
38444-90-5	37-TrCB	U	20	pg/L	20.0
53555-66-1	38-TrCB	U	20	pg/L	20.0
38444-88-1	39-TrCB	U	20	pg/L	20.0
38444-93-8	40-TeCB	CU	40	pg/L	40.0
52663-59-9	41-TeCB	U	100	pg/L	100
36559-22-5	42-TeCB	U	20	pg/L	20.0
70362-46-8	43-TeCB	U	20	pg/L	20.0
41464-39-5	44/47/65-TeCB	CU	60	pg/L	60.0
70362-45-7	45-TeCB	CU	40	pg/L	40.0
41464-47-5	46-TeCB	U	20	pg/L	20.0
2437-79-8	47-TeCB	C44			
70362-47-9	48-TeCB	U	20	pg/L	20.0
41464-40-8	49-TeCB	CU	40	pg/L	40.0
62796-65-0	50-TeCB	CU	40	pg/L	40.0
68194-04-7	51-TeCB	C45			
35693-99-3	52-TeCB	U	20	pg/L	20.0
41464-41-9	53-TeCB	C50			
15968-05-5	54-TeCB	U	20	pg/L	20.0
74338-24-2	55-TeCB	U	20	pg/L	20.0
41464-43-1	56-TeCB	U	20	pg/L	20.0
70424-67-8	57-TeCB	U	20	pg/L	20.0
41464-49-7	58-TeCB	U	20	pg/L	20.0
74472-33-6	59-TeCB	CU	60	pg/L	60.0
33025-41-1	60-TeCB	U	20	pg/L	20.0
33284-53-6	61-TeCB	CU	80	pg/L	80.0
54230-22-7	62-TeCB	C59			
74472-34-7	63-TeCB	U	20	pg/L	20.0
52663-58-8	64-TeCB	U	20	pg/L	20.0

Comments:

C Congener has coeluters. When Cxxx, refer to congener number xxx for data

U Analyte was analyzed for , but not detected above the specified detection limit.

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	**Client:**	MICR001	**Project:**	MICR00109
Lab Sample ID:	12007861			**Matrix:**	WATER
Client Sample:	QC for batch 23174				
Client ID:	MB for batch 23174			**Prep Basis:**	As Received
Batch ID:	23177	**Method:**	EPA Method 1668C		
Run Date:	03/21/2013 19:06	**Analyst:**	CLP	**Instrument:**	HRP791
Data File:	c21mar13a_2-4			**Dilution:**	1
Prep Batch:	23174	**Prep Method:**	SW846 3520C	**Prep SOP Ref:**	CF-OA-E-001
Prep Date:	19-MAR-13	**Aliquot:**	1000 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
33284-54-7	65-TeCB	C44			
32598-10-0	66-TeCB	U	20	pg/L	20.0
73575-53-8	67-TeCB	U	20	pg/L	20.0
73575-52-7	68-TeCB	U	20	pg/L	20.0
60233-24-1	69-TeCB	C49			
32598-11-1	70-TeCB	C61			
41464-46-4	71-TeCB	C40			
41464-42-0	72-TeCB	U	20	pg/L	20.0
74338-23-1	73-TeCB	U	20	pg/L	20.0
32690-93-0	74-TeCB	C61			
32598-12-2	75-TeCB	C59			
70362-48-0	76-TeCB	C61			
32598-13-3	77-TeCB	U	20	pg/L	20.0
70362-49-1	78-TeCB	U	20	pg/L	20.0
41464-48-6	79-TeCB	U	20	pg/L	20.0
33284-52-5	80-TeCB	U	20	pg/L	20.0
70362-50-4	81-TeCB	U	20	pg/L	20.0
52663-62-4	82-PeCB	U	20	pg/L	20.0
60145-20-2	83-PeCB	U	20	pg/L	20.0
52663-60-2	84-PeCB	U	20	pg/L	20.0
65510-45-4	85-PeCB	CU	60	pg/L	60.0
55312-69-1	86/87/97/109/119/125-PeCB	CU	120	pg/L	120
38380-02-8	87-PeCB	C86			
55215-17-3	88-PeCB	CU	40	pg/L	40.0
73575-57-2	89-PeCB	U	20	pg/L	20.0
68194-07-0	90/101/113-PeCB	CU	60	pg/L	60.0
68194-05-8	91-PeCB	C88			
52663-61-3	92-PeCB	U	20	pg/L	20.0
73575-56-1	93-PeCB	CU	40	pg/L	40.0
73575-55-0	94-PeCB	U	20	pg/L	20.0
38379-99-6	95-PeCB	U	20	pg/L	20.0
73575-54-9	96-PeCB	U	20	pg/L	20.0

Comments:

C Congener has coeluters. When Cxxx, refer to congener number xxx for data

U Analyte was analyzed for , but not detected above the specified detection limit.

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	**Client:**	MICR001	**Project:**	MICR00109
Lab Sample ID:	12007861			**Matrix:**	WATER
Client Sample:	QC for batch 23174				
Client ID:	MB for batch 23174			**Prep Basis:**	As Received
Batch ID:	23177	**Method:**	EPA Method 1668C		
Run Date:	03/21/2013 19:06	**Analyst:**	CLP	**Instrument:**	HRP791
Data File:	c21mar13a_2-4			**Dilution:**	1
Prep Batch:	23174	**Prep Method:**	SW846 3520C	**Prep SOP Ref:**	CF-OA-E-001
Prep Date:	19-MAR-13	**Aliquot:**	1000 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
41464-51-1	97-PeCB	C86			
60233-25-2	98-PeCB	CU	40	pg/L	40.0
38380-01-7	99-PeCB	U	100	pg/L	100
39485-83-1	100-PeCB	C93			
37680-73-2	101-PeCB	C90			
68194-06-9	102-PeCB	C98			
60145-21-3	103-PeCB	U	20	pg/L	20.0
56558-16-8	104-PeCB	U	20	pg/L	20.0
32598-14-4	105-PeCB	U	100	pg/L	100
70424-69-0	106-PeCB	U	20	pg/L	20.0
70424-68-9	107-PeCB	U	20	pg/L	20.0
70362-41-3	108-PeCB	CU	40	pg/L	40.0
74472-35-8	109-PeCB	C86			
38380-03-9	110/115-PeCB	CU	40	pg/L	40.0
39635-32-0	111-PeCB	U	20	pg/L	20.0
74472-36-9	112-PeCB	U	20	pg/L	20.0
68194-10-5	113-PeCB	C90			
74472-37-0	114-PeCB	U	20	pg/L	20.0
74472-38-1	115-PeCB	C110			
18259-05-7	116-PeCB	C85			
68194-11-6	117-PeCB	C85			
31508-00-6	118-PeCB	U	20	pg/L	20.0
56558-17-9	119-PeCB	C86			
68194-12-7	120-PeCB	U	20	pg/L	20.0
56558-18-0	121-PeCB	U	20	pg/L	20.0
76842-07-4	122-PeCB	U	20	pg/L	20.0
65510-44-3	123-PeCB	U	100	pg/L	100
70424-70-3	124-PeCB	C108			
74472-39-2	125-PeCB	C86			
57465-28-8	126-PeCB	U	20	pg/L	20.0
39635-33-1	127-PeCB	U	20	pg/L	20.0
38380-07-3	128-HxCB	CU	40	pg/L	40.0

Comments:

C Congener has coeluters. When Cxxx, refer to congener number xxx for data

U Analyte was analyzed for , but not detected above the specified detection limit.

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	**Client:**	MICR001	**Project:**	MICR00109
Lab Sample ID:	12007861			**Matrix:**	WATER
Client Sample:	QC for batch 23174				
Client ID:	MB for batch 23174			**Prep Basis:**	As Received
Batch ID:	23177	**Method:**	EPA Method 1668C		
Run Date:	03/21/2013 19:06	**Analyst:**	CLP	**Instrument:**	HRP791
Data File:	c21mar13a_2-4			**Dilution:**	1
Prep Batch:	23174	**Prep Method:**	SW846 3520C	**Prep SOP Ref:**	CF-OA-E-001
Prep Date:	19-MAR-13	**Aliquot:**	1000 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
55215-18-4	129/138/163-HxCB	CU	60	pg/L	60.0
52663-66-8	130-HxCB	U	20	pg/L	20.0
61798-70-7	131-HxCB	U	20	pg/L	20.0
38380-05-1	132-HxCB	U	20	pg/L	20.0
35694-04-3	133-HxCB	U	20	pg/L	20.0
52704-70-8	134-HxCB	U	100	pg/L	100
52744-13-5	135/151-HxCB	CU	40	pg/L	40.0
38411-22-2	136-HxCB	U	20	pg/L	20.0
35694-06-5	137-HxCB	U	20	pg/L	20.0
35065-28-2	138-HxCB	C129			
56030-56-9	139-HxCB	CU	40	pg/L	40.0
59291-64-4	140-HxCB	C139			
52712-04-6	141-HxCB	U	20	pg/L	20.0
41411-61-4	142-HxCB	U	20	pg/L	20.0
68194-15-0	143-HxCB	U	20	pg/L	20.0
68194-14-9	144-HxCB	U	20	pg/L	20.0
74472-40-5	145-HxCB	U	20	pg/L	20.0
51908-16-8	146-HxCB	U	20	pg/L	20.0
68194-13-8	147-HxCB	CU	40	pg/L	40.0
74472-41-6	148-HxCB	U	20	pg/L	20.0
38380-04-0	149-HxCB	C147			
68194-08-1	150-HxCB	U	20	pg/L	20.0
52663-63-5	151-HxCB	C135			
68194-09-2	152-HxCB	U	20	pg/L	20.0
35065-27-1	153/168-HxCB	CU	40	pg/L	40.0
60145-22-4	154-HxCB	U	20	pg/L	20.0
33979-03-2	155-HxCB	U	20	pg/L	20.0
38380-08-4	156-HxCB	CU	40	pg/L	40.0
69782-90-7	157-HxCB	C156			
74472-42-7	158-HxCB	U	20	pg/L	20.0
39635-35-3	159-HxCB	U	20	pg/L	20.0
41411-62-5	160-HxCB	U	20	pg/L	20.0

Comments:

C Congener has coeluters. When Cxxx, refer to congener number xxx for data

U Analyte was analyzed for , but not detected above the specified detection limit.

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	**Client:**	MICR001	**Project:**	MICR00109
Lab Sample ID:	12007861			**Matrix:**	WATER
Client Sample:	QC for batch 23174				
Client ID:	MB for batch 23174			**Prep Basis:**	As Received
Batch ID:	23177	**Method:**	EPA Method 1668C		
Run Date:	03/21/2013 19:06	**Analyst:**	CLP	**Instrument:**	HRP791
Data File:	c21mar13a_2-4			**Dilution:**	1
Prep Batch:	23174	**Prep Method:**	SW846 3520C	**Prep SOP Ref:**	CF-OA-E-001
Prep Date:	19-MAR-13	**Aliquot:**	1000 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
74472-43-8	161-HxCB	U	20	pg/L	20.0
39635-34-2	162-HxCB	U	20	pg/L	20.0
74472-44-9	163-HxCB	C129			
74472-45-0	164-HxCB	U	20	pg/L	20.0
74472-46-1	165-HxCB	U	20	pg/L	20.0
41411-63-6	166-HxCB	C128			
52663-72-6	167-HxCB	U	20	pg/L	20.0
59291-65-5	168-HxCB	C153			
32774-16-6	169-HxCB	U	20	pg/L	20.0
35065-30-6	170-HpCB	U	20	pg/L	20.0
52663-71-5	171-HpCB	CU	40	pg/L	40.0
52663-74-8	172-HpCB	U	20	pg/L	20.0
68194-16-1	173-HpCB	C171			
38411-25-5	174-HpCB	U	20	pg/L	20.0
40186-70-7	175-HpCB	U	20	pg/L	20.0
52663-65-7	176-HpCB	U	20	pg/L	20.0
52663-70-4	177-HpCB	U	20	pg/L	20.0
52663-67-9	178-HpCB	U	20	pg/L	20.0
52663-64-6	179-HpCB	U	20	pg/L	20.0
35065-29-3	180/193-HpCB	CU	40	pg/L	40.0
74472-47-2	181-HpCB	U	20	pg/L	20.0
60145-23-5	182-HpCB	U	20	pg/L	20.0
52663-69-1	183/185-HpCB	CU	40	pg/L	40.0
74472-48-3	184-HpCB	U	20	pg/L	20.0
52712-05-7	185-HpCB	C183			
74472-49-4	186-HpCB	U	20	pg/L	20.0
52663-68-0	187-HpCB		21.0	pg/L	20.0
74487-85-7	188-HpCB	U	20	pg/L	20.0
39635-31-9	189-HpCB	U	20	pg/L	20.0
41411-64-7	190-HpCB	U	20	pg/L	20.0
74472-50-7	191-HpCB	U	20	pg/L	20.0
74472-51-8	192-HpCB	U	20	pg/L	20.0

Comments:

C **Congener has coeluters. When Cxxx, refer to congener number xxx for data**

U **Analyte was analyzed for , but not detected above the specified detection limit.**

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	**Client:**	MICR001	**Project:**	MICR00109
Lab Sample ID:	12007861			**Matrix:**	WATER
Client Sample:	QC for batch 23174				
Client ID:	MB for batch 23174			**Prep Basis:**	As Received
Batch ID:	23177	**Method:**	EPA Method 1668C		
Run Date:	03/21/2013 19:06	**Analyst:**	CLP	**Instrument:**	HRP791
Data File:	c21mar13a_2-4			**Dilution:**	1
Prep Batch:	23174	**Prep Method:**	SW846 3520C	**Prep SOP Ref:**	CF-OA-E-001
Prep Date:	19-MAR-13	**Aliquot:**	1000 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
69782-91-8	193-HpCB	C180			
35694-08-7	194-OcCB	U	20	pg/L	20.0
52663-78-2	195-OcCB	U	20	pg/L	20.0
42740-50-1	196-OcCB	U	20	pg/L	20.0
33091-17-7	197-OcCB	CU	40	pg/L	40.0
68194-17-2	198-OcCB	CU	40	pg/L	40.0
52663-75-9	199-OcCB	C198			
52663-73-7	200-OcCB	C197			
40186-71-8	201-OcCB	U	20	pg/L	20.0
2136-99-4	202-OcCB	U	20	pg/L	20.0
52663-76-0	203-OcCB	U	20	pg/L	20.0
74472-52-9	204-OcCB	U	20	pg/L	20.0
74472-53-0	205-OcCB	U	20	pg/L	20.0
40186-72-9	206-NoCB	U	20	pg/L	20.0
52663-79-3	207-NoCB	U	20	pg/L	20.0
52663-77-1	208-NoCB	U	20	pg/L	20.0
2051-24-3	209-DeCB	U	20	pg/L	20.0
1336-36-3	Total PCB Congeners		21.0	pg/L	20.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1140	2000	pg/L	57.0	(5%-145%)
13C-3-MoCB		1180	2000	pg/L	59.1	(5%-145%)
13C-4-DiCB		1250	2000	pg/L	62.4	(5%-145%)
13C-15-DiCB		1380	2000	pg/L	69.1	(5%-145%)
13C-19-TrCB		1320	2000	pg/L	65.8	(5%-145%)
13C-37-TrCB		1450	2000	pg/L	72.4	(5%-145%)
13C-54-TeCB		1350	2000	pg/L	67.7	(5%-145%)
13C-77-TeCB		2080	2000	pg/L	104	(10%-145%)
13C-81-TeCB		2090	2000	pg/L	104	(10%-145%)
13C-104-PeCB		1250	2000	pg/L	62.3	(10%-145%)
13C-105-PeCB		2060	2000	pg/L	103	(10%-145%)
13C-114-PeCB		1910	2000	pg/L	95.5	(10%-145%)
13C-118-PeCB		1920	2000	pg/L	96.1	(10%-145%)
13C-123-PeCB		2030	2000	pg/L	101	(10%-145%)
13C-126-PeCB		2280	2000	pg/L	114	(10%-145%)
13C-155-HxCB		1300	2000	pg/L	64.8	(10%-145%)
13C-156-HxCB	C	3620	4000	pg/L	90.5	(10%-145%)
13C-157-HxCB	C156L					
13C-167-HxCB		1750	2000	pg/L	87.6	(10%-145%)
13C-169-HxCB		2150	2000	pg/L	108	(10%-145%)
13C-188-HpCB		1170	2000	pg/L	58.5	(10%-145%)
13C-189-HpCB		1700	2000	pg/L	85.1	(10%-145%)

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	Client:	MICR001	Project:	MICR00109
Lab Sample ID:	12007861			Matrix:	WATER
Client Sample:	QC for batch 23174				
Client ID:	MB for batch 23174			Prep Basis:	As Received
Batch ID:	23177	Method:	EPA Method 1668C		
Run Date:	03/21/2013 19:06	Analyst:	CLP	Instrument:	HRP791
Data File:	c21mar13a_2-4			Dilution:	1
Prep Batch:	23174	Prep Method:	SW846 3520C	Prep SOP Ref:	CF-OA-E-001
Prep Date:	19-MAR-13	Aliquot:	1000 mL		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-202-OcCB		1410	2000	pg/L	70.4	(10%-145%)
13C-205-OcCB		1860	2000	pg/L	92.8	(10%-145%)
13C-206-NoCB		1940	2000	pg/L	97.1	(10%-145%)
13C-208-NoCB		1660	2000	pg/L	82.8	(10%-145%)
13C-209-DeCB		1930	2000	pg/L	96.4	(10%-145%)
13C-28-TrCB		1430	2000	pg/L	71.4	(5%-145%)
13C-111-PeCB		1840	2000	pg/L	92.2	(10%-145%)
13C-178-HpCB		1980	2000	pg/L	98.9	(10%-145%)

Comments:

C Congener has coeluters. When Cxxx, refer to congener number xxx for data

U Analyte was analyzed for , but not detected above the specified detection limit.

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	**Client:**	MICR001	**Project:**	MICR00109
Lab Sample ID:	12007862			**Matrix:**	WATER
Client Sample:	QC for batch 23174				
Client ID:	LCS for batch 23174			**Prep Basis:**	As Received
Batch ID:	23177	**Method:**	EPA Method 1668C		
Run Date:	03/21/2013 16:54	**Analyst:**	CLP	**Instrument:**	HRP791
Data File:	c21mar13a_2-2			**Dilution:**	1
Prep Batch:	23174	**Prep Method:**	SW846 3520C	**Prep SOP Ref:**	CF-OA-E-001
Prep Date:	19-MAR-13	**Aliquot:**	1000 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
2051-60-7	1-MoCB		512	pg/L	20.0
2051-62-9	3-MoCB		534	pg/L	20.0
13029-08-8	4-DiCB		501	pg/L	100
2050-68-2	15-DiCB		583	pg/L	20.0
38444-73-4	19-TrCB		503	pg/L	20.0
38444-90-5	37-TrCB		564	pg/L	20.0
15968-05-5	54-TeCB		1020	pg/L	20.0
32598-13-3	77-TeCB		962	pg/L	20.0
70362-50-4	81-TeCB		1000	pg/L	20.0
56558-16-8	104-PeCB		1220	pg/L	20.0
32598-14-4	105-PeCB		1150	pg/L	100
74472-37-0	114-PeCB		1120	pg/L	20.0
31508-00-6	118-PeCB		996	pg/L	20.0
65510-44-3	123-PeCB		943	pg/L	100
57465-28-8	126-PeCB		1120	pg/L	20.0
33979-03-2	155-HxCB		978	pg/L	20.0
38380-08-4	156-HxCB	C	2230	pg/L	40.0
69782-90-7	157-HxCB	C156			
52663-72-6	167-HxCB		1200	pg/L	20.0
32774-16-6	169-HxCB		1080	pg/L	20.0
74487-85-7	188-HpCB		1060	pg/L	20.0
39635-31-9	189-HpCB		1040	pg/L	20.0
2136-99-4	202-OcCB		1540	pg/L	20.0
74472-53-0	205-OcCB		1490	pg/L	20.0
40186-72-9	206-NoCB		1470	pg/L	20.0
52663-77-1	208-NoCB		1590	pg/L	20.0
2051-24-3	209-DeCB		1490	pg/L	20.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1150	2000	pg/L	57.4	(15%-145%)
13C-3-MoCB		1240	2000	pg/L	61.8	(15%-145%)
13C-4-DiCB		1290	2000	pg/L	64.4	(15%-145%)
13C-15-DiCB		1490	2000	pg/L	74.5	(15%-145%)
13C-19-TrCB		1330	2000	pg/L	66.3	(15%-145%)
13C-37-TrCB		1470	2000	pg/L	73.6	(15%-145%)
13C-54-TeCB		1360	2000	pg/L	67.9	(15%-145%)
13C-77-TeCB		2170	2000	pg/L	109	(40%-145%)
13C-81-TeCB		2160	2000	pg/L	108	(40%-145%)
13C-104-PeCB		1210	2000	pg/L	60.7	(40%-145%)
13C-105-PeCB		2060	2000	pg/L	103	(40%-145%)
13C-114-PeCB		1930	2000	pg/L	96.5	(40%-145%)
13C-118-PeCB		1950	2000	pg/L	97.5	(40%-145%)

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	**Client:**	MICR001	**Project:**	MICR00109
Lab Sample ID:	12007862			**Matrix:**	WATER
Client Sample:	QC for batch 23174				
Client ID:	LCS for batch 23174			**Prep Basis:**	As Received
Batch ID:	23177	**Method:**	EPA Method 1668C		
Run Date:	03/21/2013 16:54	**Analyst:**	CLP	**Instrument:**	HRP791
Data File:	c21mar13a_2-2			**Dilution:**	1
Prep Batch:	23174	**Prep Method:**	SW846 3520C	**Prep SOP Ref:**	CF-OA-E-001
Prep Date:	19-MAR-13	**Aliquot:**	1000 mL		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-123-PeCB		2010	2000	pg/L	101	(40%-145%)
13C-126-PeCB		2290	2000	pg/L	114	(40%-145%)
13C-155-HxCB		1310	2000	pg/L	65.7	(40%-145%)
13C-156-HxCB	C	3600	4000	pg/L	90.0	(40%-145%)
13C-157-HxCB	C156L					
13C-167-HxCB		1760	2000	pg/L	87.8	(40%-145%)
13C-169-HxCB		2130	2000	pg/L	107	(40%-145%)
13C-188-HpCB		1220	2000	pg/L	60.8	(40%-145%)
13C-189-HpCB		1710	2000	pg/L	85.7	(40%-145%)
13C-202-OcCB		1410	2000	pg/L	70.4	(40%-145%)
13C-205-OcCB		1850	2000	pg/L	92.4	(40%-145%)
13C-206-NoCB		1870	2000	pg/L	93.3	(40%-145%)
13C-208-NoCB		1670	2000	pg/L	83.6	(40%-145%)
13C-209-DeCB		1800	2000	pg/L	90.0	(40%-145%)
13C-28-TrCB		1500	2000	pg/L	75.2	(15%-145%)
13C-111-PeCB		1880	2000	pg/L	94.2	(40%-145%)
13C-178-HpCB		1970	2000	pg/L	98.5	(40%-145%)

Comments:

C Congener has coeluters. When Cxxx, refer to congener number xxx for data

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	Client:	MICR001	Project:	MICR00109
Lab Sample ID:	12007863			Matrix:	WATER
Client Sample:	QC for batch 23174				
Client ID:	LCSD for batch 23174			Prep Basis:	As Received
Batch ID:	23177	Method:	EPA Method 1668C		
Run Date:	03/21/2013 18:00	Analyst:	CLP	Instrument:	HRP791
Data File:	c21mar13a_2-3			Dilution:	1
Prep Batch:	23174	Prep Method:	SW846 3520C	Prep SOP Ref:	CF-OA-E-001
Prep Date:	19-MAR-13	Aliquot:	1000 mL		

CAS No.	Parmname	Qual	Result	Units	PQL
2051-60-7	1-MoCB		525	pg/L	20.0
2051-62-9	3-MoCB		535	pg/L	20.0
13029-08-8	4-DiCB		510	pg/L	100
2050-68-2	15-DiCB		583	pg/L	20.0
38444-73-4	19-TrCB		512	pg/L	20.0
38444-90-5	37-TrCB		543	pg/L	20.0
15968-05-5	54-TeCB		1030	pg/L	20.0
32598-13-3	77-TeCB		984	pg/L	20.0
70362-50-4	81-TeCB		1060	pg/L	20.0
56558-16-8	104-PeCB		1230	pg/L	20.0
32598-14-4	105-PeCB		1100	pg/L	100
74472-37-0	114-PeCB		1080	pg/L	20.0
31508-00-6	118-PeCB		985	pg/L	20.0
65510-44-3	123-PeCB		931	pg/L	100
57465-28-8	126-PeCB		1100	pg/L	20.0
33979-03-2	155-HxCB		997	pg/L	20.0
38380-08-4	156-HxCB	C	2240	pg/L	40.0
69782-90-7	157-HxCB	C156			
52663-72-6	167-HxCB		1180	pg/L	20.0
32774-16-6	169-HxCB		1080	pg/L	20.0
74487-85-7	188-HpCB		1070	pg/L	20.0
39635-31-9	189-HpCB		1040	pg/L	20.0
2136-99-4	202-OcCB		1550	pg/L	20.0
74472-53-0	205-OcCB		1460	pg/L	20.0
40186-72-9	206-NoCB		1470	pg/L	20.0
52663-77-1	208-NoCB		1620	pg/L	20.0
2051-24-3	209-DeCB		1480	pg/L	20.0

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-1-MoCB		1180	2000	pg/L	59.2	(15%-145%)
13C-3-MoCB		1280	2000	pg/L	63.9	(15%-145%)
13C-4-DiCB		1350	2000	pg/L	67.6	(15%-145%)
13C-15-DiCB		1620	2000	pg/L	81.2	(15%-145%)
13C-19-TrCB		1460	2000	pg/L	72.8	(15%-145%)
13C-37-TrCB		1610	2000	pg/L	80.3	(15%-145%)
13C-54-TeCB		1470	2000	pg/L	73.4	(15%-145%)
13C-77-TeCB		2280	2000	pg/L	114	(40%-145%)
13C-81-TeCB		2260	2000	pg/L	113	(40%-145%)
13C-104-PeCB		1320	2000	pg/L	65.9	(40%-145%)
13C-105-PeCB		2190	2000	pg/L	109	(40%-145%)
13C-114-PeCB		2020	2000	pg/L	101	(40%-145%)
13C-118-PeCB		2060	2000	pg/L	103	(40%-145%)

PCB Congeners
Certificate of Analysis
Sample Summary

SDG Number:	13C0322	**Client:**	MICR001	**Project:**	MICR00109
Lab Sample ID:	12007863			**Matrix:**	WATER
Client Sample:	QC for batch 23174				
Client ID:	LCSD for batch 23174			**Prep Basis:**	As Received
Batch ID:	23177	**Method:**	EPA Method 1668C		
Run Date:	03/21/2013 18:00	**Analyst:**	CLP	**Instrument:**	HRP791
Data File:	c21mar13a_2-3			**Dilution:**	1
Prep Batch:	23174	**Prep Method:**	SW846 3520C	**Prep SOP Ref:**	CF-OA-E-001
Prep Date:	19-MAR-13	**Aliquot:**	1000 mL		

CAS No.	Parmname	Qual	Result	Units	PQL

Surrogate/Tracer recovery	Qual	Result	Nominal	Units	Recovery%	Acceptable Limits
13C-123-PeCB		2150	2000	pg/L	108	(40%-145%)
13C-126-PeCB		2470	2000	pg/L	123	(40%-145%)
13C-155-HxCB		1360	2000	pg/L	67.8	(40%-145%)
13C-156-HxCB	C	3900	4000	pg/L	97.5	(40%-145%)
13C-157-HxCB	C156L					
13C-167-HxCB		1950	2000	pg/L	97.3	(40%-145%)
13C-169-HxCB		2270	2000	pg/L	113	(40%-145%)
13C-188-HpCB		1250	2000	pg/L	62.7	(40%-145%)
13C-189-HpCB		1850	2000	pg/L	92.5	(40%-145%)
13C-202-OcCB		1520	2000	pg/L	76.0	(40%-145%)
13C-205-OcCB		2010	2000	pg/L	100	(40%-145%)
13C-206-NoCB		2030	2000	pg/L	102	(40%-145%)
13C-208-NoCB		1800	2000	pg/L	90.0	(40%-145%)
13C-209-DeCB		2020	2000	pg/L	101	(40%-145%)
13C-28-TrCB		1640	2000	pg/L	82.2	(15%-145%)
13C-111-PeCB		1970	2000	pg/L	98.4	(40%-145%)
13C-178-HpCB		2120	2000	pg/L	106	(40%-145%)

Comments:

C Congener has coeluters. When Cxxx, refer to congener number xxx for data